

Draft Local Plan 2021-2040 (Regulation 18)

Transport Background Paper

January 2024



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1.0 INTRODUCTION

- 1.1. This Transport Background Paper documents a variety of transport evidence in relation to the East Hampshire Draft Local Plan 2021-2040. It supplements the early work that has been undertaken on a transport assessment for the Local Plan, summarising the work that has been undertaken through the East Hampshire Accessibility Study (Ridge & Partners, 2023) and highlighting the key issues relating to transport and land-use planning in East Hampshire District Council's Local Plan Area.
- 1.2. Transport assessments in East Hampshire are particularly difficult and costly to undertake, due to the fact that there is no single transport model that covers the entire district. There are, in fact, two transport models that relate to the Local Plan Area: the North Hampshire Transport Model and the Sub-Regional Transport Model (SRTM) for the Solent (south Hampshire) area. Significantly, only one of those transport models - the SRTM - currently provides the level of detail necessary to appraise the potential impacts of new development on transport networks. All of this means that a detailed transport assessment for the Local Plan Area will cost EHDC very large amounts of money (in the order of hundreds of thousands of pounds). It is therefore only in preparing its Pre-submission (Regulation 19) Local Plan that East Hampshire District Council (EHDC) will undertake a detailed assessment of the transport implications of future development. At the current stage of the Draft Local Plan, where proposals for development (its location and scale) could still change, it is instead important to ensure that the key transport issues are identified and highlighted. This follows the Government's planning practice guidance, which highlights that the transport assessment of a local plan is 'an iterative process' that becomes 'more refined and detailed as the process draws to a conclusion.'1
- 1.3. The Government's planning practice guidance also identifies the key aspects of baseline information that should inform a transport assessment of a local plan. Transport issues such as accessibility, congestion, mobility, safety, pollution and carbon reduction across the plan area are identified. This transport background paper therefore provides baseline information on the following issues:
 - Transport & Carbon Emissions
 - Transport Networks & Travel Patterns
 - Air Quality
 - Accessibility
 - Road Safety
- 1.4. The evidence presented in this background paper drawn from publicly available sources of information and East Hampshire-specific studies has informed the policies and proposals of the Draft Local Plan 2021-2040. In addition to the above

¹ 'When should the transport assessment of the Local Plan be undertaken?' in *Transport evidence bases in plan making and decision taking*, DLUHC (Planning Practice Guidance Reference ID: 54-004-20141010, available: <u>https://www.gov.uk/guidance/transport-evidence-bases-in-plan-making-and-decision-taking</u>)

topics, this background paper also includes research and emerging thinking on parking standards, which have influenced the proposals of the revised parking standards in an appendix of the Draft Local Plan.

1.5. EHDC will continue to work on its transport assessment, implementing the bespoke methodology that has been produced by Ridge & Partners for the Council. This methodology – and its first step, an accessibility study for the Local Plan Area – is available to view on the Council's website².

² For details, see: <u>https://www.easthants.gov.uk/planning-services/planning-policy/local-plan/emerging-local-plan/evidence-base/infrastructure-1</u>

2.0 BACKGROUND: EXISTING PLANS AND STRATEGIES

Decarbonising Transport: A Better, Greener Britain³

- 2.1. The Government has committed to decarbonising all forms of transport, in recognition of the sector's substantial contribution to UK domestic GHG emissions. Specific commitments include:
 - Increasing walking and cycling;
 - Supporting zero-emissions vehicles;
 - Embedding transport decarbonisation principles in spatial planning.
- 2.2. The Government is clear that as well as decarbonising private and commercial road vehicles by increasing the ownership and use of zero-emissions vehicles in place of their petrol and diesel counterparts, we must also increase the share of journeys undertaken by public transport, cycling and walking. These modes of transport should be 'the natural first choice for all who can take them'⁴.
- 2.3. In relation to spatial planning, the requirements of the National Planning Policy Framework are re-affirmed. However, it is recognised that existing Local Plans often say "the right things" but fail to enable cycling and walking, or access to public transport, to a meaningful extent. The Decarbonisation Strategy therefore proposes that greater consideration for accessibility and connectivity by walking and cycling is required through the design of new development, and that the principles of 20minute neighbourhoods should be promoted.
- 2.4. Specific opportunities for decarbonisation in rural areas were to be identified in a further strategy: *Future of Transport: Rural Strategy*, for which a call for evidence was launched in November 2020⁵. Responses to the consultation highlighted the higher levels of car dependency in rural areas and the lack of alternative transport options, with active travel being less common than in urban areas. For consultation purposes, the Government identified a variety of innovations for addressing the decarbonisation of rural transport have been suggested, including more effective integration of journeys and the linking of services such as through mobility hubs; meeting the demand for EV charging; and digitally enabled modes of transport provision such as demand responsive travel. At the time of writing, the Government had not published its rural strategy for decarbonising transport.

³ Decarbonising Transport: A Better, Greener Britain, DfT, 2021. Document available at: <u>https://www.gov.uk/government/publications/transport-decarbonisation-plan</u>

⁴ Page 29 of Decarbonising Transport: A Better, Greener Britain, DfT, 2021.

⁵ For details, see: <u>https://www.gov.uk/government/consultations/future-of-transport-rural-strategy-call-for-evidence/future-of-transport-rural-strategy-call-for-evidence</u>

Hampshire Local Transport Plan 4⁶

2.5. At the time of writing, Hampshire County Council's fourth Local Transport Plan (LTP4) remains as a draft document but will provide a transport vision for 2050, thus covering the period of the emerging East Hampshire Local Plan. The LTP4 proposes transformation changes, marking a shift from planning for vehicles to that of planning for people and places. It supports the national priorities for decarbonising the transport system, including reducing dependence on the private car as a mode of transport. Its vision is as follows:

"A carbon neutral, resilient and inclusive transport system designed around people which: supports health, wellbeing and quality of life for all; supports a connected economy and creates successful and prosperous places; and respects and seeks to enhance Hampshire's unique environment".

- 2.6. To deliver this vision, a number of outcomes are proposed. These include the reduction of transport-related carbon emissions to a net-zero level by 2050. Other outcomes that are relevant to the planning system include improvements in air quality and reductions in transport-related noise disturbance, a transport network that promotes active travel and lifestyles, more equitable access to services, and support for sustainable housing and employment growth.
- 2.7. LTP4 places emphasis on integrating land-use and transport planning, to enable sustainable travel choices and reduce the need to travel in the first place. Walking and cycling are prioritised as transport modes that should be the first choice for shorter journeys. Hampshire residents are encouraged to own fewer cars and use them less. But it is recognised that realistic alternatives to the private car need to be provided, especially in rural areas. This clearly applies to much of East Hampshire, which is a largely rural district.
- 2.8. LTP4 therefore places an increased emphasis on addressing the barriers to walking and cycling, including issues with personal safety. When developing transport strategies and schemes, a hierarchical approach is proposed that considers different users needs but which generally prioritises the vulnerable, then walkers, then cyclists and horse riders, then public transport users, then deliveries and finally other motor vehicles. A healthy streets approach is proposed for the design of new and the regeneration of existing streets as illustrated in the following infographic:

⁶ For details, see: <u>https://www.hants.gov.uk/transport/localtransportplan</u>



Source: Hampshire County Council, Draft LTP4

Hampshire Local Transport Plan 2011-2031⁷

- 2.9. The current Hampshire Local Transport Plan (also known as LTP3) is in the process of being superseded, having been adopted in 2011. It was written to help realise a vision of 'safe, efficient and reliable ways to get around a prospering and sustainable Hampshire' (page 1).
- 2.10. Longer-term prospects for local investment in transport infrastructure (to 2031 and beyond) are noted, including opportunities for reducing carbon emissions via supporting the transition to electric and low-emission vehicles. The potential for investing in new technologies that provide more reliable and improved travel choices is also noted.
- 2.11. The main priorities of the transport plan included supporting economic growth through ensuring the safety, soundness and efficiency of the transport network. With regard to placemaking, the introduction of 'shared space' street designs is identified as an objective (Policy Objective 9) in accordance with the Government's Manual for Streets (a document that dates from 2007, which has been partially updated in 2010 and is due to be fully updated shortly). Other objectives reference improving air quality, reducing the need to travel via supporting a high-speed broadband network, and investment in sustainable transport measures, such as walking and cycling infrastructure.
- 2.12. Chapter 6 of the LTP provides a transport strategy for central Hampshire and the New Forest, an area which includes most of the district of East Hampshire, aside

⁷ For details, see: <u>https://www.hants.gov.uk/transport/strategies/transportstrategies#step-5</u>

from those parts of Clanfield, Horndean and Rowlands Castle parishes that lie within the Partnership for South Hampshire area. Towns such as Alton, Liphook and (within the South Downs National Park area) Liss and Petersfield are identified as service centres for a rural hinterland, whilst the potential for transport network improvements associated with the regeneration of Whitehill & Bordon are noted. These include the provision of a 'green grid' of walking and cycling routes, which is being delivered alongside new housing development.

East Hampshire District Transport Statement, September 2012⁸

- 2.13. Although dated, the transport statement builds on existing transport or related policy documents for East Hampshire, including the Hampshire Local Transport Plan 2011-2031 and the East Hampshire Joint Core Strategy (2011-2028).
- 2.14. Common transport issues applying to towns and villages in East Hampshire include the following:
 - Disjointed walking and cycling networks, with a lack of safe crossing points of busy roads;
 - Limited public transport options and the dominance of traffic, with knock on impacts for parking and the character of settlements;
 - The speed and volume of HGV traffic and its effects on discouraging walking and cycling.
- 2.15. The main transport challenges for policy-making include managing and reducing road congestion, encouraging lower-carbon transport choices, delivering improvements to cycling and walking networks across East Hampshire and improving accessibility to local service centre for people in rural areas without the use of a car.

East Hampshire Local Cycling and Walking Infrastructure Plan (LCWIP), 2020⁹

2.16. An LCWIP aims to define and prioritise the infrastructure needs associated with walking and cycling as modes of transport. East Hampshire District Council's (EHDC) first LCWIP was published in 2020 and is currently being refreshed through liaison with Hampshire County Council. The 2020 document was prepared with engagement from local interest groups and infrastructure delivery partners and was focused on identifying walking and cycling infrastructure needs in East Hampshire.

⁸ For details, see: <u>https://www.hants.gov.uk/transport/strategies/transportstrategies#step-7</u>

⁹ For details, see: <u>https://www.easthants.gov.uk/community-and-living/getting-active-and-sports-development/local-cycling-and-walking-infrastructure</u>

- 2.17. In 2017, the Department for Transport published a nationwide Cycling and Walking Investment Strategy that aimed to make walking and cycling the natural choices for shorter journeys or as part of longer journeys'. The LCWIP identifies that levels of walking and cycling in East Hampshire are low (2% of journeys are made by bike; 9% by walking) but that there is potential for large increases given that 36% of journeys were less than 3km (2 miles).
- 2.18. Engagement with local residents via an online survey (1,422 responses) identified that good quality pavements and safer walking routes to/from destinations were priorities for helping residents to walk more. For cycling, safe and segregated cycle routes were identified as priorities. Advised infrastructure approaches within the LCWIP include connecting routes for commuters to travel to and from work by bike and road safety improvements including a rollout of 20mph zones in built-up areas.

Gear Change: A bold vision for cycling and walking, Department for Transport¹⁰

2.19. This strategy identifies a need to transform the role cycling and walking can play in the transport system. Increasing cycling and walking is identified as having multiple benefits, from improving air quality, to combatting climate change, improving health and well-being, addressing inequality and tackling road congestion. From a health perspective, increased physical activity is identified as helping to prevent and manage over 20 chronic conditions and diseases, including some cancers, heart disease, type 2 diabetes and depression. The bold vision offered by the strategy is:

England will be a great walking and cycling nation. Places will be truly walkable. A travel revolution in our streets, towns and communities will have made cycling a mass form of transit. Cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030.

- 2.20. The strategy sets out the actions required at all levels of Government to make this vision a reality, grouped under the four themes of:
 - 1) Better streets for cycling and people
 - 2) Putting cycling and walking at the heart of transport, place-making, and health policy
 - 3) Empowering and encouraging local authorities
 - 4) Enable people to cycle and protect them when they cycle
- 2.21. The strategy aims to increase the number of people cycling through (amongst other things) promoting segregated bike routes and improving the national cycle network. The aim for the national cycle network is to make the entirety of it either off road or traffic calmed by 2040. Higher standards for the design of cycling infrastructure are to be implement with a new inspectorate, Active Travel England, being used to enforce these standards. A set of key design principles are offered for new cycling

¹⁰ For details, see: <u>Gear change: a bold vision for cycling and walking (publishing.service.gov.uk)</u>

ways including that: cyclists are separated from pedestrians and volume motor vehicle traffic, with routes feeling direct logical and be intuitive to understand.

Bus Back Better – National Bus Strategy for England¹¹

- 2.22. The national bus strategy presents a vision for travel by bus with the central aim of getting more people to travel by bus. Initially, the goal is to get overall patronage back to the pre-COVID level and then to exceed it. At the time of the strategy's publication, the patronage of bus services outside of London was approximately 40% of its pre-pandemic levels.
- 2.23. The strategy aims to achieve its goals by making buses more frequent, more reliable, easier to understand and use, better co-ordinated and cheaper. The model of franchising bus services as happens in London, with Transport for London providing contracts for specific routes, to be run by private operators is put forward as an opportunity for Local Transport Authorities (in the case of East Hampshire, this would be Hampshire County Council). Overall, it is envisaged that improvements would stem from bus operators and local government working together.
- 2.24. As well as increasing usage of buses, the strategy seeks to reduce operating costs so that better services can be sustained without permanently higher subsidies. To benefit from funding in support of the strategy, LTAs are expected to implement bus priority schemes and draw up Bus Service Improvement Plans. Of particular relevance for rural areas such as East Hampshire, the strategy offers support for new forms of service provision, such as demand responsive travel in smaller vehicles. The strategy also supports the introduction of at least 4,000 more zero emission buses.
- 2.25. Since the publication of the strategy there has been a 'cost of living crisis' driven by high inflation. As part of the Government's help for households, a fare cap of £2 for single bus fares has been instituted across the country. At the time of writing, this fare cap continues until the end of October 2023, to be replaced by a cap of £2.50 until the end of November 2024.

The Plan for Drivers¹²

2.26. A plan to help drivers was launched by the Government in October 2023. This plan intends to make car journeys smoother, stop unfair enforcement, make parking easier, crack down on inconsiderate driving and assist the transition to zero-emission driving. Smoother journeys will be achieved by focusing on, amongst other things, fixing roads faster and improving traffic lights by replacing unreliable and obsolete equipment. From a climate-change perspective, the roll-out of electric vehicle charging infrastructure will be expedited, making on-street charging easier and speeding up the approval process for the installation of charge points.

¹¹ For details, see: <u>https://www.gov.uk/government/publications/bus-back-better</u>

¹² For details, see: <u>https://www.gov.uk/government/publications/plan-for-drivers</u>

3.0 TRANSPORT & CARBON EMISSIONS

What are the issues?

5.1. The UK Government provides national statistics on the greenhouse gas emissions from transport at a local-authority level. These confirm that the carbon emissions from transport are substantial. Figure 3.1 shows the breakdown of these emissions into different sectors for East Hampshire. It is clear that transport makes a very significant contribution to East Hampshire's greenhouse gas emissions, comprising 43% of the emissions that are released by all of the net-emitting sectors (Figure 3.1) and 48% of total emissions, once sequestration by the natural environment is taken into account¹³. Indeed, transport is the largest source of local greenhouse gas emissions, when these are broken down by sector.

Figure 3.1: Greenhouse Gas Emissions by Sector in East Hampshire (2021), Highlighting the Contribution of Transport



Source: UK local authority and regional greenhouse gas emissions 2021, Department for Energy Security & Net Zero

¹³ Source: UK local authority and regional greenhouse gas emissions 2005-2021, Department for Energy Security & Net Zero. For details, see: <u>https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021</u>

5.2. Within the transport sector, the vast majority of emissions is associated with road transport on A-roads and minor roads. Figure 3.2 shows how the estimated contributions to transport-related emissions in 2021.





Source: UK local authority and regional greenhouse gas emissions 2021, Department for Energy Security & Net Zero. NB: Units are kilotonnes of CO_2 equivalent

- 5.3. De-carbonising transport is therefore a significant challenge for transport and landuse planning in East Hampshire, one that affects road transport in particular. In a district where car ownership levels are higher than the national average and where commuters are relatively reliant on the private car for travelling to work (see Section 8), a main issue for reducing greenhouse gas emissions will be to increase the attractiveness of, and the ability of people to make journeys by transport modes that generate less greenhouse gas emissions.
- 5.4. Although they remain relatively high, transport-related emissions within East Hampshire have changed over time. Figure 3.3 shows how these emissions have changed from 2005 to 2021. The effects of the lockdowns associated with the Covid

pandemic are visible in the most recent datapoints, although it is currently unknown whether emissions have continued to rise since 2021.



Figure 3.3: Transport-related Greenhouse Gas Emissions in East Hampshire from 2005 to 2021

Source: UK local authority and regional greenhouse gas emissions 2021, Department for Energy Security & Net Zero. NB: Units are kilotonnes of CO₂ equivalent

5.5. National and local planning policies are increasingly focused on significantly reducing greenhouse gas emissions to help meet the legislative requirement of reducing emissions to a net-zero level by 2050¹⁴. A further key issue for the Local Plan is to align its strategy for development with these policies and the legislative requirement, which will require thinking in terms of how to reduce the need to travel by greenhouse-gas emitting modes of transport.

What could be done through the Local Plan?

5.6. The East Hampshire Net Zero Evidence Base Study (2023) includes data on benchmark values for the energy consumption of private cars in different geographical contexts. This data was compiled by the consultants Ricardo AEA Ltd

¹⁴ This target was introduced by The Climate Change Act 2008 (2050 Target Amendment) Order 2019, available at: <u>https://www.legislation.gov.uk/ukdsi/2019/9780111187654</u>

for purposes of investigating the greenhouse gas emissions associated with different development strategies for the emerging East Hampshire Local Plan. Figure 3.4 (below) repeats this information and illustrates the likely benefits – in terms of reducing energy consumption and therefore greenhouse gas emissions – from the technological change to electric vehicles.



Figure 3.4: Annual road transport fuel consumption (cars) in different geographical contexts

- 5.7. East Hampshire is a largely rural district, so fuel consumption for 'rural – town and fringe' and 'rural – village and dispersed settlement' are likely to be most representative categories for the Local Plan Area. Figure 3.4 clearly shows that the transition to electric vehicles, which is likely to progress significantly by 2040, could facilitate substantial reductions to emissions. However, it is also clear that this is not, on its own, sufficient to reduce emissions to a net-zero level. First and foremost, the electricity grid would need to significantly de-carbonise. Whilst the national Government has a goal of de-carbonising the electricity system by 2035 (which is during the Local Plan period), the Climate Change Committee has suggested that the pace of change and the current commitments by the Government are insufficient¹⁵. The Net Zero Evidence Base Study makes clear that EHDC can respond to this situation by requiring new development to include enough on-site renewable energy generating infrastructure to meet 100% of its energy demand, and by working to achieve a step-change in the deployment of large-scale renewable through its policy approach.
- 5.8. The Net Zero Evidence Base Study makes the following recommendations in respect of petrol and diesel use in transport:

Source: East Hampshire Net Zero Evidence Base Study (2023), Ricardo Energy & Environment

¹⁵ For details, see: <u>https://www.theccc.org.uk/2023/03/09/a-reliable-secure-and-decarbonised-power-system-by-2035-</u> is-possible-but-not-at-this-pace-of-delivery/

Developments must be designed to minimise reliance on travel, and also have sufficient infrastructure to support EV charging. New development should offer good, attractive connections to services and facilities by sustainable transport modes (e.g. walking and cycling networks). (East Hampshire Net Zero Evidence Base Study, page 81).

5.9. The Study proposes that Local Plan policies should require that the location and design of new developments would facilitate walking, cycling and the use of public transport as sustainable transport options. This is part of a wider range of measures aimed at achieving net-zero carbon development.

Summary

5.10. Transport, and in particular road transport, is responsible for a large proportion of the district's greenhouse gas emissions. National and local priorities to achieve net-zero emissions by 2050 will require EHDC to focus on locating and designing new development in ways to support the use of more sustainable modes of transport, such as walking and cycling, wherever feasible. Planning policies will need to support a transition to electric vehicles in terms of the provision of charging infrastructure. In light of the Government's failure to provide a clear route to decarbonising the electricity grid, EHDC should support appropriate renewable energy development proposals—including to meet the energy demands of new development—for this could help to de-carbonise the built environment's transport needs.

4.0 TRANSPORT NETWORKS & TRAVEL PATTERNS

Existing transport networks in East Hampshire

Road

- 4.1. The strategic road network of the A3 trunk and A3(M) motorway bisect the district from the north-east to the south, passing through the South Downs National Park. The strategic road network of the A3 and A3(M) connect the settlements on the southern coast with the south-western suburbs of London. The A3 trunk road is present in the north-east of the district close to Grayshott and Liphook, then leading into the South Downs National Park. The A3 trunk becomes the A3(M) motorway in the south of the district, east of Catherington and north of Horndean. A3(M) junction 2 allows strategic access to/from the road network in the south of the district at Horndean. The north of the district does not contain any part of the strategic road network. It is to be noted that the A3 and A3(M) are the responsibility of the strategic highway authority, National Highways.
- 4.2. As shown in Figure 4.1 the district has a primary A road network, predominantly located in the north, north-east and within the South Downs National Park. The most prominent component of the primary A road network in the district, is the A31, which is predominantly dual carriageway in East Hampshire. The A31 bisects north-east to south-west of the northern area of the district, facilitating road travel from neighbouring planning authorities of Waverley and Winchester, whilst tracking south of the district's largest settlement, Alton. Adjoining the approximate mid-point of the A31 is the A339 facilitating road travel between the outskirts of Alton and north to neighbouring Basingstoke.
- 4.3. The north-east of the district hosts the A325 which adjoins the A3 strategic road network at the junction of Longmoor, in the South Downs National Park. The A325 facilitates road travel to/from Whitehill & Bordon and connects to Farnham in the neighbouring planning authority of Waverley. The A325 was re-routed in Whitehill & Bordon in conjunction with the re-development of the former garrison town, and thus now by-passes to the west of main built-up area of the town.
- 4.4. In the south of the district the primary road network is comprised of the A3, commencing south of Clanfield and traversing through Horndean to Waterlooville in neighbouring Havant Borough Council.
- 4.5. The A272 and A32 traverse the South Downs National Park in the centre of the district, facilitating road travel in a north/south and east/west direction. The A32 at its northern point adjoins the A31 south-west of Alton.
- 4.6. The remaining road network in the district is made up of lower classifications than the primary A roads. B classified roads connect some of the other larger settlements in the district as well as providing cross boundary highway travel in/out of the district to the South Downs National Park and neighbouring authorities.

Rail

- 4.7. East Hampshire has two national rail lines passing through the district: the Alton to London Waterloo line; and the London to Portsmouth Harbour line.
- 4.8. As shown in Figure 4.1, the Alton to London Waterloo line is in the north of the district, entering at the district's northern boundary running in a north-east to south-west direction. The service calls at the East Hampshire rail stations of Bentley and Alton, with the line terminating at Alton. The direct service between Alton and London Waterloo has a journey time of just over 60 minutes, with the provision of a direct service twice an hour in the weekday peak periods. A direct and indirect service continues to run every hour on weekdays. It is also possible to directly access Farnham and Woking on the same London Waterloo line.
- 4.9. Bentley is not an accessible station due to steps, steep ramps to access the platforms and it not being possible to use a ramp to board the trains. Bentley station does however have a station car park offering 85 spaces and 23 cycle storage spaces. Alton station is located north-east of Alton town centre and is an accessible station that offers 60 cycle storage spaces and 185 car parking spaces.
- 4.10. As shown by Figure 4.1, the Portsmouth Harbour to London Waterloo train line runs through the opposite side of the district, entering via the north-east district boundary and running north to south through the South Downs National Park to the south of East Hampshire and continuing south out of the district to Portsmouth Harbour. Outside of the South Downs National Park this train line calls at Liphook station in the north and Rowlands Castle station in the south of the district, whereas inside the South Downs National Park the service calls at Liss and Petersfield stations. The direct travel time from Rowlands Castle to London Waterloo is 90 minutes with two direct services an hour in the weekday peak periods.
- 4.11. Liphook station has two platforms with a pedestrian footbridge (with steps) providing a connection between platforms. The train station is not an accessible station as the platforms are too narrow to allow ramps to be used to gain access from the platforms to the train carriages, as well as steps being present in the station. Liphook rail station does have a car park which is located next to the station and has a capacity of 74 spaces. In addition, 59 covered cycle storage spaces are also available. Rowlands Castle is also an inaccessible station due to steps and it not being possible to use a ramp to board the trains. The station does however have a car park provision of 26 spaces and a small amount of cycle storage.
- 4.12. East Hampshire is home to the Mid Hants Watercress Heritage Railway Line. The Watercress Line is a tourist steam railway line running between Alton, Medstead & Four Marks and Alresford. The Watercress Line operates seasonally.
- 4.13. Table 4.1 provides details of the usage of the all the rail stations in the district, for the latest available year 2022/23. The council's busiest station is Petersfield, located in the South Downs National Park. After Petersfield it is then Liphook, followed by Alton

with Liss at two-thirds that number and Bentley and Rowlands Castle below 120,000 entries and exits each¹⁶.

4.14. Usage figures are also presented for pre-Covid, in 2019/20. Comparison between 2019/20 and 2022/23 entry/exit figures indicates whether the district's rail patronage has returned to pre-Covid levels. The effects of the Covid-19 pandemic on the railway saw dramatic decreases in entries and exits throughout stations in East Hampshire district council. Alton and Bentley in particular suffered heavily seeing reductions in entries and exits in excess of 80-84% and Liss and Liphook experiencing smaller reductions. Since then and with normal service largely resuming, the degree to which these stations have bounced-back can be measured by comparing 2019/20 to 2022/23. Rowlands Castle has seen the largest recovery reaching 91% of the entries and exits observed pre-Covid. At 81 and 83% is Liss and Liphook with similar recovery numbers, and then Petersfield on 74% and Alton 73%. The station that has struggled the most is Bentley which has seen a bounce-back of just 62%. With national figures showing an average of 79% recovery, it is evident that a trend of increasing leisure travel and return of commuting is continuing to drive strong passenger growth throughout the East Hampshire district, but that a noticeable shortfall still remains at certain stations¹⁷.

Station	Entries and Exits (2019/20)	Entries and Exits (2022/23)	% Bounce back from pre-covid
Alton	679,324	496,032	73%
Bentley	132,018	82,486	62%
Liss	328,618	267,766	81%
Liphook	633,798	525,416	83%
Rowlands Castle	123,718	112,942	91%
Petersfield	1,405,648	1,037,738	74%
Average			77.3%

Table 4.1: Rail station usage in East Hampshire

Source: Network Rail

4.15. For greater detail on rail stations, their usage and future schemes and strategies as planned by Network Rail, please refer to the Network Rail Briefing Note contained in Appendix A.

¹⁶ Network Rail East Hampshire Briefing Note 2023

¹⁷ Network Rail East Hampshire Briefing Note 2023



Figure 4.1: Rail, strategic and primary highway network in East Hampshire

Source: www.urban-graphics.co.uk in association with EHDC

Bus

- 4.16. Table 4.2 presents details of the regular bus services routing through the areas of the district, outside of the South Downs National Park.
- 4.17. Hampshire County Council bus route maps, and associated timetables, can be viewed for all bus services running in the district, (regular and infrequent), <u>here</u>:

Route	Description	Operator	Weekday	Saturday	Sunday				
North									
13	Basingstoke – Hook – Alton - Bordon	Stagecoach	Hourly 07:00 – 20:00	Hourly 07:00 – 20:00	No service				
64	Winchester - Alton	Stagecoach	Twice hourly 07:00 – 19:00 then hourly until 00:00	Hourly 07:00 – 00:00 and twice hourly 10:00 – 16:00	Hourly 08:00 – 20:00 and twice hourly 10:00 – 16:00				
65	Alton – Farnham - Guildford	Stagecoach	Hourly 06:00 – 20:00	Hourly 07:00 – 20:00	No service				
North East									
18	Aldershot – Farnham – Whitehill - Bordon	Stagecoach	Hourly 06:00 – 20:00	Hourly 06:00 – 20:00	Every two hours 08:00 – 18:00				
23	Liphook – Bordon - Haslemere	Stagecoach	Every three hours 06:00 – 18:00 with additional 10:00 service	Every three hours 06:00 – 18:00 with additional 10:00 service	No service				
		South							
8	The Star: The Hard – City Centre – Cosham – Waterlooville – Clanfield via Horndean	First	Every 20 – 25 mins 05:00 – 01:00	Every 20 mins 08:00 – 18:00, every 30 mins 05:00 – 21:00, hourly 21:00 – 01:00	Every 30 mins 07:00 – 20:00 and hourly 20:00 – 23:00				
27	Rowlands Castle - Havant - Emsworth	First	Every two hours 09:00 – 15:00	No service	No service				
37	Havant – Waterlooville – Clanfield - Petersfield	Stagecoach	Hourly 08:00 – 19:00 and twice hourly 06:00 – 07:00	Every two hours 07:00 – 18:00 but hourly 09:00 – 10:00 and 15:00 – 16:00	No service				

Table 4.2: Regular bus services in East Hampshire

Source: Hampshire County Council

4.18. The most frequent bus services serving the district, outside of the South Downs National Park, is the 8 Star route between Portsmouth and Clanfield, serving the majority of the southern settlements, with exception to Rowlands Castle. This bus services operates for 20 hours of the day with a high frequency of 20 to 25 minutes. 4.19. The north of the district, particularly settlements such as Four Marks and Alton on the A31 corridor, benefit from the regular bus service of the 64 route, which operates 7 days a week and hourly or half hourly service between 07:00 and 00:00.

Walking and Cycling

- 4.20. Public rights of way (PROW) and accessible cycle routes enable communities to reduce their reliance on both public transport and private cars. Figure 4.2 shows the PROW network in the district and the National Cycle Network (NCN) in Figure 4.3.
- 4.21. East Hampshire has three NCN routes traversing the district: routes 22, 224 and 222. Route 22 is a mixture of on and off-road sections connecting London to Portsmouth. NCN route 22 enters the district in the north at Holt Pound, traversing Whitehill & Bordon and the South Downs National Park and exits into Havant via Rowlands Castle. Route 22 has spurs allowing cycle travel to Alice Holt Forest and Liphook.
- 4.22. Route 224 is in the north of the district connecting Alice Holt Forest to Medstead. The route is predominantly off-road between Alice Holt and Bentley train station, where it is intended for users to travel by train to Alton. Once in Alton the cycle path traverses Alton town centre on-road before reaching Medstead via Chawton Park Woods off-road section. The NCN route 224 in East Hampshire connects with NCN route 23 in Medstead and route 22 in Alice Holt Forest.
- 4.23. NCN route 222 provides a connection from Petersfield in the South Downs National Park to the southern coast at Portsmouth. Route 222 adjoins route 22 south of Petersfield and runs parallel to the strategic road network of the A3 and bounds the Queen Elizabeth Country Park western boundary to traverse Horndean further south in the district.
- 4.24. Figure 4.2 presents a dense PROW network in the district, spanning both the area of the district inside and outside of the South Downs National Park. Several prominent long distance walking routes are found within East Hampshire and are promoted by Hampshire County Council as walking routes in the countryside¹⁸. The following are key PROW located in East Hampshire:
 - Shipwrights Way a long distance route commencing in Alice Holt Forest and passing through Bentley, Bordon, Liphook, the South Downs and Rowlands Castle before ending in Portsmouth. Suitable for walkers, cyclists and horse-riders. The majority of the route is off-road using rights of way and permissive paths.
 - Staunton Way a route between Queen Elizabeth Country Park in the South Downs to Staunton Country Park, adjacent to Rowlands Castle.

¹⁸ For details, see: <u>Walking routes in the Hampshire Countryside | Hampshire County Council (hants.gov.uk)</u>

- The Hangers Way approximately 20 miles long between Alton train station and Queen Elizabeth Country Park in the South Downs, passing through a series of steep sided hills known as "The Hangers".
- The Writers Way a walk based on a collection of local writers to the area and is open to walkers, cyclists and horse-riders. The route links Alton to surrounding smaller villages and settlements, such as Worldham, Chawton, Selbourne and Four Marks.
- St Swithun's Way runs between Farnham and Winchester via Alton and some of its smaller surrounding settlements.
- 4.25. Figure 4.3 also provides locations of the suggested improvements to the district's walking and cycling network from the East Hampshire Local Cycling and Walking Infrastructure Plan (LCWIP, August)¹⁹.
- 4.26. The East Hampshire LCWIP provides suggested improvements to the existing cycling and walking network in the district. The aim of an LCWIP is to encourage greater participation in the active travel modes for a range of purposes, by identifying improvements and schemes that benefits the modes. The suggested improvements consist of a range of scheme proposals, from small scale "quick wins" to more longer-term infrastructure improvements that require funding streams. The suggested LCWIP improvements will enable the creation of priority routes and identify where existing missing connections, as well as supporting infrastructure is required to aid greater amounts of cycling and walking in the district. For more information on the LCWIP schemes please see the current version of the East Hampshire LCWIP.
- 4.27. At the time of writing, the East Hampshire LCWIP was in the stages of being updated, with a superseded version anticipated to be published in 2024. The new version of the LCWIP will contain new primary and secondary cycling routes as well as core walking zones, with the entire district encapsulated.

¹⁹ For details, see: <u>rapport (easthants.gov.uk)</u>



Figure 4.2: Network of public rights of way and cycle routes in East Hampshire

Source: Hampshire County Council

Figure 4.3: National cycle routes and suggested walking / cycling improvements in East Hampshire



Source: East Hampshire LCWIP V1.2 2020

Existing travel patterns in the planning area

2011 vs. 2021 Census Data

4.28. EHDC are aware of the issues of utilising 2021 census data. The ONS have stated that the data are not reflective of current commuting patterns²⁰ and this is due to the 2021 census being undertaken in March 2021 when Covid-19 lockdown restrictions and furlough schemes were in place. Lockdown restrictions greatly reduced the population's ability to travel for all purposes, particularly work, and the furlough scheme resulted in a large proportion of the population not actively engaging in many normal activities, specifically travel to work, for a large period of time. As such travel patterns recorded in the 2021 census being conducted were not reflective or representative, specifically for commuting purposes. Where thought most appropriate the 2021 census data has been utilised, as the latest source of data. However, where possible 2011 census data has been presented along with 2021 census data, to make reference to pre-Covid travel patterns that could be misrepresented in the 2021 census data, travel to work datasets.

2021 Census Data

4.29. As shown in Figure 4.4, car availability in East Hampshire is high with 90% of households owning 1 or more cars/vans, in accordance with the 2021 census. A greater proportion of households in the district own 3 or more cars/vans than the proportion of the districts households that do not own a car, 17% versus 10% respectively. Car ownership is higher in East Hampshire compared to the rest of the country, especially for multiple car ownership in one household. The rural nature of the district should be kept in mind when considering reasons for high car ownership in East Hampshire.



Figure 4.4: 2021 census car availability by household in East Hampshire

Source: 2021 census

²⁰ Source: Origin-destination data explorer - Census 2021 - ONS

- 4.30. Figure 4.5 indicates that the greatest proportion of residents in East Hampshire choose to travel to a workplace by driving a car or van. East Hampshire has a slightly greater proportion of residents, 49.2%, travelling to work by driving a car or van, when compared to the proportion for England 44.5 % respectively. This could relate to the rural nature of the district and evidence of a higher car ownership when compared to England.
- 4.31. East Hampshire also has a higher proportion of residents, 37.5%, with the main workplace being at home, inferring no travel modes are needed for travel to the workplace. All other modes of travel to work are undertaken by a smaller proportion of East Hampshire residents when compared to statistics for the country. Approximately 1% of the district's residents choose to travel by train or bicycle, with 6% choosing to walk to work.



Figure 4.5: 2021 census method of travel to work in East Hampshire

4.32. Table 4.3 presents data informing the mode of choices made by residents when travelling to work, in relation to the chosen mode and distance of the journey. The largest proportion, 32%, of East Hampshire residents travelling by car to work are travelling between 10km and 30km. However, 30% of residents travelling to a workplace less than 10km are driving, with half of these journeys being less than 5km in distance. Just over 50% of commuting trips made by bicycle are less than 5km, but with 14% and 15% of cyclists travelling to a workplace of 5km to 10km and 10km to 30km away, respectively. Understandably, the greatest proportion of residents walking to work are travelling a distance less than 5km. The largest distances to work, specifically 60km or more, are completed using the rail and underground modes.

Source: 2021 census

	Less than 5km	5km to 10km	10km to 30km	30km to 60km	60km +	Work from home	Works offshore no fixed place, outside the UK
Work from home	0%	0%	0%	0%	0%	100%	0%
Underground etc	2%	2%	9%	9%	51%	0%	27%
Train	3%	7%	25%	10%	38%	0%	17%
Bus, minibus, coach	16%	24%	32%	7%	1%	0%	20%
Taxi	24%	10%	17%	3%	7%	0%	38%
M'cycle, scooter, moped	19%	14%	34%	10%	4%	0%	18%
Driving a car / van	15%	15%	32%	9%	2%	0%	26%
Passenger in car / van	22%	19%	24%	4%	1%	0%	29%
Bicycle	52%	14%	15%	3%	2%	0%	14%
On foot	67%	5%	14%	2%	2%	0%	10%
Other	10%	8%	18%	7%	5%	0%	53%

Table 4.3: 2021 census method and distance travelled to work in East Hampshire

Source: 2021 census

- 58,354 people work in the district of East Hampshire;
- 45,833 people live and work in the district;
- 12,521 people travel from outside of the district to work in East Hampshire (incommuting); and
- 15,894 people travel from their residence in East Hampshire to work outside of the district (out-commuting).
- 4.34. The largest movement of people travelling into East Hampshire to work (incommuting) were from:
 - Havant 2,888 people;
 - Portsmouth 1,793 people; and
 - Winchester 1,191 people.
- 4.35. The largest movement of people travelling out of East Hampshire to work (outcommuting) were to:
 - Waverley 3,113;
 - Havant 1,461 people; and
 - Portsmouth 1,460 people.
- 4.36. The entire 2021 census Workplace Flow dataset can be visually investigated via animation, for all commuting movements in and out of the district, all using the following <u>link</u>.

^{4.33.} The 2021 census Workplace Flow dataset indicates the following headline statistics about workplace flow in the district:

2011 Census Data

4.37. Figure 4.6 provides the 2011 census data on the method of travel chosen to travel to work by residents in East Hampshire. 2011 census data is similar to 2021 census data in that the dominant mode to travel to work is the car / van. However, the 2011 census data is contrary to the 2021 census data with reference to the vast difference in the proportion of residents choosing to work from home in 2021, likely to be highly influenced by the Covid-19 lockdown restrictions.



Figure 4.6: 2011 census method of travel to work in East Hampshire

Source: 2011 census

4.38. Figure 4.7 displays the distances travelled to work recorded for East Hampshire from the 2011 census. The greatest proportion of East Hampshire residents commuting to work travel between 10km and 20km or less than 2km, according to the 2011 census.



Figure 4.7: 2011 census distance travelled to work in East Hampshire

Source: 2011 census

- 4.39. Figure 4.7 provides detail of the commuter flows in and out of East Hampshire according to the 2011 census.
- 4.40. East Hampshire has a greater number of people commuting out of the district to work than those commuting into the district to work. As of 2011, 27,725 residents of East Hampshire also worked within the district.
- 4.41. Of the districts resident's workers commuting out of the district, 44% are travelling to Waverley, London, Havant and Portsmouth, with 15% solely to the neighbouring local authority of Waverley. Figure 4.7 indicates a high proportion of out-commuting travel though the district in a north/south direction. Those wanting to travel in a north/south direction from East Hampshire benefit from the strategic road network of the A3 and A3(M) as well as the London to Portsmouth Harbour rail line.
- 4.42. With respect to in-commuting to the district, the greatest number of the district's employees, 19%, are travelling from the south in the neighbouring local authority of Havant. Portsmouth, Waverley and Winchester are also all popular origins of travel for those commuting into East Hampshire.



Figure 4.7: 2011 census commuter flows of East Hampshire

Source: 2011 census

- 4.43. Figures 4.8 to 4.10 display the in and out-commuting trends of East Hampshire by the three modes of driving a car or van, train or bus. As already indicated by the 2011 census, the greatest number of East Hampshire residents travel to work by car. Figure 4.8 informs that approximately 12,000 people travel into East Hampshire by car or van to work, whereas approximately 20,000 of East Hampshire's residents commute out of the district to work by driving a car or van to other local planning authorities. Those commuting into the district to work by car or van are predominantly originating from neighbouring Havant, Waverley and Portsmouth. The greatest number of people deciding to travel into East Hampshire for work by car or van, are coming from the north of the district in neighbouring Waverley Borough Council.
- 4.44. Figure 4.9 indicates many fewer in-commuting trips to the district made by rail, when compared to out-commuting rail trips. The distribution of the origin rail trips commuting into the district is relatively even, with a slightly greater amount originating from Portsmouth. It should also be noted that the local planning authorities that the greatest amount of in-commuting workers originate from are not directly on the rail lines contained in East Hampshire, suggesting that in-direct rail travel is occurring. Figure 4.9 does show a much greater number of rail trips that commute out of the district, prominently to local planning authorities in central London and greater London. All the out-commuting rail destinations shown in Figure 4.9 can be directly travelled to on the London to Portsmouth Harbour line.

4.45. Figure 4.10 indicates that East Hampshire has a greater number of in-commuting trips made by bus than rail, approximately 700 versus 400 respectively. In-commuting bus trips to the district are predominantly originating from the south of the district, specifically the local planning authorities of Havant and Portsmouth. Approximately 400 residents commute out of East Hampshire by bus, with the greatest proportions of these trips destined to work in Waverley, Portsmouth and Havant.





Source: 2011 census



Figure 4.9: 2011 census commuter flows of East Hampshire, train

Source: 2011 census

Figure 4.10: 2011 census commuter flows of East Hampshire, bus



Source: 2011 census

Whitehill & Bordon Low-Car Design Travel Survey

4.46. In 2022 East Hampshire undertook a digital consultation to understand if greater flexibility should be given to parking standards in the settlement of Whitehill & Bordon in conjunction with future low-car design of housing, given the recent large redevelopment that has occurred there. Not only were Whitehill & Bordon residents asked to comment on multiple low-car designs of future housing, but also existing and future travel habits to understand the feasibility of households owning fewer cars given the demands of modern living.

4.47. The Whitehill & Bordon low-car design revealed that respondents were clear that if people are to be encouraged to use their cars less – so that households don't need as many parking spaces – there needs to be a realistic alternative for journeys that could not be undertaken on foot or by bike. The Whitehill & Bordon low-car design consultation reinforces the 2021 census findings as travel by car was found to be the prominent mode of transport as 75% (399 no.) of all responses identified that travel for specific purposes was likely to involve the car ²¹. Figure 4.11 indicates that the low-car design consultation also revealed that the car is the favoured mode of transport in Whitehill & Bordon for all key trip purposes.



Figure 4.11: Whitehill & Bordon low-car design travel modes

Source: EHDC Whitehill & Bordon low-car design consultation, 2023

4.48. A large majority of respondents told the Council that, at present, public transport alternatives were lacking in Whitehill & Bordon, with 70% (116 no.) of respondents stating they were "very unhappy" with the current public bus provision serving the settlement. Convenience was identified as the most important consideration when deciding how to travel; whilst a wider range of destinations and an increased frequency of public transport options were thought to encourage greater travel by bus, see Figures 4.12.

²¹ For details, see: <u>download (easthants.gov.uk)</u>





Source: EHDC Whitehill & Bordon low-car design consultation, 2023

Road congestion and prospective development sites

- 4.49. The draft Local Plan of East Hampshire 2021-2040 contains proposed site allocations.²² To understand the potential impacts that proposed site allocations could have on generating new congestion "hotspots" or exacerbating existing "hotspots" it is first necessary to understand where existing highway congestion "hotspots" occur in the district and when. This will assist the future transport analysis of the proposed site allocations, informed by a cumulative transport assessment at a district scale.
- 4.50. To understand existing road congestion in the planning area of East Hampshire, Google maps, displaying average congestion for varying times of the day and days of the week, has been observed for the larger settlements in the district. For more

²² At the time of writing this document the draft Local Plan was at Regulation 18 consultation

observations of congestion on varying days of the week and times please see Appendix B.

Alton

- 4.51. Alton is the largest settlement in the planning authority area of East Hampshire. The built-up area is contiguous with Holybourne, which relies on Alton for many of its services and facilities. Alton has direct connections to the A31, which runs south of the settlement and acts as a bypass by providing access to the north-east and south-west of the settlement. The A339 adjoins the south-west of Alton and provides connections to Basingstoke. The A32 and B3006 provide connections to the more rural settlements to the south of Alton and the B3349 to the rural settlements to the north. Chawton Park Road, Butts Road, High Street and Anstey Road, provide a direct route through the centre of Alton and the town centre in a south-west to north-east direction.
- 4.52. Alton has a wide range of education settings and facilities, all of which are found in the east of the settlement, including a college and secondary school. Alton also has a large number of business and industrial units, located south of the railway line and town centre bounding the northbound carriageway of the A31.
- 4.53. Figures 4.13 to 4.20 display the observed highway congestion experienced in Alton for an average Thursday between 08:30 and 17:30. Figures are shown for the entire settlement as well as focused on the town centre.
- 4.54. Figures 4.13 to 4.16 indicate that when looking at the settlement of Alton holistically, most of the congestion is located in the vicinity of the town centre, Butts Road, High Street and Anstey Road, for the duration of an average weekday. Another "hotspot" that has observed congestion for large proportions of the average weekday, is London Road in Holybourne and the priority junction of B3004 London Road/Montecchio Way with London Road, this junction forms the exit from Eggar's Secondary School.
- 4.55. In the morning (08:30) and evening (17:30) observed weekday the south-west of the settlement also experiences some congestion at what could be termed "hotspot" junctions, these being:
 - A339 with Butts Road (The Butts roundabout) roundabout junction; and
 - A339 Pertuis Avenue/Basingstoke Road with B3349 Basingstoke Road priority junction.
- 4.56. Observed congestion at The Butts roundabout is worse during the evening weekday time period, when compared with the morning, with the greatest congestion on the approach arms of Butts Road and A339 Pertuis Avenue southbound.

- 4.57. In both the morning and evening weekday time periods the congestion at the priority junction of A339 Pertuis Avenue/Basingstoke Road with B3349 Basingstoke Road is most prominent on the northbound approach to the junction on A339 Pertuis Avenue.
- 4.58. Figures 4.17 to 4.20 present observed highway conditions zoomed to central Alton for an average Thursday. These maps show in more detail the exact locations on High Street and Anstey Road that incur delay and congestion as well as at the junction of B3004 London Road/Montecchio Way with London Road, in the vicinity of Eggar's Secondary School. These observations also indicate that Anstey Lane adjoining Anstey Road and in the vicinity of education facilities also incurs congestion, specifically in the morning and evening time periods.
- 4.59. It is also evident that another corridor running through Alton is susceptible to incurring congestion and delay throughout the day, this being Mill Lane, Lower Turk Street and Draymans Way that route through the more employment and industrial land uses of the town. In the north-east of the town, Mill Lane adjoins B3004 Montecchio Way as a priority junction and this junction is observed as incurring delay throughout the day with queues forming on the Mill Lane approach arm, with the greatest delay on this arm experienced in the evening (17:30) time period, when many would be leaving the industrial estates. Lower Turk Street and Draymans Way at the south-western side of the town, particularly in the vicinity of Sainsubry's supermarket has observed congestion in both directions of travel for the majority of the average weekday, with exception to the morning time period.



Figure 4.13: Alton highway congestion, average Thursday 08:30

Source: Google












Source: Google







Figure 4.18: Alton town centre highway congestion, average Thursday 10:30







Figure 4.20: Alton town centre highway congestion, average Thursday 17:30

Source: Google

- 4.60. Figure 4.21 indicates the location of proposed future residential site allocations in Alton as part of the draft East Hampshire Local Plan 2021-2040. Alton is allocated four proposed residential sites:
 - Land at Brick Kiln Lane, located north of A339 Basingstoke Road 150 homes;
 - Land at Whitedown Lane, located south of A339 Basingstoke Road 90 homes;
 - Land at Travis Perkins (Mounters Lodge part), located between railway line and A31 – 24 homes; and
 - Land at Neatham Manor Farm, located east of A31 approximately 1,000 homes (strategic allocation site).
- 4.61. Alton is also allocated four proposed infrastructure and employment developments:
 - Extension to Chawton Park GP Surgery;
 - Land adjacent to Alton Sewage Treatment Works;
 - Land at Wilsom Road; and
 - Land at Lynch Hill, located between B3004 Montecchio Way and A31.
- 4.62. Due to the quantum of the proposed homes at the strategic allocation site of Neatham Manor Farm it is likely that this development, in isolation, will have the largest impacts on existing highway conditions in Alton. It is likely that this proposed development will exacerbate existing congestion in the vicinity of the site, specifically B3004 Montecchio Way, Anstey Road, High Street, B3004 Mill Lane and adjoining junctions. It is also likely that a development of this scale will cause additional highway congestion at nearby key destinations, such as local supermarkets and schools as well as the potential for new delay "hotspots" in the town, particularly on the A31 and its associated junctions. However, it should be kept in mind that a development of this scale can provide new education facilities as well as a new local

centre with facilities and services to cater for daily needs. Consequently, the development and its associated new infrastructure could allow for residents to live locally and have greater opportunity to make short distance journeys within the proposed development, and to surrounding Alton via active travel modes. This will be greatly encouraged by EHDC by ensuring the design, services and accompanying infrastructure emphasise good sustainable linkages within the development and to surrounding Alton. The potential highway impacts of the development will of course be investigated by an independent site-specific transport assessment as well as the district's cumulative transport assessment of the Local Plan.

- 4.63. The proposed residential allocations of Land at Brick Kiln Lane and Land at Whitedown Lane are adjacent to each other across the A339 Basingstoke Road. Both sites bound the A339 Basingstoke Road and the existing priority junction of A339 Pertuis Avenue/Basingstoke Road with B3349 Basingstoke Road, identified as an existing highway "hotspot" in Alton. It is likely that both developments will exacerbate the existing congestion and delay at this priority junction but there is the potential to improve this junction in conjunction with the proposed residential allocations, by converting the priority junction to a roundabout. Conversion to a roundabout would not only ease the delay incurred by having more free-flowing traffic but would also enable the two sites access to be formed as arms to this new junction, thus producing the potential need for a future five-armed roundabout, subject tofeasibility, engineering and safety concerns being permitted by the highway authority.
- 4.64. The proposed development at Land at Travis Perkins is of a much smaller quantum and as such the potential highway impacts also likely to be of a smaller scale. However, the proposed development should be kept in consideration, particularly with the identified highway "hotspots" of The Butts Roundabout and the existing priority junction of A339 Pertuis Avenue/Basingstoke Road with B3349 Basingstoke Road.
- 4.65. Three employment allocations are located between the A31 and B3004 Mill Lane, in the industrial sector of the town. It is likely that these three employment allocations will exacerbate the existing congestion and delay on B3004 Mill Lane and its associated junctions, however the scale of exacerbation will be dependent on the land use type that the sites are used for. Office land uses will incur a greater amount of highway trips arriving and departing from the sites in the morning and evening time periods, whereas industrial land uses could generate less highway trips in the traditional peak time periods but a greater flow of light and/or heavy goods vehicles during the off-peak time periods.
- 4.66. All proposed site allocations in Alton, as well as the rest of the district, potential highway impacts will be investigated by the East Hampshire cumulative transport assessment, which will provide an insight into whether any highway mitigation is required for proposed allocations, as well as the most suited type of mitigation. The district transport assessment will be produced as an evidence base for the next stage of the Local Plan's development, at Regulation 19 consultation.



Figure 4.21: Location of proposed housing sites and outstanding permissions in Alton

Whitehill & Bordon

- 4.67. Whitehill & Bordon is one of the largest settlements in the district's planning area. The A325 runs through Whitehill & Bordon in a north/south direction providing connections to Farnham in the north and the strategic road network of the A3 to the south. The A325 formerly routed through the centre of the settlement but was realigned to the western side of the town in conjunction with the large-scale redevelopment and regeneration of the former military base, now familiarly known as the A325 Relief Road.
- 4.68. In recent years, former defence facilities such as the Quebec and Louisburg Barracks have been successfully redeveloped and regenerated for housing and employment purposes. Regeneration of the wider Bordon Garrison is on-going in accordance with planning application 55587/001 and related detailed planning applications. In accordance with the planned regeneration of the Bordon Garrison, significant numbers of new homes, a relief road and community infrastructure have been developed to the west of the High Street/Camp Road, whilst a new town centre will be delivered at the junction of Budds Lane.
- 4.69. The Oakmoor Secondary School is located on Budds Lane and the majority of daily services and facilities are located on, or accessed via High Street/Camp Road.

Figures 4.22 to 4.26 display the observed highway congestion experienced in Whitehill & Bordon for an average Wednesday between 08:35 and 17:15.



Figure 4.22: Whitehill & Bordon highway congestion, average Wednesday 08:35

Source: Google



Figure 4.23: Whitehill & Bordon highway congestion, average Wednesday 10:00



Figure 4.24: Whitehill & Bordon highway congestion, average Wednesday 12:00

Source: Google



Figure 4.25: Whitehill & Bordon highway congestion, average Wednesday 15:00



Figure 4.26: Whitehill & Bordon highway congestion, average Wednesday 17:15

Source: Google

- 4.70. Figure 4.22 indicates that in the morning time period (08:35) congestion and delay is prominent in various locations, with the following forming average weekday morning "hotspots" in Whitehill & Bordon:
 - Budds Lane, in both directions of travel;
 - High Street, between Budds Lane and Conde Way in both directions of travel;
 - Junction of B3002 Camp Road with B3002 Lindford Road, Camp Road and Station Road – signalised junction; and
 - Junction of A325 Relief Road with B3002 roundabout.
- 4.71. During the off-peak time periods of the day (10:00, 12:00 and 15:00), Station Road in both directions of travel is observed to be congested. This is also the case for High Street between Budds Lane and Conde Way.
- 4.72. In the afternoon time period (15:00) that coincides with school pick-up, the local road network in the north of the settlement experiences the greatest delay and congestion. Namely the road and junctions surrounding Oakmoor Secondary School, specifically:
 - Station Road, in both directions of travel;
 - Junction of B3002 Camp Road with B3002 Lindford Road, Camp Road and Station Road – signalised junction;
 - Junction of Budds Lane with High Street/Camp Road mini-roundabout; and
 - Junction of Oakhanger Road/Station Road with Budds Lane priority junction.

- 4.73. The least congested time period on the highway network in Whitehill & Bordon is in the evening (17:15) where delay is less apparent, but still very present on the "hotspot" of High Street between Conde Way and Budds Lane.
- 4.74. Figure 4.27 indicates the location of proposed future site allocations in Whitehill & Bordon as part of the draft East Hampshire Local Plan 2021-2040. Whitehill & Bordon is allocated the following proposed residential sites:
 - Whitehill & Bordon Town Centre Intensification, located south of Budds Lane 316 homes;
 - Land at Former Bordon Garrison, south of Oakhanger Lane 115 homes;
 - BOSC Residential Expansion, located west of A325 Relief Road 38 homes;
 - Louisburg Residential Expansion, located west of A325 Relief Road 27 homes;
 - Land at Hollywater Road and Mill Chase Road, located west of B3004 Standford Road – 126 homes; and
 - Land at the Forest Centre, located in current town centre 44 homes.
- 4.75. In addition to the residential allocations, Whitehill & Bordon is also subject to employment and commercial allocations as part of the Local Plan:
 - Whitehill & Bordon Town Centre Intensification, located south of Budds Lane leisure, commercial and office use;
 - North of Louisburg Employment Proposal, located west of A325 Relief Road;
 - Land at Lion Court, located west of A325 expansion of employment use; and
 - Land at the Forest Centre, located in current town centre leisure and commercial use.
- 4.76. The largest quantum of proposed development, in isolation, in Whitehill & Bordon is the Whitehill & Bordon Town Centre Intensification which bounds Budds Lane, an already identified highway "hotspot" of the settlement. The intensification of the town centre for both residential and commercial land uses have the potential to exacerbate existing highway conditions. However, it should be kept in mind that the location of this residential development will form the new town centre and as such highway related trips related to new residences at this development should be minimal as there should be future improvements made for this location to also be a new sustainable travel hub i.e., for walking/cycling and bus connections.
- 4.77. The proposed residential development of Land at Former Bordon Garrison also has the potential to exacerbate existing highway congestion, specifically at the nearby "hotspot" junction of Oakhanger Road/Station Road with Budds Lane. But this proposed residential development will be in the vicinity of the settlements new town centre and consequently will also be in proximity to any associated transport infrastructure improvements, increasing the opportunity for residents to travel sustainably to local services and facilities.
- 4.78. Multiple development allocations are proposed to the west of the A325 Relief Road, a mix of residential and employment uses. The quantum of proposed residential

development is relatively low, but the cumulative impact of this could cause local congestion to deteriorate and investigation will be required to ensure mitigation is not required at the existing junctions adjoining the A325 Relief Road.

4.79. The proposed allocation to the east of the settlement, Land at Hollywater Road and Mill Chase Road, is quite removed from the rest of the settlement and not near any observed existing congestion. Due to the location of the development, it is possible that the residential development trips could potentially disperse onto the local road network using a number of different routing options and thus potentially minimising any impacts in one specific location.

Figure 4.27: Location of proposed housing sites and outstanding permissions in Whitehill & Bordon



Horndean

- 4.80. Horndean is located in the south of the district, situated north-west of Havant. Horndean is one of the largest settlements in the district and prominent to the busy and densely populated area is the strategic road network of the A3(M) and A3(M) junction 2, to the east of the settlement. The B2149 adjoins the A3(M) junction 2 and provides connections east and west of the A3(M), and to the west connects to the A3 local road network providing linkages to Cowplain, Waterlooville and beyond.
- 4.81. The main large attractions in Horndean are the Junior School, Technology College and Morrisons, all located in close proximity and accessed from the local road

network of the A3 and B2149. Figures 4.28 to 4.33 display the observed highway congestion experienced in Horndean for an average Monday between 08:30 and 17:30.

- 4.82. It is apparent from observations of highway conditions in Horndean that there is a local congestion "hotspot" at the signalised junction of the A3 Portsmouth Road with B2149 and Catherington Lane. The congestion on all approaches to this junction remains constant throughout an average weekday.
- 4.83. Another "hotspot" area in Horndean is Merchistoun Road which is a connecting road between the A3 Portsmouth Road and Catherington Lane. Merchistoun Road provides access to both Horndean Technology College and Junior School, with congestion shown to be relatively constant on a weekday with this reducing in the evening time period of 17:30. Direct access to Horndean Junior School is from Five Heads Road, adjoining Merchistoun Road and consequently experiences congestion on the section outside of the school, primarily in the afternoon time period that coincides with school pick-up time.



Figure 4.28: Horndean highway congestion, average Monday 08:30



Figure 4.29: Horndean highway congestion, average Monday 10:30

Source: Google



Figure 4.30: Horndean highway congestion, average Monday 12:45





Source: Google



Figure 4.32: Horndean highway congestion, average Monday 15:30





Source: Google

- 4.84. Figure 4.34 indicates the location of proposed future residential site allocations in Horndean as part of the draft East Hampshire Local Plan 2021-2040. Horndean is allocated three proposed residential sites:
 - Land at Woodcroft Farm, located to the very west of Horndean and west of Lovedean Lane 164 homes;
 - Land south of Five Heads Road, located south of Five Heads Road 118 homes; and
 - Land north of Chalk Hill Road, located east of Five Heads Road 38 homes.



Figure 4.34: Location of proposed housing sites and outstanding permissions in Horndean

- 4.85. The impact of the proposed Woodcroft Farm development, situated to the west of Horndean is likely to be highly dependent on the direction of travel that trips choose to route to reach local attractions. For instance, if future residents wish to travel north via the A3(M) it is likely that a large proportion of these trips could choose to navigate the existing "hotspot" of the signalised junction of the A3 Portsmouth Road with B2149 and Catherington Lane, to access the strategic road network northbound. However, if future highway trips travelling to/from the development are attracted to the southern region of Havant and Portsmouth then it is likely trips will distribute south onto the neighbouring local road network in Havant Borough Council. It should be kept in mind that education trips related to the development are likely to exacerbate existing congestion at the aforementioned signalised junction as well as Merchistoun Road and Five Heads Road to access the College and Junior School.
- 4.86. Land south of Five Heads Road and Land north of Chalk Hill Road developments are in close vicinity to each other, but Land south of Five Heads Road proposing a much larger quantum of future homes. The cumulative highway impacts of these two developments should be considered with future assessments as well as via the district's cumulative transport assessment to support Regulation 19 consultation. It is likely that the existing congestion on Five Heads Road and Merchistoun Road will be exacerbated by these developments, and as such it will be crucial to encourage travel by sustainable modes instead of the private car where possible, particularly for education related journeys.

Liphook

- 4.87. Liphook is one of the largest settlements in the planning area of East Hampshire. Liphook has direct connections to the strategic road network of the A3 to the north of the settlement and rail via the London to Portsmouth Harbour line. Liphook has three mini roundabouts in very close proximity to one another in the centre of the settlement, with the following roads adjoining these mini roundabouts: B3004 Headley Road; B2131 London Road; B2131 Haslemere Road; Midhurst Road; B2070 Portsmouth Road; and Longmoor Road. Figures 4.35 to 4.39 display the observed highway congestion experienced in Liphook on an average Thursday between 08:25 and 17:15.
- 4.88. The most congested time of day during an average Thursday in Liphook is in the morning peak hour between 08:00 and 09:00 at approximately 08:30. Congestion is found greatest in the direction of travel inbound to the centre of Liphook, with highway traffic travelling towards the series of mini roundabouts to traverse the centre of Liphook. It should be noted that the congested time period of 08:30 coincides with school drop-off times and there are three schools in the centre of Liphook in close proximity accessed via Longmoor Road and B3004 Headley Road. Figure 4.35 indicates that the most congested roads at approximately 08:30 on an average Thursday in Liphook are: B2131 London Road; B2131 Haslemere Road; and B2070 Portsmouth Road.
- 4.89. The mid-morning (10:00) and lunchtime (12:15) time periods are less congested in central Liphook, compared to other times of the day but congestion is still present on some arms of the mini roundabouts leading into the centre of Liphook. Figure 4.38 indicates that congestion increases slightly in the afternoon time period at approximately 15:30, specifically on B2131 London Road in an in-bound direction of travel to central Liphook. Although it should be noted that congestion is present on key roads in the centre of Liphook in both an inbound and outbound direction of travel to the centre of Liphook in the mid-afternoon. The time of approximately 15:30 coincides with school pick-up times.
- 4.90. Congestion is present in the evening period, at approximately 17:15, to a slightly lesser degree than the mid-afternoon period. It can be assumed this congestion is due to employees of Liphook leaving the workplace to commute home, but with this being said the direction of congestion still occurs in an inbound direction to the centre of Liphook with queues propagating back from the series of mini roundabouts.



Figure 4.35: Liphook highway congestion, average Thursday 08:25

Source: Google



Figure 4.36: Liphook highway congestion, average Thursday 10:00

Source: Google



Figure 4.37: Liphook highway congestion, average Thursday 12:15



Figure 4.38: Liphook highway congestion, average Thursday 15:40



Figure 4.39: Liphook highway congestion, average Thursday 17:15

Source: Google

- 4.91. Figure 4.40 indicates the location of proposed future residential site allocations in Liphook as part of the draft East Hampshire Local Plan 2021-2040. Liphook is allocated three proposed residential sites:
 - Land west of Headley Road, located to the west of B3004 Headley Road to the north of the centre of Liphook 24 homes;
 - Land north of Haslemere Road, located to the north of B2131 Haslemere Road to the east of the centre of Liphook 20 homes; and
 - Land at Chiltley Farm, located to the east of the centre of Liphook and south of the railway line 67 homes.
- 4.92. Land west of Headley Road is a small residential development at the north of the settlement. Additional vehicular trips from this proposed development could exacerbate existing highway congestion in the centre of Liphook but this is only likely for those trips destined to travel south or east through the mini roundabouts. Highway trips from the proposed development wanting to access the A3 to the north of Liphook, do not have to traverse the mini roundabouts but could instead utilise Tower Road and then B2131 London Road to access the A3. Similarly, development highway trips could travel west to Longmoor Road and the A3 at Griggs Green by routing via The Avenue instead of the centre of Liphook. It is anticipated that the Land west of Headley Road of 24 homes would have a minimal impact on the existing congestion hotspot of the Liphook mini roundabouts.
- 4.93. The other two proposed development sites in Liphook, Land north of Haslemere Road and Land at Chiltley Road are likely to have more highway impacts on the existing congestion in Liphook. This is due to both developments having the need for

highway trips to traverse the mini roundabouts in the centre of Liphook for all directions of travel, with exception to eastbound trips from Land north of Haslemere Road and southbound trips from Land at Chiltley Farm. However, it should be kept in mind that the proposed development at Land north of Haslemere Road is a small quantum and there is the potential for both development sites to encourage travel to the local facilities by active modes of travel due to their proximity. Land at Chiltley Farm is also in proximity to Liphook train station, and this is the largest of the proposed development sites in Liphook.

Figure 4.40: Location of proposed housing sites and outstanding permissions in Liphook



Clanfield

- 4.94. Clanfield is situated in the south of East Hampshire, north of Horndean and south of the boundary with the South Downs National Park. Clanfield is located west of the strategic road network of the A3, just north of the commencement of the A3(M). There are two junctions with the A3 in proximity to Clanfield: north of the settlement adjoining Chalton Lane and Gravel Hill with the northbound slip roads staggered; and south of the settlement adjoining A3 London Road that only provides a southbound off slip and northbound on slip.
- 4.95. Clanfield consists of two parts: 'Old' Clanfield which is a historic settlement to the north west of the settlement and 'New' Clanfield, which is a relatively new built-up area in the south and west of the settlement.

- 4.96. Figures 4.41 to 4.46 display the observed highway conditions for an average Wednesday between 08:30 and 17:30. The congestion in Clanfield remains in the same locations throughout the day with the most prominent locations being South Lane in Old Clanfield and Greene Lane and Drift Road in New Clanfield, referring to three key existing "hotspot" junctions:
 - South Lane / Chalton Lane with East Meon Road priority junction;
 - South Lane / Downhouse Road with Drift Road and Redhouse Lane priority junction; and
 - Green Lane with Drift Road and White Dirt Lane roundabout junction.
- 4.97. In the morning time period of 08:30 queues are observed on the majority of approaches to these three junctions. The exception to this being no queue approaching from the south on Downhouse Road to the priority junction of with South Lane, Drift Road and Redhouse Lane and no queue on Drift Road approaching the roundabout eastbound. It should be noted that schools and childcare facilities are in proximity to all of these three junctions in Clanfield, specifically: Petersgate Infant School on Green Lane just north of the roundabout; Clanfield Junior School on East Meon Road in close proximity to the junction with South Road / Chalton Lane; and Little Gems Day Nursery on South Lane. It should also be noted that the roundabout in New Clanfield is the centre of community services and facilities that Clanfield offers.
- 4.98. Congestion on the approaches to these three junctions remains relative constant at 10:30 and midday with queues on Drift Road in both directions being prominent. Congestion lessens at 14:00 but then increases slightly in the mid-afternoon period at 15:30, with the junction of South Lane / Downhouse Road with Drift Road and Redhouse Lane being an exception to this with no observed queues at this time of day.
- 4.99. The latter time period of the day of 17:30 is the least congested with minimal queues on some approaches to the roundabout in New Clanfield being present.

Figure 4.41: Clanfield highway congestion, average Wednesday 08:30



Source: Google



Figure 4.42: Clanfield highway congestion, average Wednesday 10:30

Source: Google



Figure 4.43: Clanfield highway congestion, average Wednesday 12:00

Source: Google



Figure 4.44: Clanfield highway congestion, average Wednesday 14:00



Figure 4.45: Clanfield highway congestion, average Wednesday 15:30



Figure 4.46: Clanfield highway congestion, average Wednesday 17:30

Source: Google

- 4.100. Figure 4.47 indicates the location of proposed future residential site allocations in Clanfield as part of the draft East Hampshire Local Plan 2021-2040. Clanfield is allocated two proposed residential sites:
 - Land at Clanfield County Farm, located north of Drift Road and east of South Lane 100 homes; and
 - Land at Drift Road, located south of Drift Road and west of White Dirt Lane 80 homes.
- 4.101. Both of the proposed residential allocations in Clanfield are for a relatively large quantum of homes and as such the number of highway trips generated from these could exacerbate existing congestion "hotspots" in Clanfield. It will be important to try and encourage as many of the residents of the new developments to "live locally" in Clanfield for daily needs where possible, to try and reduce the amount of additional car trips generated from the development and instead increase participation in active travel modes. Both proposed site allocations are within walking and cycling distance to the services and facilities provided in 'New Clanfield', particularly the Land at Drift Road which is very close to the existing services and facilities, as such there should be high potential for active travel modes to be used for accessing some daily needs.
- 4.102. The proposed site allocations are also in proximity to one another and therefore the cumulative impacts of the sites are likely to impact similar parts of the road network in Clanfield, specifically the existing "hotspot" junctions of the priority junction of South Lane/Downhouse Road with Drift Road and Redhouse Lane and the roundabout central to the local facilities in 'New Clanfield' of Green Lane with Drift Road and White Dirt Lane. Investigation via the forthcoming Regulation 19 district

Transport Assessment will be required to understand whether any highway mitigation is likely as a result of the cumulative impact of these two proposals in Clanfield and the district as a whole.

4.103. The strategic road network of the A3 should be kept in mind with the potential highway impacts generated from these sites, specifically any queues that could be caused on the off-slips from the A3 onto the local road network. No existing queues are observed in the vicinity of the A3 slip roads in Clanfield, so it is hopeful that the proposed developments will not cause any disruption to the strategic road network as some road traffic is likely to distribute to the local road network south of Clanfield to neighbouring settlements of Catherington, Horndean and beyond, not just bound for the strategic road network.

Figure 4.47: Location of proposed housing sites and outstanding permissions in Clanfield



Four Marks

4.104. Four Marks is a settlement located approximately five miles to the south-west of Alton. It is a linear settlement that has developed around the A31, an integral part of the local road network in the northern area of East Hampshire. Medstead is the settlement located in the closest proximity, to the north of Four Marks with the northern area between Four Marks and Medstead known as South Medstead.

- 4.105. A number of local roads connect to the A31 to provide local traffic to travel to surrounding residential areas, predominantly north and south of the A31. Lymington Bottom Road and Boyneswood Road adjoin the north of the A31 and connect to South Medstead and Medstead, whilst Telegraph Lane and Lymington Bottom facilitate travel to southern Four Marks. There are two local pinch points on the local road network in Four Marks, these being: Lymington Bottom Road, where the road passes under the Watercress railway line, a single carriageway controlled by priority shuttle junction; and Boyneswood Road is also single carriageway when passing over the Watercress railway line controlled by priority shuttle junction.
- 4.106. It should be noted that Four Marks Primary School is not located near the settlement's main services and facilities around the A31, but instead to the southwest of the settlement accessed via Lymington Bottom. Figures 4.48 to 4.51 display the observed highway conditions for an average Thursday between 08:30 and 17:30 in Four Marks.
- 4.107. In the average weekday morning at 08:30, no congestion is observed on the A31 but instead it is present on the adjoining roads of Boyneswood Road, Telegraph Lane, Lymington Bottom and Lymington Bottom Road all in the direction of travel inbound to the junctions with the A31. Congestion is also present on Boyneswood Road and Lymington Bottom Road northbound from the junctions of the A31 north towards South Medstead and in proximity to the aforementioned single carriageway priority shuttle junctions. During the later morning and midday of an average Thursday, congestion remains on the adjoining side roads of the A31, but with congestion covering a greater distance of Telegraph Lane and Lymington Bottom Road. It is observed that Four Marks has three existing junctions that can generate "hotspots" for traffic, these being:
 - A31 junction with Lymington Bottom Road priority junction;
 - A31 junction with Boyneswood Road priority junction;
 - A31 junction with Telegraph Lane priority junction; and
 - A31 junction with Lymington Bottom priority junction.
- 4.108. The A31 running through the middle of Four Marks also becomes more congested, specifically in the vicinity of the main shops and services in the centre of the settlement, with congestion remaining into the evening period of 17:30. Congestion eases on the adjoining roads to the A31 in the evening period.



Figure 4.48: Four Marks highway congestion, average Thursday 08:30





Source: Google



Figure 4.50: Four Marks highway congestion, average Thursday 12:00

Source: Google



Figure 4.51: Four Marks highway congestion, average Thursday 17:30

4.109. Figure 4.52 indicates the location of proposed future residential site allocations in Four Marks as part of the draft East Hampshire Local Plan 2021-2040.



Figure 4.52: Location of proposed housing sites and outstanding permissions in Four Marks

4.110. Four Marks is allocated three proposed residential sites:

- Land west of Lymington Barn, located west of Lymington Bottom Road 90 homes;
- Land rear of 97-103 Blackberry Lane, located east of Lymington Bottom 20 homes; and
- Land south of Winchester Road, located between A31 and Brislands Lane 100 homes.
- 4.111. In addition to the above proposed residential allocations, Four Marks is also allocated an infrastructure proposal of an extension to the existing Boundaries GP surgery and two traveller pitches east of Lymington Bottom.
- 4.112. It is likely that the proposed residential allocations of Land west of Lymington Bottom Road and Land south of Winchester Road are to have the greatest impacts on existing highway conditions in Four Marks as these are the largest quantum of proposed homes. At this point in time the proposed access to Land south of Winchester Road is unknown but the possibilities are either onto the A31 via Barn Lane or via the neighbouring development accessed via Pheasant Way/Goldcrest Way again onto the A31. The access of the proposed development needs to be consider both in terms of exacerbating any existing congestion on the A31 but also safety. The Land west of Lymington Barn development could exacerbate existing

congestion and delay on Lymington Bottom Road passing through the priority shuttle junction under the railway bridge, but also at the junction with the A31. Investigation into the developments proposed highway impacts will need to occur to understand in any mitigation is required, specifically to the junctions on and adjoining Lymington Bottom Road, as well as Four Marks and beyond. The districts cumulative highway Transport Assessment for Regulation 19 will be a useful tool of understanding potential impacts from development in Four Marks.

Grayshott

- 4.113. Grayshott is located in the north-east of the district close to the boundary with the neighbouring authority of Waverley Borough Council. The strategic road network of the A3, with slip roads on and off via the A333 Portsmouth Road, (south of the Hindhead Tunnel), are in very close proximity to the settlement and bounds the eastern edge. The B3002 runs through the centre of Grayshott, providing a connection to Headley, Lindford and Bordon to the west.
- 4.114. Figures 4.53 to 4.57 display the observed highway congestion experienced in Grayshott on an average Wednesday between 08:30 and 18:00.



Figure 4.53: Grayshott highway congestion, average Wednesday 08:30



Figure 4.54: Grayshott highway congestion, average Wednesday 10:00

Source: Google



Figure 4.55: Grayshott highway congestion, average Wednesday 12:30



Figure 4.56: Grayshott highway congestion, average Wednesday 14:30

Source: Google



Figure 4.57: Grayshott highway congestion, average Wednesday 18:00

Source: Google

4.115. The majority of Grayshott's facilities and services are located on the B3002 Headley Road. Figures 4.53 to 4.57 indicate that the B3002, in both directions of travel experiences congestion and delay for nearly all of the observed time periods of an average weekday, the exception to this being the later time period of the day of 18:00, when congestion is not observed.

- 4.116. The priority junction of B3002 Headley Road with Crossways at the eastern end of the centre of Grayshott, appears to be an existing congestion "hotspot". Congestion is observed on all approaches to this junction for much of an average weekday.
- 4.117. There are no proposed future residential site allocations in Grayshott as part of the draft East Hampshire Local Plan 2021-2040. Therefore, Grayshott will not experience any additional congestion as a result of future allocated development in the settlement, but it could as a result of cumulative impacts of additional highway traffic generated from future development in the district, as well as neighbouring local authorities and general increases in car ownership.

5.0 AIR QUALITY

What are the issues?

- 5.1. Air is full of particles and gases from natural and man-made sources. Examples of pollution in the air: pollen; emissions generated from industry, vehicles, buildings; and agricultural chemicals or sprays.
- 5.2. Poor air quality has been linked to a number of health conditions and tends to have the greatest impact on the most vulnerable members of society (young and elderly), as well as those with existing health conditions.
- 5.3. Due to the relationship between poor air quality and ill health, the following pollutants are monitored throughout the district at fixed locations annually, and are known to be large contributors to poor air quality on a national scale:
 - Nitrogen dioxide (NO₂);
 - Sulphur dioxide (SO₂); and
 - Particulate matter (e.g. PM₁₀)
- 5.4. Latest monitoring data from 2021²³ indicates that all air quality monitoring stations in the district complied with air quality objectives. Consequently, East Hampshire continues to have no need for declaring an Air Quality Management Area (AQMA) and air quality in the district is generally found to be good.
- 5.5. Over 50% of nitrogen dioxide (NO₂) emissions are estimated to be generated from road transport²⁴, consequently NO₂ levels are generally found to be highest in builtup areas where higher concentrations of vehicles are found. Concentrations of NO₂ have elevated during recent years, both at the national scale and local in East Hampshire. Monitoring of NO₂ has revealed concentrations to be close to, but not exceeding, air quality limits in Bordon.
- 5.6. NO₂ has also been found to have a detrimental impact on the natural environment by causing acidification and eutrophication to soil and water, thus impacting sensitive species. Future development can generate increases in road traffic by increasing car ownership and/or traffic flows on roads in the vicinity of the proposed development. Therefore, future development can directly lead to increases levels of NO₂ emissions generated from domestic properties, via car usage. To ensure future development does not have an adverse impact on internationally designated sites of Special Areas of Conservation (SACs) and /or Special Protection Areas (SPAs), a Habitats Regulation Assessment (HRA) is utilised to project future emissions, including NO₂, generated from roads within 200m of the internationally designated sites of sites. An HRA is an iterative assessment that is undertaken during the Local Plan process to ensure no adverse impact is caused on the designated sites. The

²³ EHDC Air Quality Annual Status Report - 202021.docx (live.com)

²⁴ George Wilkinson Report East Hampshire Local Plan Habitats Regulations Assessment 2018-11-26 (easthants.gov.uk)
following international designated sites lie (fully or partially) in the district and Figure 5.2 displays them geographically:

- Butser Hill SAC;
- East Hampshire Hangers SAC;
- Shortheath Common SAC; and
- Wealden Heaths Phase II SPA and Woolmer Forest SAC.

Figure 5.1: SSSIs, SPAs and SACs in East Hampshire



Source: Natural England via EHDC Integrated Impact Assessment Scoping Report, 2023

What could be done through the Local Plan?

- 5.7. As the largest contributors to poor air quality are primarily generated from the transport industry, a reduction in travel and using alternative non-fuelled modes is a key priority of the Local Plan to enhance air quality in the district.
- 5.8. The Local Plan is promoting sustainable development by advocating "living locally" based on the concept of the 20-minute neighbourhood. The key transport benefits to be gained from living locally is minimising the need to travel and reducing the distance of journeys, thus causing a reduction in transport emissions generated and a resulting improvement to air quality. By locating development in the most sustainable locations that are in realistic walking or cycling distances to existing, or future, facilities and infrastructure that can support daily living, there will be less need for the district's residents to be reliant on the private car for travelling. Locating development in 10-minute walking or cycling distances to shopping, health and employment needs will encourage regular, shorter distance journeys to be undertaken by sustainable modes that are not detrimental to the environment or public health. A reduction in NO₂ emissions from the domestic transport sector in East Hampshire will contribute to improving air quality and public health.
- 5.9. A secondary benefit from living locally and greater opportunities to walk and cycle to access daily needs is the increased activity levels of the community. Active and healthier lifestyles can be encouraged by real opportunities in engaging in walking and cycling on a regular frequency for simple routine outings from the home. Public health would also be benefited by having improved air quality to undertake such active journeys in.
- 5.10. However, a rural district such as East Hampshire will still need to use the car for purposes that cannot be fulfilled locally. A greater uptake and switch to electrification and battery powered vehicles is estimated to greatly improve air quality. EHDC' Net Zero Evidence Base Study (2023)²⁵ projects that annual road fuel consumption in cars is set to reduce by over 50% when switching from petrol or diesel to battery powered electric cars, thus also reducing emissions by reducing the amount of fossil fuels burnt.
- 5.11. It is acknowledged that there are current limitations to a large uptake in battery powered vehicles in the UK: primarily the high cost of purchase compared to petrol and diesel fuelled vehicles; and a lack in the supporting infrastructure in the form of large quantities of electric charging points in the community. Consequently, it will be of great importance for the supporting infrastructure of electric charging points for battery powered vehicles to be provided in all future development, in accordance with East Hampshire's policy guidance as set out in Appendix F of the Local Plan 2021-2040.
- 5.12. To ensure air quality remains at a good state within East Hampshire and that concentrations do not exceed permitted levels, it is appropriate for the Local Plan to

²⁵ East Hampshire Net Zero Evidence Base Study (easthants.gov.uk)

integrate an air quality policy to inform the development management decision making regarding future developments that could be detrimental to air quality levels in isolation, or as a cumulative impact of development at a localised scale of the district. The new air quality policy will ensure that development is only permitted when it will not detrimentally contribute to poor air quality and that suitable mitigation, on-site and/or off-site, are provided as part of the development proposals. Such onsite and off-site mitigation could be:

- inclusion of active travel networks or connections that aim to minimise the number of car journeys, specifically in large quantum development;
- supporting infrastructure to active travel i.e. cycle storage and parking; and/or
- well-designed spaces incorporating green infrastructure to absorb pollutants and/or to create natural barriers to hinder dispersal of pollutants from nearby road traffic.

Summary

- 5.13. In line with government strategies and objectives, East Hampshire needs to consciously encourage residents to choose to walk, cycle and use public transport wherever possible, and as frequently as possible. By being less reliant on the private car, it will be possible for the air quality of the district to remain compliant with statutory objectives, whilst improving the personal health of residents.
- 5.14. As part of strategy for sustainable development, the East Hampshire Local Plan will plan for future development to be located in the most accessible locations. This will prioritise walking and cycling modes, helping to reduce the number of short car journeys and thus improving local air quality in new developments and surrounding neighbourhoods.

6.0 ACCESSIBILITY

What are the issues?

- 6.1. Due to the transport industry being evidenced as a substantial contributor to emitted greenhouse gases and the consequential declaration of a climate emergency at a local and national scale, it is necessary for action to be taken to try to reduce the reliance on private car and increase usage of sustainable transport modes.
- 6.2. The Government's Decarbonising Transport Paper is clear that spatial planning is a key enabler to greater engagement levels in cycling and walking. Sustainable development and transport need to be approached and planned for holistically, particularly when aiming to reduce carbon emissions. The Government endorses concepts such as 20-minute neighbourhoods and undertaking a greater number of shortened journeys for completing daily needs.
- 6.3. Hampshire County Council supports the decarbonisation of the transport sector with many of the objectives in the forthcoming Local Transport Plan 4. HCC aspire for residents to undertake a greater number of shorter distance trips by cycling and walking, thus encouraging less use of the private car. It is recognised that in urban areas that have established and successful public transport networks, residents have greater opportunity to undertake regular travel by modes other than the private car. East Hampshire is a rural district with settlements of varying scales geographically spread with limited public transport and interchanges. Cycling and walking networks are present in the district, but more focused to serve travel leisure purposes than commuting and provision of linkages between neighbouring settlements. East Hampshire is challenged to decarbonise its transport sector and increase cycling and walking due its rural nature and lack of existing active travel networks providing connections within the district.
- 6.4. East Hampshire needs to overcome such barriers in its sustainable transport network. A key aim of the district's Local Plan is to encourage greater use of sustainable travel modes, by creating more safe and convenient routes and/or connections for pedestrians, cyclists and public transport users within the rural setting of the district. Sustainable transport connections and networks will not work in isolation. Sustainable land-use spatial planning is essential to ensure future residential and employment development is located in the most sustainable locations. Development situated in accessible walking and/or cycling distances to infrastructure, services and facilities has the greatest potential to encourage greater levels of sustainable travel and less reliance on the private car, with resulting reductions in greenhouse gases from the transport sector.

The Accessibility Study 2023 and its implications

6.5. To enable the Council to plan for future development in the most sustainable manner, it is important to understand which part(s) the Local Plan Area is/are best supported by local services and facilities, and of what type. Secondly, it is important

to know which areas have the greatest potential for people to be least reliant on using the private car for completing their daily journeys. The East Hampshire Accessibility Study takes account of local service provision and transport connections. It applies the concept of the 20-minute neighbourhood to focus on how residents might be enabled to live locally, fulfilling some of their daily needs within a 20-minute journey, primarily utilising active modes of transport (walking and cycling).

- 6.6. The objectives of the East Hampshire Accessibility Study were to address the following research questions:
 - How should the concept of 20-minute neighbourhoods be applied to East Hampshire, if at all?
 - Which parts of the Local Plan Area where land is promoted for residential development have the greatest potential to support increases in the use of sustainable transport modes (public transport, walking and cycling) over the plan period?
 - Which parts of the Local Plan Area where land is promoted for residential development have the least potential to support increases in the use of sustainable transport modes over the plan period?
 - What are the opportunities and constraints for connecting to pedestrian, cycle and public transport infrastructure for each of the potential development sites identified within the Council's reasonable alternatives for its Local Plan spatial strategy?
- 6.7. The transport consultants: Ridge and Partners were commissioned to undertake the Accessibility Study on behalf of EHDC. Ridge & Partners developed the methodology of the study in conjunction with EHDC's planning policy team, its regeneration team and the local highway authority, which is Hampshire County Council.
- 6.8. A bespoke tool, the Local Settlement Area Accessibility Tool (LSAAT) was developed by Ridge & Partners to assess the relative accessibility across the Local Plan Area. It should be noted that this tool has been developed specifically for East Hampshire to provide answers to the objectives of the study. Analysis of the accessibility of the Local Plan Area will aid decision-making about the most sustainable locations for future growth in the Local Plan Area and/or any need for the accempanying transport infrastructure and/or new daily services.
- 6.9. Ridge & Partners initially conducted research into the 20-minute neighbourhood concept with a specific focus on how it might be applied to rural settlements. Case studies and experiences in other rural communities were considered. The research and evidence concluded that a 20-minute neighbourhood concept should be applied to East Hampshire because living locally could help to maximise achievement of the Council's priorities during the Local Plan time period. Research and evidence also revealed that 10-minutes is generally the threshold time period that people are willing to walk to a destination, in order to access services. This was found to relate particularly to rural areas, as it is evidenced that people walk less and have less

willingness to walk further. It was therefore recommended that EHDC utilise the 20minute neighbourhood concept based on reaching a destination within 10-minutes i.e. a 20-minute round trip.

- 6.10. The key components of the LSAAT tool were formed by geographically mapping all public facilities and services within the East Hampshire district as well as within a 5km buffer of the district's boundary. The 5km buffer was included in recognition that residents close to the Local Plan Area boundary are not restricted by administrative boundaries, which often have little meaning for many services (especially those that are not provided by local authorities).
- 6.11. A honeycomb grid was overlaid on the Local Plan Area to create a fine grid of hexagons. Each hexagon was given an accessibility score based on the relative accessibility of facilities within a 10-minute walk and cycle from its central point. Recognising the different reasons for accessing facilities and services within the district, these were split into six categories based on the following 'social functions': living, working, supplying, caring, learning and enjoying. Equal weighting was placed on each of the functions, but varying weightings were attributed to individual facilities, as well as to the mode of travel (walking or cycling). All weightings were determined by reviewing empirical evidence. Further detail on the LSAAT tool and specific weightings of social functions and daily needs can be found in the East Hampshire Accessibility Study report.
- 6.12. The results of the Accessibility Study can be viewed numerically as well as geographically. Figure 6.1 provides some map-based imagery from the Accessibility Study, to show how areas within and around the settlements of Alton, Four Marks, Liphook and Rowlands Castle have performed. These images are for illustrative purposes only, to enable readers to appreciate the outcomes to the Accessibility Study. More geographically comprehensive information is available within the Accessibility Study report.



Figure 6.11: Representations of Accessibility Study results affecting Alton, Four Marks, Liphook and Rowlands Castle

Source: East Hampshire Accessibility Study 2023. NB: darker colours indicate a higher accessibility score (walking and cycling modes) to local services and facilities

- 6.13. For reference, the lowest scoring hexagon in the district's accessibility study, covering the Local Plan Area, is 2.1. The maximum accessibility score is 58.6 and the median accessibility score for the district is 4.9. As the median score indicates, the majority of the Local Plan Area of the district scores poorly for accessibility. The rural nature of the district and the vast geographical spread of services and facilities is the main reason for a low median accessibility score.
- 6.14. The results of the Accessibility Study show that hexagons located within or close to the centres of some of the districts largest settlements, particularly Alton, Whitehill & Bordon, Liphook and Horndean, have the highest accessibility scores. The built-up areas of the district, generally those that have a settlement policy boundary, have hexagons that score well in the accessibility study. By contrast, the hexagons covering the smaller settlements in the less well-connected countryside areas score lower in terms of accessibility. This implies that the settlements and the surrounding

built-up areas are the most accessible by means of active travel for completing social functions relating to serving daily needs.

- 6.15. The highest accessibility scores in the district are found in the hexagons covering Alton High Street and its immediate vicinity. This indicates that the centre of Alton provides a relatively large number and range of services and facilities within a 10minute cycling and walking distance. All hexagons covering the settlement policy boundary of Alton have a high accessibility score, much greater than the median of the district. Scores of hexagons covering Alton settlement policy boundary range from 14.8 in the south-eastern residential area (Windmill Hill) to 58.6 in the central retail area (High Street).
- 6.16. Other settlements in the north of the district that have high accessibility scores are Four Marks and South Medstead, Bentley and Holt Pound. The area surrounding the local shopping parade on the A31 in Four Marks has scores ranging from 14.9 to 21.4, with other areas of the settlement also scoring higher than the district's median. Bentley benefits from a mainline train station as well as some local services within the village, thus causing the settlement to have a range of accessibility scores from 8.2 to 17.7. Holt Pound is located on the district boundary with Waverley, with the neighbouring facilities and services being taken into consideration of the study, allowing Holt Pounds accessibility to be rated as 17.9 on the eastern side of the settlement.
- 6.17. Whitehill & Bordon in the north-east of the district, also scores very well in the Accessibility Study. In particular, the hexagons surrounding the existing town centre and community hospital receive a score of 34. All of the settlement policy boundary of Whitehill & Bordon, as well as the area providing a buffer to this, have good accessibility scores, which are greater than the district's median. Other settlements in the northeast of the district that are covered by multiple high-accessibility scoring hexagons are Liphook and Grayshott, with central Liphook scoring highly (37.5).
- 6.18. Many of the hexagons covering the southern settlements of the district such as Clanfield, Catherington, Horndean and Rowlands Castle, have an accessibility score greater than the district's median. The southern settlements of East Hampshire are all relatively accessible in terms of being within a 10-minute cycle or walk of daily facilities and services that serve key social functions. In the south of the district the settlement of Horndean has the largest accessibility score of 35, with this ranging to 12 over the hexagons that cover the settlement policy boundary.
- 6.19. The hexagons covering the majority of the countryside in the north and north-east of the district have lower accessibility scores, approximately the district's median score of 4.9 or less. This indicates the rural nature of these areas and the lack of services and facilities external to the built-up areas of the key settlements. It also indicates the lack of connections between the district's settlements and that the district is formed of individual hubs of services and facilities. However, the Accessibility Study does indicate that the district's residents have opportunities for living locally and fulfilling

daily needs by undertaking short distance journeys by the sustainable modes of walking or cycling, mainly in the existing settlements.

- 6.20. A high or low score from the Accessibility Study does not determine whether development should or should not be allocated in a given location, but it informs the Local Plan decision-making process with regards to existing accessibility of an area and helps to identify the transport infrastructure/services and supporting facilities that would be necessary to improve the accessibility of an area by active modes of transport.
- 6.21. For detailed information on the EHDC Accessibility Study methodology employed and results produced, please refer to the Accessibility Study Report.

Summary

- 6.22. To fulfil the aim of becoming carbon neutral in our transport sector, the greatest focus must be on reducing the use of the private car and increasing travel by active modes. The greatest opportunity in increasing cycling and walking, in the rural context of East Hampshire, is to reduce the distance of journeys undertaken. Accessing services and facilities that cater for daily needs by walking or cycling, instead of driving a car, provides the best opportunities for fulfilling this aim on a regular basis.
- 6.23. The EHDC Accessibility Study supports the Local Plan by providing evidence as to the area(s) of the district that are most accessible i.e. are located within a 10-minute walk or cycle of the greatest number of services and facilities that fulfil the daily social functions of residents.
- 6.24. The results of the EHDC Accessibility Study helps to provide evidence as to where in the district is most sustainable for development to be sited, as well as what future accompanying sustainable transport infrastructure and/or routes/connections are required to increase the amount of sustainable travel undertaken in the rural district.

7.0 ROAD SAFETY

What are the issues?

- 7.1. Conflict between all modes of transport needs to be considered and understood. Conflict between highway modes of transport and active travel modes of pedestrians and cyclists is common. Safety of all road users is vital and is aimed to be enhanced where possible. It is necessary to understand where existing highway conflicts are most frequent, and the scale of these, to ensure that any development related to the district's Local Plan is not at risk of exacerbating an existing known issue.
- 7.2. Due to the rural nature of East Hampshire several roads in the district can place a higher risk to users by narrow carriageways, lack of street-lighting and narrow/lack of pedestrian footpaths.
- 7.3. As evidenced in the district's current LCWIP (2020) there can be a lack of pedestrian footpaths and designated cycleways, particularly in the more rural parts of the district. This has been acknowledged in a number of locations, in conjunction with Hampshire County Council, and suitable schemes are being, or have been, designed to tackle these known issues. For example, Four Marks Primary School is located a distance from the centre of the settlement and is adjacent to a busy junction of five adjoining roads, known as Five Lanes. Due to the school's distance from the settlement and lack of safe and suitable pedestrian footpaths in its vicinity, the school travel survey revealed a large number of pupils are being driven to school. To encourage greater amounts of walking and scooting, Hampshire County Council are finalising the most suitable package of schemes to provide new pedestrian footpaths that route between the centre of the settlement to the school, funded by S106 monies, with the project being known as Four Marks Safer Routes to School. Figure 7.1 displays the Five Lanes junction outside of Four Marks Primary School.
- 7.4. To encourage greater amounts of sustainable travel, particularly cycling and walking adjacent or on the highway (for cycling), then it is highly important to be aware of any highway safety issues in the district and combat these where possible.



Figure 7.1: Alton Lane, Five Lanes area of Four Marks

Source: Hampshire County Council

Road safety: larger settlements and strategic routes

- 7.5. To understand the quantum and location of existing highway incident occurrences in East Hampshire, the <u>Crashmap</u> database has been investigated.
- 7.6. This section displays statistics and geographic locations of highway incidents for the last 5 years of available data, for some of the largest settlements in the district. It should be noted that due to the limitations in Crashmap, areas that best represent the settlements have been analysed. Consequently, associated statistics are for the entire mapped areas shown in Figures 7.2 to 7.8, not for specific settlement policy boundaries.
- 7.7. Incidents are presented for the following vehicle types: pedal cycle; motorcycle; car; goods vehicle; bus; and young driver. Incidents are presented for the following casualty types: pedal cycle casualty; child casualty; motorcycle casualty; and pedestrian casualty. Incidents are categorised into the following 3 categories of severity: slight; serious and fatal.

Alton

7.8. Table 7.1 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.2 geographically displays the recorded incidents for Alton, defined as the entire area as shown in Figure 7.2, for the latest year of 2021.

Appendix C should be referred to for geographic incident plots for all other observed years.

Year	Slight	Serious	Fatal	Total
2017	20	2	1	23
2018	21	7	0	28
2019	22	7	0	29
2020	11	3	0	14
2021	12	3	1	16
Total	86	22	2	110

Table 7.1: Recorded highway incidents by severity in Alton







- 7.9. Table 7.1 indicates that the Alton area has suffered 86 slight, 22 serious and 2 fatal highway incidents between 2017 and 2021. Highway incidents were more frequent in 2017 to 2019, with almost half the amount of highway incidents occurring in 2020 and 2021. It should be kept in mind that COVID-19 lockdown restrictions were in place during 2020 and 2021, which in turn reduced the amount of highway travel.
- 7.10. Of the most recent data, 1 fatal highway incident occurred in Alton on the A339 north-west of the settlement. 3 serious incidents occurred, with 2 of these occurring in proximity to the A31 off slips to the A339/B3006 Selbourne Road. Another serious incident occurred in 2021, but this was more central to the settlement and occurred at the roundabout junction of Lower Turk Street with Turk Street and Draymans Way,

on the Lower Turk Street approach to the roundabout. Slight accidents occur most frequently in Alton, with 12 recorded in 2021. The location of slight accidents is geographically spread amongst roads in the town centre as well as more rural roads serving as connections to the settlement, with 3 slight incidents recorded on B3349 New Odiham Road.

Whitehill & Bordon

7.11. Table 7.2 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.3 geographically displays the recorded incidents for Whitehill & Bordon, defined as the entire area as shown in Figure 7.3, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other observed years.

Table 7.2: Recorded highway incidents by severity in Whitehill & Bordon

Year	Slight	Serious	Fatal	Total
2017	13	5	0	18
2018	14	6	0	20
2019	13	4	0	17
2020	4	5	0	9
2021	11	4	1	16
Total	55	24	1	80





Source: Crashmap

- 7.12. Table 7.2 indicates that in the last 5 years of recorded data, the Whitehill & Bordon area has experienced 55 slight highway incidents, 24 serious highway incidents and 1 fatal highway incident. The fatal highway incident occurred on the residential road of San Domingo Road in 2021. Of the serious incidents, 4 of these occurred in 2021 and as shown by Figure 7.3 are geographically spread across the settlement in the following locations: A325 Louisburg Avenue; Hogmoor Road; Petersfield Road; and Hollybrook Park. 11 slight highway incidents occurred in 2021 and these were geographically spread in the settlement but with most in the central area of the settlement, specifically with concentrations on Petersfield Road, Forest Road and Chalet Hill.
- 7.13. Over the last 5 years of records, the fewest highway incidents occurred during 2020 in Whitehill & Bordon. 2020 coincides with the year of COVID-19 lockdown restrictions commencing.

Horndean

7.14. Table 7.3 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.4 geographically displays the recorded incidents for Horndean, defined as the entire area as shown in Figure 7.4, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other observed years.

Year	Slight	Serious	Fatal	Total
2017	13	4	0	17
2018	14	3	0	17
2019	14	3	0	17
2020	8	0	0	8
2021	14	1	0	15
Total	63	11	0	74

Table 7.3: Recorded highway incidents by severity in Horndean



Figure 7.4: Recorded highway incidents by severity in Horndean, 2021

7.15. It should be noted that the A3 and A3(M) are included in the highway incident statistics for Horndean. Table 7.3 indicates that the severity of highway incident that has occurred most in Horndean between 2017 and 2021 is slight, 63 in total. 14 of these slight incidents most recently in 2021 and Figure 7.4 displays that the slight highway incidents have occurred in a number of locations around Horndean, specifically a cluster on the B2149 roundabout junction of the A3(M) junction 2. Only 1 serious incident was recorded in Horndean during 2021, and this was on the A3(M) Junction 2 -1 northbound carriageway. No fatal highway incidents have been recorded in the area of Horndean for the last five years.

Liphook

7.16. Table 7.4 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.5 geographically displays the recorded incidents for Liphook, defined as the entire area as shown in Figure 7.5, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other observed years. It should be noted that the A3 is included in the highway incident statistics for Liphook.

Source: Crashmap

Year	Slight	Serious	Fatal	Total
2017	16	6	0	22
2018	9	2	0	11
2019	12	4	0	16
2020	6	5	0	11
2021	14	7	0	21
Total	57	24	0	81

Table 7.5: Recorded highway incidents by severity in Liphook

Source: Crashmap

Figure 7.5: Recorded highway incidents by severity in Liphook, 2021



- 7.17. During 2017 and 2021, 81 highway incidents have been recorded in the area of Liphook, as shown in Figure 7.5. None of these incidents were fatal but 24 were serious and the remaining 57 slight highway incidents.
- 7.18. 7 of the serious highway incidents occurred in 2021. 2 serious incidents are recorded in 2021 as occurring on the A3 southbound carriageways, before and after the Liphook junction. It is noticeable that none of the recorded highway incidents in Liphook have occurred in the centre of the settlement at the series of miniroundabouts, where congestion has been evidenced to be prominent.

Clanfield

7.19. Table 7.5 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.6 geographically displays the recorded incidents for Clanfield,

defined as the entire area as shown in Figure 7.6, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other observed years. It should be noted that the A3 is included in the highway incident statistics for Clanfield.

Year	Slight	Serious	Fatal	Total
2017	16	3	0	19
2018	11	4	0	15
2019	8	1	0	9
2020	12	3	0	15
2021	8	3	0	11
Total	55	14	0	69





Source: Crashmap

- 7.20. There have been no fatal highway incidents in Clanfield between 2017 and 2021. 55 highway incidents in the area were classified as slight and 14 as serious. During the latest 5 years of records, 9 to 19 highway incidents were occurring annually in the Clanfield area.
- 7.21. In 2021, 3 serious highway incidents occurred with 1 occurring at the observed congestion "hotspot" priority junction of South Lane / Downhouse Road with Drift Road and Redhouse Lane. The other two serious incidents were recorded on

Chalton Lane providing access to/from the southbound carriageway of the A3 and Catherington Lane, south of Clanfield.

7.22. The recorded slight highway incidents are geographically spread with exception to a noticeable cluster of 2 incidents on the A3 southbound carriageway just north of the off-slip to the local road network of A3 London Road. This is also just before the point of the strategic road network of the A3 trunk road becoming the the A3(M) motorway.

Four Marks and Medstead

7.23. Table 7.6 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.7 geographically displays the recorded incidents for Four Marks and Medstead, defined as the entire area as shown in Figure 7.7, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other observed years.

real	Slight	Serious	Fatal	Total
2017	6	4	0	10
2018	4	4	0	8
2019	5	2	0	7
2020	7	5	0	12
2021	10	1	0	11
Total	32	16	0	48

Table 7.6: Recorded highway incidents by severity in Four Marks and Medstead





- 7.24. Table 7.6 presents the information for the latest recorded highway incidents for Four Marks and South Medstead. Annually, between 2017 and 2021 7 to 12 recorded highway incidents have occurred in the area. No fatal highway incidents have occurred, but 32 slight and 16 serious.
- 7.25. In 2021, 10 slight highway incidents were recorded. 6 of these occurred on the A31 Winchester Road, with 4 located in the more central part of Four Marks that is bounded by residential properties. 1 slight incident was recorded on Roe Downs Road in Medstead.
- 7.26. The 1 serious highway incident was not located in Four Marks and Medstead but instead south of the small neighbouring village of Lower Farringdon. This was only recorded in this dataset due to the limitations in Crashmap, by not being able to be more precise on the area.

Grayshott

7.27. Table 7.7 presents the recorded incidents by severity for the last available five years, 2017 – 2021. Figure 7.8 geographically displays the recorded incidents for Grayshott, defined as the entire area as shown in Figure 7.8, for the latest year of 2021. Appendix C should be referred to for geographic incident plots for all other

observed years. It should be noted that a small section of the A3 is included in the highway incident statistics for Grayshott.

Year	Slight	Serious	Fatal	Total
2017	3	0	0	3
2018	1	2	0	3
2019	0	0	0	0
2020	2	0	0	2
2021	2	0	0	2
Total	8	2	0	10

Table 7.7: Recorded highway incidents by severity in Grayshott





Source: Crashmap

- 7.28. Between 2017 and 2021 only 10 highway incidents have been recorded in Grayshott, with 2 of these in the most recent year of 2021. 1 slight incident was located in the centre of Grayshott on B3002 Headley Road and the other on the A3 northbound carriageway in close proximity to the on-slip prior to the Hindhead tunnel.
- 7.29. Annually, Grayshott incurs 2 to 3 highway incidents. No highway incidents were recorded in Grayshott during 2020, when COVID-19 restrictions commenced.

A31 and A3 / A3(M)

7.30. Due to the limitations in Crashmap it is not possible to analyse the number of highway incidents on the A31 and A3 / A3(M) in isolation. Figures X to X display the location and severity of highway incidents recorded on the A31 and A3 / A3(M) in East Hampshire between 2017 and 2021.

Figure 7.9: Recorded highway incidents by severity on A31 Bentley to Chawton, 2017-2021



Source: Crashmap





Source: Crashmap









Source: Crashmap





Source: Crashmap

Summary

- 7.31. Highway safety of all users is crucial to ensure travel within the district can be undertaken with confidence by all modes. Existing highway issues and schemes are being designed and completed by Hampshire County Council, that will solve current identified safety concerns, for example the provision of pedestrian footpaths in the vicinity of services and facilities that are used most frequently, particularly schools.
- 7.32. To encourage greater amounts of travel by active modes of cycling and walking, the routes and paths need to be as convenient and accessible as possible to give greatest opportunity for as many to be able to engage in travel options other than the private car. Supporting infrastructure that benefits the travel environment is also important to users and the perception of safety, for instance segregated footpaths and cycle routes, street lighting and direct routes.
- 7.33. Highway incidents have been investigated for the larger settlements of the district for the last five years. Incidents defined as slight are most common in the district for all user types, with a varying geographic spread of occurrence on all different road categories of the local and strategic highway network.

8.0 PARKING STANDARDS

What are the issues?

- 8.1. Data from the 2021 Census (ONS) indicates that car ownership and use remain high in East Hampshire, with 37.4% of households owning two cars or vans compared to the national average of 26.1%. This can be attributed partly to the rural nature of the district and the lack of public transport connectivity. Some areas in the Local Plan Area are relatively remote with limited options for public transportation. As a result, residents in these areas often face difficulties in accessing essential services and amenities without private transportation. Even in some of the larger settlements, such as Alton and Whitehill & Bordon, residents rely heavily on their cars to commute to work and access various destinations. The 2021 Census identified that 49.2% of East Hampshire residents travel to the workplace by car or van. This compares with 44.5% of people nationally.
- 8.2. There is a balance to be struck between prioritising sustainable transport modes (section 3) and recognising that for some journey purposes, access to a car or van often remains a practical necessity. It will be important to work with partners (e.g. Hampshire County Council) to remove some of the barriers that relate to land use, which dissuade people from making walking and cycling their preferred choice mode of transport for local journeys. These barriers may relate to the availability, the attractiveness or the safety of pedestrian or cycling infrastructure. However, in a rural district where journeys between places can be too far for many people to walk or cycle, access to a car is likely to remain important. This is confirmed by the relatively low accessibility scores that many parts of the district received within the Accessibility Study (see section 6).
- 8.3. Despite the financial pressures for households that have been caused or exacerbated by the cost-of-living crisis, access to a car or van is likely to involve vehicle ownership. This in turn necessitates a space requirement for vehicle parking, both at home and at likely journey destinations (e.g. offices, shops, leisure facilities). EHDC has previously established a set of parking standards²⁶, which propose minimum requirements for the parking of vehicles including cars. A key issue is whether this approach remains appropriate.
- 8.4. National planning policy seeks to promote sustainable transport. In addition to promoting walking, cycling and the use of public transport, this includes ensuring that patterns of movement, streets and parking considerations are integral to the design of new development and contribute to making high quality places (NPPF, paragraph 108). EHDC's parking standards have previously focused on the quantity of parking spaces that should be provided for different uses; but it is clear that a more joined-up focus on how parking arrangements can influence the attractiveness and functioning of new development is necessary, in light of the renewed focus on design within the

²⁶ EHDC published its Vehicle Parking Standards as a supplementary planning document in 2018. These set out the minimum parking requirements for different types of development within the Local Plan Area. For details, see:

revised NPPF, supported by the National Design Guide (2021) and the National Model Design Code (2021).

8.5. Hampshire County Council's LTP4 proposes a 'healthy streets approach' to the design of streets (see section 2), aspects of which could be adversely affected by poorly designed parking arrangements. A recent design review of new developments in summer 2023 has found that car parking arrangements can negatively affect the overall appearance and attractiveness of the street. Common issues include very extensive areas of surfacing (such as tarmac) which creates a car-dominated streetscape that has less space for green infrastructure, making the environment less climate resilient than other. It also makes the street less welcoming for pedestrians and cyclists, creating greater potential for conflicting movements as cars manoeuvre.





8.6. By contrast, a lack of suitable car parking can result in inappropriate parking by visitors, which can be danger to other users of the highway and an obstruction to pedestrians.



8.7. Reliance on shared parking courts to provide a large number of parking spaces requires a large amount of land. This can reduce opportunities for providing shade and shelter within the bult environment, whilst also reducing passive surveillance of parking areas, potentially leading to safety concerns and the risk of vandalism or theft.



8.8. In one recent development, boundary treatments and incidental landscaping contributed to attractive plot frontages, but these were not complemented by sufficient pedestrian infrastructure, with only one side of the street having a

pavement. This approach could build in or encourage a reliance on the car, by making it less convenient to walk to local destinations.



- 8.9. A further key issue is therefore resolving the question of how to provide new car parking in ways that contributes to the creation of attractive, climate-resilient neighbourhoods that support walking and cycling as preferred modes of transport for local journeys.
- 8.10. Other climate-related issues that are relevant to parking standards include the provision of sufficient electric vehicle charging infrastructure as part of parking arrangements, and the provision of sufficient convenient and secure cycle parking to enable greater use of cycling as a mode of transport.

What could be done through the Local Plan?

8.11. In relation to the issues for parking standards, three case studies have been reviewed to understand ideas for 1) a different approach to parking standards; 2) potentially suitable approaches to dealing with car parking in different residential environments and 3) how to provide car parking as part of an integrated approach to building healthy streets.

Case study 1: Winchester District Draft Local Plan and parking standards

- 8.12. As a response to mitigating and adapting to climate change, Winchester City Council has proposed an approach of promoting active and sustainable transport, whilst reducing car use for new development through its Draft Local Plan²⁷.
- 8.13. One of the approaches to lowering car dependency is to reduce car parking requirements in locations where other modes of sustainable travel are available.

²⁷ For details, see the Winchester District Local Plan 2019-2039, Regulation 18 Consultation, November 2022. Available at: <u>https://www.winchester.gov.uk/planning-policy/winchester-district-local-plan-2018-2038-emerging/regulation-18-local-plan</u>

Draft Policy T2 (Parking for New Developments) promotes a case-by-case approach, where each proposal considers how much parking to provide for new residential developments based on local circumstances, including the layout of development, the mix of dwellings, the character of the local area and the proximity of public transport. There are no minimum standards for the number of car parking spaces per dwelling, and explicit support for schemes with no parking provision where new homes would be in easy walking distance of a range of services and facilities (where the lack of provision would not be detrimental to the surrounding area to those with limited mobility).

Could a similar approach be put forward in East Hampshire?

- 8.14. The abolition of minimum parking standards would not be easy to apply in EHDC's Local Plan Area. There are no settlements in East Hampshire that are of the same size (physically, or in terms of local population levels) as Winchester, and none with an equivalent range and number of services and facilities. Many parts of EHDC's Local Plan Area do not receive high scores within the East Hampshire Accessibility Study²⁸, which indicates that it would be difficult if not impractical to rely on walking and cycling as the only modes of transport for meeting many of a household's daily needs. Public transport options are also more limited in many parts of East Hampshire compared to Winchester.
- 8.15. Nevertheless, there may be opportunities in central parts of Alton and Whitehill & Bordon for flexibly applying the existing car parking standards, in recognition of competing policy objectives e.g. to ensure that new development makes an effective use of land and is not wasteful and to avoid the development of car-dominated environments. These are some of the most accessible parts of the Local Plan Area, as identified within the Accessibility Study.

Case study 2: Approaches to the design of residential car parking

- 8.16. In the summer of 2022, EHDC invited residents of Whitehill & Bordon to take part in an informal, online consultation on ideas for the future design of residential car parking. This consultation was entitled: 'Whitehill & Bordon Low Car Design' and was undertaken in the context of the on-going regeneration of the Bordon Garrison and the need to make best use of previously developed land in the area. The results from the public consultation can be used to inform the East Hampshire Local Plan 2021-2040.
- 8.17. The consultation comprised three phases:
 - Phase 1 asked local residents to comment on low-car residential designs in the context of information on their pros and cons from a design perspective;

²⁸ A discussion of the Accessibility Study is provided in section 6 of this background paper. The Accessibility Study is available to view at: <u>https://www.easthants.gov.uk/planning-services/planning-policy/local-plan/emerging-local-plan/evidence-base/infrastructure-1</u>

- Phase 2 featured a travel survey, allowing residents to provide information on their travel choices and the potential for making future changes to these choices;
- Phase 3 focused on helping residents to identify good and bad examples of current parking arrangements in Whitehill & Bordon.
- 8.18. As noted above, issues with the design of residential parking are also apparent in recent housing developments across the Local Plan Area. Therefore, it may be appropriate for architects and urban designers to consider the suitability of certain approaches to parking– being different on-plot parking typologies within their emerging proposals, based on the outcomes to the Whitehill & Bordon consultation feedback. Over the following pages, the preferred approaches in low, medium and higher housing density environments are put forward. Selected considerations emerging from the consultation feedback are also highlighted. Full results from the low car design consultation are available on the Council's website²⁹.

²⁹ The consultation report is available to view at: <u>https://www.easthants.gov.uk/planning-services/planning-policy/local-plan/emerging-local-plan/evidence-base/infrastructure-1</u>

Suggested Typologies for Design-led Investigation







Case study 3: parking and the design of healthy streets

- 8.19. In support of creating healthy streets, Uttlesford District Council has published a 'Building for a Healthy Life' Design Guide, so named because it is based on the government-endorsed, industry-standard approach to urban design of the same name. This is a comprehensive design toolkit that includes a range of measures focusing on (amongst other things) street design. A section of the design guide entitled: 'Streets for All' emphasises the need to create attractive streets in order to encourage walking and cycling for short trips. To achieve this, the guide imposes certain detailed requirements that relate specifically to vehicle parking, including:
 - Integration of car parking into the design of streets, to avoid an unsightly and cardominant appearance.
 - The use of landscaping and green infrastructure to visually integrate frontage car parking areas into the street to enhance the overall appearance of the street.
 - Maximising the efficient use of parking resources, such as through the provision of shared parking areas and unallocated parking spaces.
 - Anticipating the parking needs of residents and visitors, by providing sufficient parking spaces without creating an excessive concentration of parking spaces in certain areas.
 - Secure and safe cycle storage conveniently located for people's front doors, to encourage residents to choose cycling as a mode of transportation.
- 8.20. By adhering to these design principles, streets should appear more attractive and inviting for pedestrians and cyclists, whilst dealing with the need to accommodate the private car.

Can these design principles be applied in East Hampshire?

8.21. The Uttlesford design guide highlights a number of 'don'ts' in relation to the design of new car parking that are familiar to EHDC's planning policy team, following the design review of summer 2023. This includes large areas of frontage (on-street or front-of-plot) parking with little or no softening from landscaping; and a failure to anticipate anti-social parking caused by a lack of suitable car parking. The following are images from the design guide which are also representative of poor examples of residential car parking that could be found in East Hampshire:



Source: Uttlesford District Council, June 2020

- 8.22. The design guide is therefore focused on familiar problems from an East Hampshire perspective. It also provides some 'good practice' examples that are in accordance with its design principles. Some of the design guide's examples of good practice include:
 - The use of landscaping to help settle cars into the street,
 - Anticipating and designing out (or controlling) anti-social car parking,
 - Frontage parking where the space equivalent to a parking space is given over to green relief every four bays or so,
 - Small and overlooked parking courtyards and;
 - Shared and unallocated on-street parking and the provision of dedicated cycle storage and racks.



8.23. Whether or not some of these specific examples are suitable for new development sites in East Hampshire will depend on the specific local context. Some neighbourhoods in East Hampshire have a specific character that derives from houses situated on spacious plots with large set-backs from the street. Some of these areas have been reviewed and characterised in the Council's Neighbourhood Character Study (2018)³⁰. On-street frontage parking that incorporates new green infrastructure may be out-of-context in these locations and could actually reduce the presence of green infrastructure within the street scenes. Furthermore, it may be less convenient than on-plot parking arrangements, taking account of the distance to front doors. Nevertheless, there will be contexts in East Hampshire where, in order to make an effective use of land as a finite resource, a 'tighter grain' of residential development (with new homes closer to the street and closer together) would be appropriate. In these contexts, the integration of frontage parking with high-levels of green infrastructure will be important not just for aesthetic reasons, but also to build

³⁰ For details, please see: <u>https://www.easthants.gov.uk/planning-services/planning-policy/local-plan/emerging-local-plan/evidence-base/other-evidence-1</u>

in resilience to climate change (e.g. the provision of shade, shelter and sustainable drainage).

8.24. The provision of well-designed cycle parking will also be a key consideration for future developments within the Local Plan Area. Uttlesford District Council's design guide notes that there can be an over-reliance on garages and garden sheds for secure cycle parking in new developments. Subject to plot design, this can make cycling a less convenient choice for would-be cyclists considering how to reach a local destination. However, in a climate emergency, cycle parking should not be an after-thought; developers and designers should consider how the built environment can be designed to make cycling an easier, not a more difficult choice. The image below shows a cycle store at Oakmoor School, Bordon that has been well-designed to ensure both shelter and convenience for young cyclists:



8.25. Design policies in the Local Plan can play a crucial role in addressing the need for sufficient and well-integrated vehicle parking in developments, including for bicycles. Through its parking standards or as part of a future design code, EHDC could further investigate how to ensure that sheltered and secure cycle parking is provided that is conveniently accessible and close to the entrances and exits of new buildings.

Summary

8.26. Due to the rural nature of much of East Hampshire and the relatively low accessibility of many areas of the Local Plan Area for pedestrians and cyclists, it seems appropriate to maintain a set of minimum parking standards within the Draft East Hampshire Local Plan 2021-2040. Nevertheless, this should not distract the Council or developers from ensuring that parking is provided so as to prioritise cycling and walking for feasible local journeys. This will mean following a 'healthy streets' approach to design, and to considering ways of accommodating vehicles that provide attractive residential environments and that support climate resilience.

APPENDICES
Appendix A – Network Rail East Hampshire District Council Briefing Note

1 - Railways Today

The railway, like most industries, has experienced a tumultuous few years enduring the impact of the coronavirus pandemic. Fuelled by government-mandated lockdowns and widespread fear of public transport and the perceived increase in covid transmission in these settings, ridership plummeted to as low as 4% during the initial lockdown. The rail industry has had to work tirelessly to overcome this perception and bring back passengers to the levels seen pre-pandemic. Current DfT figures show the post-covid recovery in passengers to be hovering around the 96% with selected months of the year experiencing significant growth year-on-year. Data available from the DfT showed that in April of 2023, passenger levels had reached over 100% recovery on 14 out of the month's 30 days signalling a healthy uptake of rail travel across the country. The returning travel has comprised of significantly more leisure travel, with commuter travel slowly on the increase too as employees return to the office in an albeit reduced frequency.

Another significant development to the railways occurred during the "pandemic years". This was the release of the Williams-Shapps Plan for Rail setting out its proposals for reform and restructuring of the British rail industry. Outcomes of the report include the formation of "Great British Railways" or "GBR". GBR will absorb Network Rail and work to amalgamate many of the railways existing functions, from owning the infrastructure, receiving fare revenue and running and planning the network, setting fares and timetables. The report and subsequent overhaul look to address concerns the current system is not fit-for-purpose by embracing closer collaboration between moving parts, increasing efficiency, and bringing better value for money for customers and taxpayers.

At a route level, the focus for the railways has shifted. Within Wessex, it is no longer so much about ferrying masses of commuters into London from various hubs across the route, but more about looking at how connectivity within the area can be achieved. This strategy hopes to address the desire for greater availability of sustainable, reliable transport between localities within Wessex, capitalising on lower demand for services into Waterloo and increased leisure travel.

A key theme for Network Rail and the Government as a whole is that of decarbonisation and greener, more sustainable travel. Decarbonisation aims to create a net-zero rail network by 2050 by introducing a number of plans look to reduce the railways impact on the planet. To achieve this ambitious target, the rail industry hopes to remove all diesel-only trains from the network by 2040, deliver cost-efficient electrification programmes, fund and develop new environmentally responsible technology and work to improve accessibility to the railway as a means of sustainable travel.

2 - East Hampshire's Railway Provision

The district council of East Hampshire features the stations of Alton, Bentley, Liss, Liphook and Rowlands Castle. The council's busiest station is Petersfield. After Petersfield it is then Liphook, followed by Alton with Liss at two-thirds that number and Bentley and Rowlands Castle below 120,000 entries and exits each.

The effects of coronavirus on the railway saw dramatic decreases in entries and exits throughout stations in East Hampshire district council. Alton and Bentley in particular suffered heavily seeing reductions in entries and exits in excess of 80-84% and Liss and Liphook experiencing smaller reductions. Since then and with normal service largely resuming, the degree to which these stations have bounced-back can be measured by comparing 2019/20 to 22/23. Of the six stations, Rowlands Castle has seen the largest recovery reaching 91% of the entries and exits observed pre-covid. At 81 and 83% is Liss and Liphook with similar recovery numbers, and then Petersfield on 74% and Alton 73%. The station that has struggled the most is Bentley which has seen a bounce-back of just 62%. With national figure showing an average of 79% recovery, it is evident that a trend of increasing leisure travel and return of office-working is continuing to drive strong passenger growth throughout the East Hampshire district, but that a noticeable shortfall still remains at certain stations.

Station	Entries and Exits (2019/20)	Entries and Exits (2022/23)	% Bounce back from pre-covid
Alton	679,324	496,032	73%
Bentley	132,018	82,486	62%
Liss	328,618	267,766	81%
Liphook	633,798	525,416	83%
Rowlands Castle	123,718	112,942	91%
Petersfield	1,405,648	1,037,738	74%
Average			77.3%

Figure 1: Table to show entries and exits of East Hampshire district council stations

Two lines operate within the boundaries of East Hampshire district council. The Alton branch off the South West Main line includes the stations of Alton and Bentley and is operated by South Western Railway. The Alton line is electrified with 750V AC third rail and provides two trains per hour to London Waterloo. The Portsmouth Direct comprises of Liss, Liphook, Rowlands Castle and Petersfield. A variety of stopping and fast services operate up the Portsmouth Direct main line and into London Waterloo, the table below demonstrates how each station is served along this route.

Station	Hourly services to London Waterloo (Peak)	Change compared to May' 22 timetable	Hourly services to London Waterloo (Off- peak)	Change compared to May' 22 timetable
Alton	2	0	2	0
Bentley	2	0	2	0
Liss	3	+1	2	+1
Liphook	3	+1	2	+1
Rowlands Castle	1	0	2	+1
Petersfield	5	+1	3	+1

Figure 2: Table to show peak and off-peak services to London Waterloo (Dec' 23)

With a recovering uptake in rail journeys evident across the district, the number of services available to residents has widely increased too, matching a renewed demand for the rail network as a means of reaching further destinations. The table shows that three of six stations received an increased hourly peak service to

Waterloo and four of six an increased hourly off-peak service, demonstrating a positive change in positioning rail as a fast and frequent mode of travel. Services within the county show mixed levels of connectivity. The table below displays the fastest journey times between stations excluding waiting times. In some cases, journey times are fast and require no changes, however in other cases journeys can take as much as 76 minutes of travel time, and this is without considering waiting times or possible delays.



Figure 3: Table to show journey times (excl. waiting) between stations within East Hampshire district council



 Table 1: Comparing train journey time vs car journey time, and train cost (cheapest single fare) vs fuel cost (40mpg at 188p per litre unleaded) of Alton to various destinations within East Hampshire

The above table shows just how difficult both financially and efficiency-wise it can be to travel by train within the East Hampshire area, especially when having to make changes to reach a destination. Travelling by car for

these journeys is often cheaper and faster representing a significant advantage for personal vehicle usage and a large roadblock to be overcome in pursuit of higher uptakes of green travel methods. Currently, none of the journeys are cheaper by train and only one is quicker (Alton to Bentley). The data shows that significant work is still to be done to make rail a considerably more attractive option for residents travelling within the area. Positives can be found in understanding the change in rail prices year-on-year with the graphic showing three of the five journeys from Alton reducing in price by as much as ¼, however trips to Liphook have increased by approximately 5% and to Rowlands Castle 27%.



 Table 2: Comparing train journey time vs car journey time, and train cost (cheapest single fare) vs fuel cost (40mpg at 188p per litre unleaded) of Rowlands Castle to various destinations within East Hampshire

When undergoing the same cost/journey-time analysis from Rowlands Castle, a Portsmouth Direct line station, the competitiveness of rail is much greater. Travel by car from Rowlands Castle to destinations within East Hampshire is only slightly cheaper and roughly 25% faster than train. This is significantly lower than the figures for car use versus train use from Alton. This data proves connectivity within East Hampshire using rail is somewhat feasible in comparison to personal vehicle use, however, it is largely dependent on the origin and destination to determine to what extent you are paying more money and (in most cases) spending more time travelling. The data also demonstrates how much more expensive and time consuming it is to travel around East Hampshire if your origin station is Alton compared to Rowlands Castle. Alton station users will spend almost double (1.87x) on train tickets and 24 extra minutes in journey time travelling to the stations of East Hampshire District Council. What is noticeable with journeys from Rowlands Castle is that of the five example destinations, three decreased in price year-on-year and two remained the same. Tickets decreased by as much as 29% in one instance (RLN-LIS) and by 24% for both RLN-AON and RLN-BTY indicating greater value for passenger and residents joining at Rowland Castle.

Freight within East Hampshire is minimal with no services running on the Portsmouth direct line. Freight trains previously ran on the Alton Line serving Holybourne Oil Terminal transporting oil to the Fawley refinery. Network Rail remain in conversation with the site owners about the possible return of freight to this line but there are no timescales on a realisation of future traffics at this moment.



3 - East Hampshire Stations

Figure 4: Map to show locations of stations within East Hampshire District Council

East Hampshire District Council contains six railway stations within its borders, all managed by South Western Railways, a key train operating company on the Wessex route. The stations saw a combined 2.15m entries and exits in 2021-22 demonstrating the value and custom that East Hampshire brings to the rail industry. As mentioned earlier, this number is rising year-on-year and not just in response to the reversal of legislation, attitudes and behaviours adopted during covid, but also in response to growing populations, housing and economic developments across the district council and a desire from residents to make use of more sustainable, greener travel choices. In order to accommodate these growing numbers and attract further modal shift it is essential that rail, and the stations by which passengers access the network, are sufficiently equipped. In practice, this means ensuring that the network is one which can be reached by those of all ages and abilities. Through measuring accessibility and facilities at East Hants stations' it is possible to understand what progress has been made so far, and where improvements can be made in order to achieve this goal.

AON BTY LIS LIP F Accessible WC		Bentley Step-free cotegory	R. Castle	207 60 96 23 40 22	Alton Bentley Liss
Staff Available		Alton Liss/Lipho	ok/Petersfield(B)	74 67 26 4 154 172	Liphook Rowlands Castle Petersfield
	Constitution of	11			
Alton (AON)	Seating	Hospitality	Toilets	Bus	
Alton (AON) Bentley (BTY)	Seating		Toilets Toilets	Bus Bus	
Alton (AON) Bentley (BTY) Liss (LIP)	Seating		Toilets Toilets Toilets	Bus Bus Bus	
Alton (AON) Bentley (BTY) Liss (LIP) Liphook (LIS)	Seating Seating		Toilets Toilets Toilets Toilets	Bus Bus Bus Bus	
Alton (AON) Bentley (BTY) Liss (LIP) Liphook (LIS) Rowlands Castle (RLN)	Seating Seating	Hospitality	Toilets Toilets Toilets Toilets	Bus Bus Bus Bus Bus Bus	

Figure 5: Table providing key summary information on East Hampshire district council stations

Accessibility at the stations within the district are generally good. Notably, Rowlands Castle features relatively poor accessibility however, with no part of the station suitable for those requiring assistance. Just two of the six stations feature hospitality (cafes and restaurants in the station) and just one of the six (Petersfield) has any retail options for passengers. A level of bus connectivity is available at all stations with aspirations for more services to connect nearby towns and villages running from each of East Hampshire's rail stations and services.

The above graphic provides a high-level analysis of car and cycle space at each station. This gives us an idea of how over or undersubscribed each station is with regards to facilities for those accessing the station by car or bicycle.

Station	Car space as % of daily entries/exits	Cycle space as % of daily entries/exits
Alton (AON)	20%	6%
Bentley (BTY)	54%	13%
Liss (LIS)	6%	3%
Liphook (LIP)	6%	5%
Rowlands Castle (RLN)	10%	2%
Petersfield (PTR)	6%	7%

Table 3: Table to show car and cycle spaces as a percentage of daily entries and exits

The above data tells us that some stations are more accommodating of cycle and car users then others, with Bentley offering more than sufficient cycle and car spaces for every entry and exit at the station and Liss on the lower end for both cycle and car. What is important to understand and is not shown in this high-level table, however, is that each station's passengers may access the station in a number of ways. Where car spaces are low at Liss and Liphook, for example, may be more representative of less people using car travel to arrive at the station, rather than a deficiency of parking spaces. From an overall point of view, this data can be used to earmark where improvements can be made with an emphasis on encouraging active travel reflected in the need for greater numbers and quality of cycle storage at stations throughout the district.

East Hampshire is home to the 'East Hampshire Community Rail Partnership (CRP)'. CRPs are local organisations aimed at bringing together local groups and stakeholders along railway lines to work with industry, providing a number of community engagement and promotional activities. Initiatives range from people helping to maintain station gardens to major refurbishment schemes. East Hampshire Community Rail partnership, specifically, aims to:

- Promote the train services at Liphook, Liss, Petersfield and Rowlands Castle stations.
- Encourage use of the train services and stations as access gateways to the South Downs National Park.
- Encourage partners such as local businesses, community organisations, and volunteers to become more involved with the stations and services.
- Enable the rail industry to work with local tourist attractions and the South Downs National Park to attract more visitors to access the area by train.
- Provide a means to enhancing the environment and facilities at each station.

4 - Current Railway Projects

Recently completed schemes within the East Hampshire district council area include the forecourt refurbishments that took place at Alton station. The alterations hoped to enhance passenger access to the station entrance and improve integration with connecting transport to the station. The scope of work taking place included a reconfiguration of pedestrian cycle and vehicle access and egress at the station, a reconfiguration of taxi bays and bus stops in addition to the installation of a new bus stop. The car parking bays were also modified to improve layout and pedestrian access routes. Alongside this, the access steps leading from the forecourt to the highway were also modified to improve safety as part of the works.

A scheme ongoing within the boundaries of East Hampshire District Council is the Farncombe to Petersfield re-signalling project taking place between 2022 and 2024 on the Portsmouth Direct line. Prior to the pandemic 40,000 passengers used the line every day making it one of the busiest commuter routes in the country. The project looks to install a new digital signalling system controlled from Network Rail's Rail Operating Centre in Basingstoke. In addition to this there will be a selection of new and improved switches and crossings at Petersfield and Haslemere which will increase the speed at which trains can travel on the line and create a more reliable railway for passengers. Twelve level crossings will also be upgraded making them safer for both drivers and passengers as part of the scheme.



Figure 6: Engineers working on the S&C renewal near Petersfield station (Network Rail)

Plans are also in place to close two high-risk footpath level crossings (Alice Holt and Buckthorne Oak Level Crossing) at Bentley station following a fatality. The scheme proposes a new station footbridge with steps and a lift to provide disabled access. As of Spring this year, Network Rail have submitted proposals to Hampshire County Council to close and divert footpaths as a first step in removing the crossings at Buckthorn Oak and Alice Holt.

5 - Future strategy

Wessex strategic planning investigated a number of potential means by which the variety of constraints faced on Wessex route, and specifically East Hampshire, could be mitigated, the results of these studies produced a number of possible outputs that could be utilised. The below map shows the expected crowding on trains into Waterloo in the high peak hour (08:00 to 08:59). This is an averaged across all the services in the high peak time period so some specific trains may be more crowded than the map suggests, whilst others may be more lightly crowded. What this shows is that there is some crowding expected on the Portsmouth Direct Line (the purple line) and the dark green as far as Guildford which may hide that there is more overcrowding when you look at specific trains.

This led us to decide on a service specification that:

- Reinstate the Haslemere service that was taken out of the timetable owing to Covid/ changing travel patterns (commuting less)
- A new Haslemere service
- A new Havant service

This will provide capacity for the period to 2050.



Figure 7: Expected levels of crowding into London Waterloo station

A centre turnback at Haslemere is part of future rail strategy in East Hampshire allowing for the quicker movement of trains in different directions without compromising on capacity. The plan will see Haslemere utilise platform two more regularly as a centre turnback and increase line speeds into platform one for through-trains, potentially reducing journey times. Another proposal targeting improved journey times is additional track capacity between Liphook and Petersfield via an additional loop to allow a fast, non-stopping service to operate.

More information can be found in the Wessex Main Lines Study, published in December 2023 at the link HERE.

6 - Opportunities for station enhancements

Station Travel Plans devised by South Western Railway have identified a catalogue of potential improvements and developments that could be made at stations within East Hampshire, the table below provides a selection of possible projects that could take place to enhance the stations from access to transport integration, with each proposal ranked by impact and cost as per the travel plans.

Cost		4 2 5 6 1	
	3	Impact	
Area	No.	Action	Owner
Walking	1	Marked pedestrian walkway	Rail
	2	Footway to link station and village	External
	3	Signage from station to village	Rail/External
Access to/from station by cycle	4	Consider allocation of road space to cycles	External
Improved bus access	5	Consider bus service between village station	External
mproved car	6	Formal kiss & ride facilities	Rail

OFFICIAL

Cost			
		7 6	
		5 4	
		3 8 1	
Ľ		Impact	
Area	No.	Action	Owner
Area Walking and	No.	Action Improved pedestrian/cycle wayfinding	Owner SWR/EHDC
Area Walking and cycling	No. 1 2	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces	Owner SWR/EHDC SWR
Area Walking and cycling	No. 1 2 3	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces Streetilights near stairs to Paper Mill Lane	Owner SWR/EHDC SWR SWR/EHDC
Area Walking and cycling Bus/ rail/ taxi	No. 1 2 3 4	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces Streetilights near stairs to Paper Mill Lane Shelters at taxi rank	Owner SWR/EHDC SWR SWR/EHDC SWR/EHDC
Area Walking and cycling Bus/ rail/ taxi integration and access	No. 1 2 3 4 5	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces Streetlights near stairs to Paper Mill Lane Shelters at taxi rank Improve and inc. shelters for bus user	Owner SWR/EHDC SWR SWR/EHDC SWR/EHDC
Area Walking and cycling Bus/ rail/ taxi integration and access	No. 1 2 3 4 5 6	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces Streetlights near stairs to Paper Mill Lane Shelters at taxi rank Improve and inc. shelters for bus user Provide real time bus information	Owner SWR/EHDC SWR SWR/EHDC SWR/EHDC SWR/EHDC/H CC
Area Walking and cycling Bus/ rail/ taxi integration and access	No. 1 2 3 4 5 6 7	Action Improved pedestrian/cycle wayfinding Inc. station cycle spaces Streetilights near stairs to Paper Mill Lane Shelters at taxi rank Improve and inc. shelters for bus user Provide real time bus information Update 'kiss & ride' facilities	Owner SWR/EHDC SWR SWR/EHDC SWR/EHDC SWR/EHDC/H CC SWR







Cos	st 🛔		
		3 4 6 2 1	
		5 Impact	
Area	No	Action	Owner
Cycle access	1	Installation of new cycle rack	Rail
Pedestrian	2	Pedestrian signage from station to village & trails	External
access	3	Improved pedestrian routes around station	Rail/External
mproved accessibility	4	Tactile strips at dropped kerb crossings in local r and a dropped kerb to access the ticket office	Rail/External
mprove bus access	5	Signage between bus stop and station	Rail/External
mprove car	6	Consider dedicated kiss and ride area	Rail

Lead Agency	Network Rail
	Department for Transport
	Rail operators
Key evidence	Office of Rail and Road Publications
	Wessex Main Lines Study (2023)
Existing facilities	The Planning Authority Area is relatively well connected with six Railway Stations. Alton and Bentley are both located on the Alton Line that provides services between Alton and London Waterloo. Liphook, Liss, Rowlands Castle and Petersfield are both located on the Portsmouth Direct Line that provides services between Portsmouth and London Waterloo.
Planned provision	Future enhancements to rail services and infrastructure are developed through industry collaboration involving the Department for Transport, Train Operating companies and Network Rail.
Key Issues	In order to enable an increase to the service level for stations residing in the East Hampshire District Council area, it is important to understand and overcome the constraints that currently prevent this.
	One such constraint is capacity at Woking Junction. One solution for this would be the implementation of a grade separated junction at Woking providing mitigation to conflicting services and congested infrastructure at one of the most pivotal parts of the network. Undertaking improvements such as this will offer relief to the wider network with knock-on effects being the potential to increase service level to East Hants stations, making use of now available capacity.

	Another constraint for this district is capacity at Haslemere. A proposed centre turnback at Haslemere would help quell these issues and allow for the quicker movement of trains in different directions without compromising on capacity. The proposal will see Haslemere utilise platform two more regularly as a centre turnback and increase line speeds into platform one for through-trains, potentially reducing journey times.
	Another proposal targeting improved journey times is additional track capacity between Liphook and Petersfield via an additional loop to allow a fast, non- stopping service to operate.
Potential Funding Sources	Significant enhancements in rail infrastructure are generally funded by Central Government and delivered by Network Rail. In addition to this, investment in the railway can be made through CIL or developer type contributions whereby an increased demand for rail services can be supported by the developments that catalyse this.
	Train Operating Companies provide funding opportunities for improvements, particularly for stations and often tied in with national funding programmes for general station enhancements or to provide accessibility improvements for disabled people.
Implications for the East Hampshire Local Plan Review	The proposals for housing and employment development in addition to encouraging alternative modes of transport to the car has the potential to increase passenger traffic on the rail network.



Appendix B – Settlement highway congestion – Source: Google



Average Monday 12:00



Average Monday 14:30



Average Monday 17:30



Average Saturday 08:30



Average Saturday 10:30



Average Saturday 14:30



Average Saturday 17:30





Alton Town Centre – Average Monday 08:30

Average Monday 10:30



Average Monday 12:00



Average Monday 14:30



Average Monday 17:30



Average Saturday 08:30



Average Saturday 10:30



Average Saturday 12:00



Average Saturday 14:30



Average Saturday 17:30





Whitehill & Bordon – Average Monday 08:35

Average Monday 10:00



Average Monday 12:00



Average Monday 15:00



Average Monday 17:15



Average Thursday 08:35



Average Thursday 10:00



Average Thursday 12:00



Average Thursday 15:00



Average Thursday 17:15



Average Saturday 08:00



Average Saturday 11:00



Average Saturday 15:00



Average Saturday 18:00





Horndean – Average Thursday 08:30

Average Thursday 10:30



Average Thursday 12:45



Average Thursday 14:20



Average Thursday 15:30



Average Thursday 17:30



Average Friday 08:30



Average Friday 10:30



Average Friday 12:45



Average Friday 14:20



Average Friday 15:30



Average Friday 17:30



Average Saturday 08:30



Average Saturday 10:30


Average Saturday 12:45



Average Saturday 14:20



Average Saturday 15:30



Average Saturday 17:30



Liphook - Average Monday 08:25



Average Monday 10:00



Average Monday 12:15



Average Monday 15:30



Average Monday 17:15



Average Tuesday 08:25



Average Tuesday 10:00



Average Tuesday 12:15



Average Tuesday 15:30



Average Tuesday 17:15



Average Sunday 08:00



Average Sunday 10:00



Average Sunday 12:00



Average Sunday 15:10



Average Sunday 17:25



Clanfield – Average Monday 08:30



Average Monday 10:30



Average Monday 12:00



Average Monday 14:00



Average Monday 15:30



Average Monday 17:30



Average Thursday 08:30



Average Thursday 10:30



Average Thursday 12:00



Average Thursday 14:00



Average Thursday 15:30



Average Thursday 17:30



Average Sunday 08:00



Average Sunday 11:00



Average Sunday 14:00



Average Sunday 18:00





Four Marks – Average Monday 08:30

Average Monday 09:45



Average Monday 12:00



Average Monday 17:30



Average Friday 08:30



Average Friday 09:45



Average Friday 12:00



Average Friday 17:30



Average Saturday 08:30



Average Saturday 09:45



Average Saturday 12:00



Average Saturday 17:30





Grayshott – Average Monday 08:30

Average Monday 10:00



Average Monday 12:30



Average Monday 14:30



Average Monday 18:00



Tuesday 08:30



Average Tuesday 10:00



Average Tuesday 12:30



Average Tuesday 14:30



Average Tuesday 18:00



Average Saturday 08:30



Average Saturday 10:00



Average Saturday 12:30



Average Saturday 14:30



Average Saturday 18:00



Appendix C – Highway Incidents – Source: Crashmap

Alton: 2017



Alton: 2018



Alton: 2019



Alton: 2020





Whitehill & Bordon: 2017

Whitehill & Bordon: 2018







Whitehill & Bordon: 2020


Horndean: 2017



Horndean: 2018



Horndean: 2019



Horndean: 2020



Liphook: 2017



Liphook: 2018



Liphook:2019



Liphook: 2020



Clanfield: 2017



Clanfield: 2018



Clanfield: 2019



Clanfield: 2020



Four Marks and Medstead: 2017



Four Marks and Medstead: 2018



Four Marks and Medstead: 2019



Four Marks & Medstead: 2020



Grayshott: 2017



Grayshott: 2018



Grayshott: 2019

No incidents recorded

Grayshott: 2020

