

Draft Local Plan 2021-2040 (Regulation 18)

Revised Settlement Hierarchy

Background Paper

January 2024



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N.B. References to East Hampshire throughout this document refer to East Hampshire district outside of the South Downs National Park

Settlement Hierarchy Background Paper (2023)

1. Introduction

- 1.1. East Hampshire is in the process of reviewing its Local Plan, which currently consists of the Joint Core Strategy (JCS, adopted June 2014) and a Housing and Employment Allocations Plan adopted in April 2016. The JCS includes a "settlement hierarchy", which classifies settlements in terms of the availability and accessibility of a broad range of facilities, their economic role and any environmental constraints to development.
- 1.2. An updated settlement hierarchy was initially proposed in December 2018 to support the emerging Local Plan, based on a methodology that predated the Council's declaration of a climate emergency in July 2019. A further update was proposed for the Regulation 18 "Issues and Priorities" consultation in late 2022 to early 2023, using a new methodology that responded to the climate emergency through emphasising the need to lower transport-related greenhouse gas emissions. Specifically, the revised methodology concentrated on potential accessibility to local facilities and services by walking and cycling modes.
- 1.3. Some of the consultation responses to the 2022/23 "Issues and Priorities" consultation identified concerns relating to the new methodology. This background paper reviews those concerns and identifies what has been done to improve the Council's understanding of accessibility via a bespoke Accessibility Study that was undertaken in 2023 by the transport consultants, Ridge & Partners. The Accessibility Study, which is published separately, has been used as a robust evidence base on which to re-consider the results of the 2022/23 settlement hierarchy work and help determine whether amendments are necessary.
- 1.4. The classification of towns, villages and rural settlements is important in planning terms. It is a tried and tested method for supporting the implementation of Local Plan policies and in particular for defining a development strategy. Settlements that are in a higher tier of the hierarchy will often be more sustainable locations for new development, because new residents would be able to access a greater range of services and facilities more easily, without the need to travel large distances by car. The Council remains committed to an approach to determining a settlement hierarchy that prioritises accessibility by the most sustainable transport modes of walking and cycling in order to tackle greenhouse gas emissions.
- 1.5. In addition to applying the results of the East Hampshire Accessibility Study, resident populations of settlements have been taken into account using data from the 2021 Census. This is so that the proposed settlement hierarchy takes account of the relative size of individual settlements in terms of their population, which is an indicator of the relative demand for local services and can effect social sustainability. As a rule of thumb, the larger the local population, the greater the local demand for services and facilities. However, the proximity of

- small settlements to larger centres also needs to be taken into account, as small villages can act as satellite populations for adjoining towns.
- 1.6. A revised settlement hierarchy for areas outside of the South Downs National Park is put forward at Section 7 of this background paper, with further supporting information and evidence included in the appendices. The revised settlement hierarchy informs the Draft East Hampshire Local Plan 2021-2040, which covers those parts of the district outside of the South Downs National Park.

2. Background

- The Government's National Planning Policy Framework (NPPF) does not 2.1 provide specific advice for the production of settlement hierarchies. However, as a broad matter of principle, it notes that planning policies and decisions should play an active role in guiding development towards sustainable solutions, taking local circumstances into account, to reflect the character, needs and opportunities of each area (paragraph 9, NPPF 2023). Furthermore, to promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services. Where there are groups of smaller settlements, development in one village may support services in a village nearby (paragraph 83, NPPF). These aspects of national policy suggest that indicators of service provision and accessibility should be considered, and the role of different settlements in East Hampshire taken into account, as part of a future development strategy.
- 2.2 During the plan-making process for the emerging Local Plan 2021-2040, East Hampshire District Council (EHDC) declared a climate emergency and has therefore been considering how to locate development within its planning area in order to mitigate future greenhouse gas emissions. Over 40% of East Hampshire's carbon dioxide emissions are associated with transport¹, so it is expected that a substantial proportion of future emissions will be associated with the transport requirements of new buildings. One way of enabling a greater use of sustainable and active modes of transport as far as may be practicable, given the rural nature of East Hampshire and the corresponding need to travel is to promote a pattern of development that locates new homes close to existing jobs and services. This approach is also consistent with the key messages from the NPPF.
- 2.3 Previous iterations of the settlement hierarchy are set out in Appendix A. It has been necessary to review the existing (2012-based) settlement hierarchy of the East Hampshire Joint Core Strategy (adopted 2014), as well as the emerging

¹ Source: Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, 2021

- proposed hierarchies, because of changes to the evidence base for the Local Plan and recent consultation responses.
- 2.4 Since the 'Issues & Priorities' consultation of November 2022-January 2023, EHDC has commissioned Ridge & Partners to undertake an accessibility study for the Local Plan Area. The East Hampshire Accessibility Study reviews the concept of 'living locally' that formed part of the Issues & Priorities consultation. The Accessibility Study also provides an in-depth consideration of access to services and facilities by walking and cycling modes for all parts of the Local Plan Area. It considers accessibility in a level of detail that goes beyond the evidence that was previously available to EHDC.
- 2.5 This settlement hierarchy background paper uses the latest available evidence from the Accessibility Study to propose a further iteration of the settlement hierarchy for the emerging East Hampshire Local Plan. In doing so, it builds on the philosophy of earlier proposals for a settlement hierarchy, by ensuring that accessibility to local services and facilities by walking and cycling modes is central to the hierarchy's definition. The Accessibility Study 2023 is published as a separate document and also forms part of the Council's Transport Assessment for the emerging Local Plan.
- 3. Responses to the Settlement Hierarchy of the Regulation 18 "Issues & Priorities" Consultation
- 3.1. The Council held a Regulation 18 Local Plan consultation between November 2022 and January 2023, focusing on the "Issues and Priorities" for the emerging Local Plan. The purpose of that Regulation 18 consultation was to gain feedback from residents and statutory consultees on the key issues that the Local Plan should address, as well as potential development options for distributing future housing development across the Local Plan Area.
- 3.2. Responses to the "Issues and Priorities" consultation highlighted the use of the settlement hierarchy in conjunction with the proposed development options, as well as other related themes used in the methodology to address climate change, such as accessibility to local services and the concept of the 20-minute neighbourhood.
- 3.3. Consultation comments were received sharing concern over the realism of applying a concept similar to 20-minute neighbourhoods in East Hampshire. Some thought that it was not realistic to use distances from the centre of settlements based on "as the crow flies" measurements, but that instead actual routing options for cyclists and walkers should be utilised. Some consultees suggested that 20-minute distances would need to consider on-the-ground realities, such as barriers to travel that may be encountered, including segregation caused by main roads or where pedestrian footpaths are lacking on existing carriageways, and the varying topography of the district.

- 3.4. Other comments that were raised in relation to 20-minute neighbourhoods concerned how the existing demographic composition can vary between the district's settlements, and how this should be considered when developing the settlement hierarchy methodology. The district has an ageing population, and this point was raised as a potential barrier to participation rates in active travel for daily journeys. This can be exacerbated by the aforementioned physical segregation barriers and varying gradients in settlements. Such combinations of factors were commented on as likely to impact residents' desire for and/or ease of participating in active travel. Rather than choosing to live locally, residents may prefer to use the car to access each and every destination.
- 3.5. The justification for applying a concept of living locally within rural areas was also queried on the basis of the lack of examples from elsewhere in England and/or the UK. This criticism goes beyond the specific methodology of the previous settlement hierarchy background paper, to query the suitability of any methodology that is based on 20-minute neighbourhoods.
- 3.6. Comments were received in support of the development option that followed the proposed settlement hierarchy of 2019, which concentrates development within the larger, higher-tiered settlements of the Local Plan Area. Support was given for incorporating the earlier iteration of the settlement hierarchy in the development option, as it was thought to identify the most sustainable locations in the district. It was also thought that the settlements in the highest tiers were perceived to be the most popular for residents in the district to choose to live in, as they have the greatest number of facilities and services to support those living there.
- 3.7. The settlement hierarchy methodology of 2022/3 was also criticised for not considering key employment clusters in the district in the methodology. There was concern that this omission could lead to development not being suitably distributed for supporting commuting by sustainable transport modes. Some suggested that the key transport corridors of the district should be considered in the settlement hierarchy, along with the key employment locations, to ensure that travel to work is made with the greatest sustainable opportunities by travelling efficiently on public transport links in the district.
- 3.8. Mixed opinions were shared about whether the settlement hierarchy of the 'Issues & Priorities' consultation was valid by using evidence on the number of services and facilities at a point in time. Some respondents believed that by undertaking an audit of all the settlements existing services and facilities, as well as their proximity to the centre of each settlement, provided a valid and robust evidence base for informing the ranking of the settlements in the district. However, contrary opinions were also received, suggesting that not all facilities and services had been scored or recorded correctly and that these will only represent the settlements for a very short amount of time as services and

- facilities can be expanded on or removed in the timescales of the Local Plan period. It was expressed that the context of the district, including its residing population and supporting infrastructure, is ever changing.
- 3.9. Comments were received in support of and with objections against certain settlement rankings of the 2022/23 settlement hierarchy. For example, support was offered for Liphook's position within Tier 1 because the centre of this settlement, its schools and railway station were thought to be within an accessible distance of the main built-up area. By contrast, the categorisation of Four Marks and South Medstead was not well received. Some responses suggested that it was inappropriate for Four Marks and South Medstead to be ranked in Tier 2 of the hierarchy because the existing services and facilities are not, in reality, accessible for many residents by means of short walking and cycling journeys.
- 3.10. Some responses identified a preference for following a settlement hierarchy methodology that does not emphasise accessibility and living locally, as this could allow development to be more evenly distributed throughout the district, allowing more development in the smallest settlements. Some responses thought that this could help these settlements to become more independent by increasing the provision of local services and facilities for their local residents.

Response for the Draft Local Plan 2021-2040

Further evidence has been prepared in relation to the concept of 'living locally' since the Issues & Priorities Regulation 18 consultation of 2022/23. Transport consultants (Ridge & Partners) were commissioned to produce an accessibility study in 2023 (see Section 4) as part of the emerging Transport Assessment for the Local Plan. This study involved substantial research into the question of whether a 20-minute neighbourhood concept should be applied to a rural area such as East Hampshire. In addition, when formulating the methodology for the study the following issues were raised and discussed, picking up some of the abovementioned consultation responses:

- How should walking and cycling distances take account of local routes and topography?
- How should access to employment opportunities be considered?
- What information source(s) should be used to reliably identify relevant services and facilities?

The East Hampshire Accessibility Study of 2023 has now been used as a more robust evidence base to overcome the limitations of the 'living locally' analyses of the Settlement Hierarchy Background Paper 2022. The Accessibility Study confirms that it is relevant to apply the concept of 'living locally' to rural areas such as East Hampshire and provides a bespoke methodology for appraising the relative accessibility by walking and cycling modes for different parts of the Local Plan Area (including proposed development sites). The walking and cycling contours used as proxies for cycling and walking distances take account of local routes and 'on-the-ground' realities, whilst the Ordnance Survey's 'Points

of Interest' data set has been used as robust starting point for understanding the nature and location of local facilities and services not just within East Hampshire, but in adjoining buffer areas as well (e.g. Waverley and Havant Borough Council areas). Data from the Office for National Statistics on the number of jobs in a given area has been used to indicate the potential accessibility of employment opportunities.

Following professional advice as well as input from Hampshire County Council's transport planners, the East Hampshire Accessibility Study is considered to represent a robust analysis of current accessibility for walking and cycling modes of transport at a strategic scale and for plan-making purposes.

It is noted that the size of a settlement was felt to be important by consultees for purposes of defining a settlement hierarchy. The Local Planning Authority agrees that there are good reasons for considering population size, for this will ultimately influence the sustainability of any services and facilities that are accessible within a settlement. A higher resident population will often translate in to a greater number of potential users or customers. Settlement population size has therefore been used to influence the revised hierarchy of this background paper. Given the modest scale of the envisaged additional development requirements (e.g. c.3,500 new homes over a 15-year period), it is not credible to disperse proposed development to all settlements within the Local Plan Area and expect this to increase service provision everywhere. A key risk of this approach would be to exacerbate existing issues with the delivery of services in rural areas.

4. The East Hampshire Accessibility Study

- 4.1. 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).
- 4.2. 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?
- 4.3. 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.
- 4.4. 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 accompanying transport infrastructure and/or new daily services.
- 4.5. 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 20-minute neighbourhood concept based on reaching a destination within 10-minutes i.e. a 20-minute round trip.
- 4.6. 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).
- 4.7. 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.

4.8. The results of the Accessibility Study can be viewed numerically as well as geographically. Figure 1 (over the page) 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 1: 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

- 4.9. 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.
- 4.10. 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.

- 4.11. 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 10-minute 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 southeastern residential area (Windmill Hill) to 58.6 in the central retail area (High Street).
- 4.12. 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.
- 4.13. Whitehill & Bordon in the northeast 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 very highly (37.5).
- 4.14. 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.
- 4.15. The hexagons covering the majority of the countryside in the north and northeast 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.

4.16. 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.

5. Re-considering the Settlement Hierarchy

- 5.1. The previous update to the settlement hierarchy was made in support of the Regulation 18 "Issues and Priorities" consultation, held over the winter of 2022/23. The methodology responded to the climate emergency by focusing on how accessibility by sustainable modes of transport (walking and cycling) could be prioritised, when defining a hierarchy of settlements within the Local Plan Area, for purposes of locating future development. This could help to reduce greenhouse gas emissions associated with transport, by reducing the need to travel by motorised transport to meet many of our daily needs. Therefore, the methodology focused on accessibility to local facilities and services by walking and cycling.
- 5.2. Figure 2 displays the previously outcomes for evaluating the accessibility of settlements, with associated scoring and ranking, for East Hampshire settlements outside of the South Downs National Park. This formed the basis of the settlement hierarchy that was consulted on in the "Issues and Priorities" consultation. That previous suggested settlement hierarchy is included in Appendix A.

Figure 2: Previous Ranking of Settlements in East Hampshire (outside of the South Downs National Park) from the Issues and Priorities (Regulation 18) Consultation

Ranking based on scores	Score out of 40	Name of settlement(s)
1st	32	Alton, Liphook
2nd	30	Whitehill & Bordon
3rd	25	Horndean
4th	21	Grayshott
5th	19	Four Marks & South Medstead
6th	18	Clanfield
7th	7	Holybourne
8th	6	Rowlands Castle
9th	5	Headley
10th	4	Bentley, Headley Down, Kingsley, Lindford, Ropley
11th	3	Bramshott, Holt Pound, Medstead
12th	2	Oakhanger, Ropley Dean
13th	1	Bentley Station, Bentworth, Catherington, Passfield Common
14th	0	Arford, Beech, Griggs Green, Lasham, Lower Froyle, Lovedean, Shalden, Upper Froyle, Upper Wield

- 5.3. Taking account of the comments that were made on the proposed hierarchy and the concept of 'living locally' during the Issues & Priorities consultation (see Section 3), the methodology for determining the ranking and scoring of settlements has been re-considered. It remains important to evaluate accessibility to services and facilities by walking and cycling, but the additional evidence that has been provided by the East Hampshire Accessibility Study must be taken into account for this purpose, in order to address some of the concerns that were raised by consultees.
- 5.4. The East Hampshire Accessibility Study is the first part of the Transport Assessment for the emerging Local Plan. It covers all parts of the Local Plan Area and not just the existing settlements. Therefore, when using the Study's results to revise the hierarchy, it was necessary to define each of the identified settlements in terms of the wider geography of the Accessibility Study. In practice, this meant representing each settlement (e.g. per existing settlement policy boundaries) by tessellated arrangements of the Accessibility Study's 500m-wide hexagons, as shown in Appendix B.
- 5.5. A hexagon from the Accessibility Study was included as relevant to a given settlement if at least 30% of its area covers land within the settlement policy

boundary; or if at least 30% of its area covers existing built form, for smaller settlements where no settlement policy boundary had previously been defined. For the rare instances where the settlement pattern is so dispersed that no hexagon covers 30% of a settlement's built form, the hexagon with the largest proportion of the built-up area was chosen to represent the settlement.

- 5.6. These criteria provide an approach to defining the settlements of the Local Plan Area that can be applied consistently using the geography of the East Hampshire Accessibility Study. The criteria have been introduced in order to reduce the likelihood of capturing large areas of undeveloped countryside within a defined settlement, whilst recognising that edge-of-settlement locations might otherwise be excluded from the assessment, if no accommodation were made for geometric discrepancies between a hexagonal template and the irregular profile of our towns and villages. An exception was made in the case of Whitehill & Bordon, where the allocated regeneration area was used to identify suitable hexagons even if the land in question had not yet been developed. This exception takes account of the consented regeneration proposals that have not yet been fully implemented, but which are integral to the development strategy of the adopted Local Plan.
- 5.7. Whilst the application of the above criteria is not ideal in case of very small and dispersed settlements, EHDC has been mindful of previous comments alleging irrationality, where departure from a stipulated approach had been considered more appropriate as a matter of planning officer judgement. Specifically, some respondents voiced objections to a different approach being applied in the case of Four Marks & South Medstead, during the last iteration of the settlement hierarchy. Consequently, no exceptions have been made to procedures for evaluating accessibility in this revised assessment, except to acknowledge the planned regeneration of Whitehill & Bordon.
- 5.8. Based on the Accessibility Study outcomes, an average (mean) accessibility score for each settlement was calculated from the complete set of hexagons that represent a given settlement. These average accessibility scores provide evidence to consider whether the previous settlement hierarchy ranking is still appropriate.
- 5.9. Figure 3 displays the average accessibility score for each settlement, as well as an indication of whether this implies any change in settlement hierarchy ranking in comparison with the previous (2022) settlement hierarchy update. However, as noted previously, the average accessibility scores are not always sufficient to determine a proposed change to the settlement hierarchy. A consideration of settlement populations based on 2021 Census data has been used to understand the relative size of different settlements and whether changes within the hierarchy might be contrary to the implications of future social sustainability. Put more simply, this means that judgements on the ability of service provision to endure over time, based on potential patronage by local

- residents, have been used to "sense check" the implications of a review that is founded on average accessibility scores.
- 5.10. Figure 3 compares the ranking that has been produced from the East Hampshire Accessibility Study to the previous ranking from the Issues & Priorities consultation. A number of differences are apparent. If the average accessibility scores are used to determine a revised settlement hierarchy, the hierarchy would alter; although changes are also affected by judgements concerning the spread of results and how settlements would thereafter be split into tiers (see discussion following Figure 3).
- 5.11. The new ranking based on average accessibility scores indicates that the settlements of Holybourne and Lindford would be promoted. This is due to the close proximity of these settlements to the range of facilities and services found in nearby larger settlements. Specifically, Holybourne's average accessibility score benefits from its proximity to Alton, whilst Lindford's benefits from its proximity to Whitehill & Bordon. To recognise the potential interconnectivity of services and facilities by walking and cycling modes, there is an argument for conjoining Alton and Holybourne within the hierarchy, and for doing likewise for Whitehill & Bordon and Lindford.
- 5.12. By contrast, the average accessibility score for Four Marks & South Medstead provides a reason for its demotion within the settlement hierarchy. Although central areas of Four Marks perform well within the Accessibility Study, the linear settlement pattern means that peripheral areas that are within the settlement fall beyond the newly calculated walking and cycling catchments for many of the local services and facilities. The relative distance of Four Marks from larger settlements also means that the settlement does not benefit from being accessible to the services and facilities of other places in the same way as (e.g.) Holybourne and Lindford.
- 5.13. Holt Pound's ranking also changes as a result of considering average accessibility scores from the Accessibility Study. This is a result of the change to the geographical scope for considering accessibility on foot or by bike. In particular, the Accessibility Study recognises that a limited number of services in Waverley Borough are potentially accessible by walking or cycling modes from Holt Pound. The change in ranking therefore reflects on-the-ground realities that were not previously apparent, because previous versions of the settlement hierarchy method were constrained to reviewing accessibility only within the Local Plan Area.
- 5.14. Some of the district's smaller settlements are now also ranked more highly than in previous iterations of the settlement hierarchy background paper. This applies specifically to Arford, Bentley, Catherington, Griggs Green, Lovedean, Medstead and Ropley. The underlying reason for these changes is that the Accessibility Study has enabled a more granular and nuanced review of accessibility to services and facilities by walking and cycling, based on a more

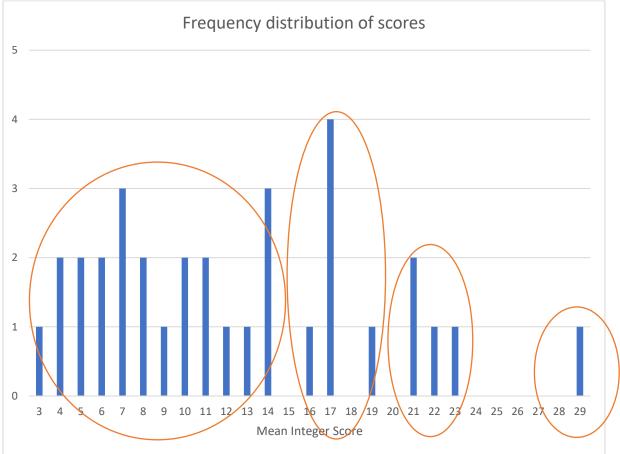
thoroughly researched methodology that uses the LSAAT tool (see above). Correspondingly, a number of settlements have reduced in the overall ranking due to their average scores from the Accessibility Study. These settlements are: Kingsley, Lasham, Oakhanger and Rowlands Castle.

Figure 3: Average Accessibility Study Score of Settlements in East Hampshire (outside of the South Downs National Park)

Settlement	No. of relevant hexagons	Lowest scoring hexagon	Highest scoring hexagon	Total score (sum of all hexagons)	Mean score	Potential change to 2022 ranking (up, down or no change)
Alton	21	16	58.7	616.1402461	29.34001172	-
Whitehill & Bordon	24	7.9	36.9	515.773875	21.49057813	-
Liphook	10	8.9	37.5	226.770888	22.6770888	-
Horndean	22	9	35	407.152074	18.50691245	-
Grayshott	6	10.5	29.8	104.126744	17.35445733	-
Four Marks & South Medstead	9	20.1	8.2	125.310436	13.92338178	\downarrow
Clanfield	9	9.5	21.9	151.681994	16.85355489	-
Holybourne	3	18.5	24.8	65.360689	21.78689633	†
Rowlands Castle	7	6.1	19.1	97.791075	13.97015357	\
Headley	4	8.6	19.8	62.523862	15.6309655	-
Bentley	1	16.7	16.7	16.716111	16.716111	1
Headley Down	7	6	18.1	86.047364	12.29248057	-
Kingsley	1	10.3	10.3	10.265716	10.265716	\
Lindford	4	16.4	24.5	83.703254	20.9258135	<u> </u>
Ropley	1	13.9	13.9	13.87483	13.87483	<u> </u>
Bramshott	1	9.2	9.2	9.160423	9.160423	-
Holt Pound	1	16.6	16.6	16.609833	16.609833	1
Medstead	1	11	11	10.965128	10.965128	<u> </u>
Oakhanger	1	4.1	4.1	4.084005	4.084005	Ţ
Ropley Dean	1	8.1	8.1	8.1387888	8.1387888	-
Bentley Station	1	7.2	7.2	7.167252	7.167252	-
Bentworth	1	6.9	6.9	6.914357	6.914357	-
Catherington	1	10.7	10.7	10.712467	10.712467	↑
Passfield Common	1	7.1	7.1	7.065371	7.065371	-
Arford	1	10	10	9.974893	9.974893	↑
Beech	3	4.7	8.3	18.643947	6.214649	-
Griggs Green	1	8.2	8.2	8.170017	8.170017	<u> </u>
Lasham	1	4.6	4.6	4.599571	4.599571	<u> </u>
Lower Froyle	1	6.3	6.3	6.296094	6.296094	-
Lovedean	1	13	13	12.99651	12.99651	<u> </u>
Shalden	1	4.8	4.8	4.846437	4.846437	-
Upper Froyle	1	4.3	4.3	4.251085	4.251085	-
Upper Wield	1	3.3	3.3	3.328617	3.328617	-

- 5.15. The previous update to the settlement hierarchy used the ranking of settlements to propose four categories of settlements that formed the different tiers. These categories were defined on the basis of reviewing a frequency distribution of scores received for accessibility. Using the new methodology of the East Hampshire Accessibility Study, Figure 4 presents a revised frequency distribution, showing the number of settlements achieving average accessibility scores (rounded to the nearest integer value).
- 5.16. Figure 4 indicates that the resulting average settlement accessibility scores can be readily grouped into four broad categories: those that score between 3 and 14; those scoring between 16 and 19; scores between 21 and 23; and a score of 29 in isolation. These groupings are highlighted by annotations on Figure 4. The majority of the district's settlements scored between 3 and 14 in terms of accessibility, with nineteen settlements receiving a score within this range.
- 5.17. A five-tier hierarchy can be defined from the spread of results but by using equal scoring intervals, except in the case of the large grouping of settlements at the base of the hierarchy, where a broader scoring interval would seem to be more appropriate. Within this large group of settlements, differences are often between low and very low relative accessibility. This means that these differences are of less interest for the intended purpose of enabling realistic improvements to walking and cycling as a prioritised means of transport.
- 5.18. Based on the distribution of settlement average accessibility scores, a five-tier hierarchy is therefore proposed using the following integer scoring intervals:
 - 1. Average accessibility score ≥ 26 points
 - 2. Average accessibility score ≥ 21 points and ≤ 25 points
 - 3. Average accessibility score ≥ 16 points and ≤ 20 points
 - 4. Average accessibility score ≥ 11 points and ≤ 15 points
 - 5. Average accessibility score ≥ 0 points and ≤ 10 points
- 5.19. By creating a settlement hierarchy in this way, only settlements that score more than double the median accessibility score for the entire Local Plan Area will feature in tiers that are above the bottom tier of the settlement hierarchy. This would help to ensure that new development is indeed directed to areas that are relatively accessible by walking and cycling modes, when the resulting settlement hierarchy is employed for such a purpose. The hierarchical framework of paragraph 5.18 is therefore considered to be 'fit for purpose' for the Local Plan Area.

Figure 4: Distribution of Average Accessibility Study Scores (no. of settlements recording a certain score)



5.20. Now that a hierarchical framework has been established in terms of average accessibility scores, the membership of settlements within the hierarchy needs to be considered in terms of relative population levels (as noted above in paragraph 5.9). This is dealt with in the next section of this background paper.

6. Settlements & Resident Populations

6.1. The number of local residents is a good indicator of the potential number of users that may access services and facilities within a settlement on foot or by bike. Generally speaking, the larger the number of residents, the greater the potential number of customers or users that are within 'striking distance'. This can be important for evaluating and amending a potential settlement hierarchy that is otherwise based on average accessibility scores, for these do not consider levels of patronage in a direct manner. Over time, the number and range of services and facilities in a location can change in response to the number of people using them. Services with few customers or users may disappear, whereas more services could emerge in places with a large number of potential customers. It is therefore useful to consider proxies for potential customers or users (noting that future development can also change the dynamic for service provision).

- 6.2. To make the proposed settlement hierarchy more resilient to changes over time, the Council has compared the ranking of settlements by their average accessibility scores with the size of local resident populations. This has been done as far as is reasonably practicable, taking account of limitations in the availability of suitable population data (see below). Nevertheless, it has enabled some important adjustments to the emerging hierarchy, which are identified within Figure 5.
- 6.3. Reasonable adjustments have been made only where the average accessibility scores place settlements close to a boundary between tiers, as established in paragraph 5.18. Where population levels appear to be relatively high given a settlement's accessibility score, this has been interpreted to indicate a good potential to maintain or even enhance accessible service provision over the time period of the Draft Local Plan. Therefore, settlements that are at the top of one tier in terms of an accessibility score could be promoted to the next tier up in the hierarchy. Correspondingly, where population levels are relatively low given the settlement's accessibility score, this has been interpreted to indicate a lower potential to retain/enhance service provision, such that settlements at the bottom of one tier could be demoted to the next tier down. Notwithstanding these 'rules of thumb', where a settlement's score does not seem proportionate to its residential population due to the interconnectivity of services and facilities from an adjoining settlement, there is also the potential to consider that settlement as an accessible locality in terms of its neighbour(s).
- 6.4. Local resident populations can be obtained from official Census data. The Office for National Statistics (ONS) has released an online tool that enables users a create a demographic profile for a customised area (including small geographies) using information from 2021 Census topics. This tool can be used to identify the resident populations of 'built-up areas' as recorded by the 2021 Census. The built-up areas may be thought of as areas of best fit for named settlements, albeit using boundaries that have been defined for the collection and processing of ONS Census data.
- 6.5. The ONS tool allows the Council to estimate the populations of many settlements within the Local Plan Area. It is not, however, perfect. In the case of some of the smaller East Hampshire settlements, the available boundaries include large areas of countryside and even other, small (nearby) settlements. The online tool cannot be used to provide estimates of resident population for a settlement when the "built up area" is unrepresentative in these respects. Nevertheless, data from the 2021 Census is robust and credible, so the online tool has been used wherever it is reasonable to do so, for purposes of considering local resident populations.
- 6.6. Figure 5 provides an analysis of average accessibility scores from the East Hampshire Accessibility Study in the context of estimates of residential population from the online Census tool. This analysis is limited to 15 of the 33 settlements from Figure 3 because of the aforementioned limitations with the data boundaries of the Census tool. It is therefore a useful *supplementary*

- check of the emerging hierarchy (where available) but is not considered to be a necessary or sufficient reason for deciding on the finalised settlement hierarchy, which is still primarily determined by average accessibility scores.
- 6.7. Comparisons between average accessibility scores and settlement populations confirm the view that the settlements of Holybourne and Lindford may be conjoined with the larger, proximate settlements of Alton and Whitehill & Bordon respectively. The very good levels of accessibility to services and facilities are a consequence of the proximity of these small population centres to these larger settlements, where many of the relevant services and facilities are located. In addition, the comparisons within Figure 5 indicate a good case for adjusting the emerging settlement hierarchy in respect of Horndean, Four Marks & South Medstead and Rowlands Castle.
- 6.8. Horndean has a large resident population relative to its average accessibility score, and is close to the top of the scoring interval for Tier 3. Taking account of the good potential for the residential population to support existing services and facilities, an adjustment to the emerging settlement hierarchy is proposed by promoting Horndean to Tier 2 within the hierarchy.
- 6.9. Similarly, both Four Marks & South Medstead and Rowlands Castle have large resident populations relative to their average accessibility scores, whilst both are close to the top of the scoring interval for Tier 4. An adjustment to the emerging settlement hierarchy is therefore also proposed for both of these settlements, promoting each of them to Tier 3 within the hierarchy. No other changes are proposed in light of the analyses from Figure 5.

Figure 5: Comparative Analysis of Average Accessibility Scores and Residential Populations of Selected Settlements

Settlement	Average Accessibility Score (integer values)	Prospective (accessibility- based) Tier in the Hierarchy	Resident Population	Implication from Comparing Accessibility and Population
Alton	29	1	18,100	Large settlement with a high accessibility score. No change.
Liphook	23	2	7,100	Settlement is small considering its accessibility-based ranking, but remains a relatively large settlement within the Local Plan Area and is not at the bottom of a tier in terms of average accessibility scores. No change.
Holybourne	22	2	1,300	Settlement is very small considering its accessibility- based ranking, but this is a result of its accessibility to interconnected services and facilities within Alton. This implies support for its consideration as part of the adjoining Alton conurbation
Whitehill & Bordon	21	2	14,800	Large settlement with a high accessibility score. No change.
Lindford	21	2	2,700	Settlement is very small considering its accessibility- based ranking, but this is a result of its accessibility to interconnected services and facilities within Whitehill & Bordon. This implies support for its consideration as part of the adjoining Whitehill & Bordon conurbation
Horndean	19	3	13,500	Settlement is large considering its accessibility-based ranking, and is at the top of its tier in terms of average accessibility scores. This supports promotion from Tier 3 to Tier 2
Grayshott	17	3	2,800	Mid-sized settlement with good accessibility score. No change.

Settlement	Average Accessibility Score (integer values)	Prospective (accessibility- based) Tier in the Hierarchy	Resident Population	Implication from Comparing Accessibility and Population
Clanfeld	17	3	5,900	Settlement has a relatively large population considering its accessibility-based ranking, but is close to the bottom of its tier in terms of average accessibility scores. No change.
Four Marks & South Medstead	14	4	5,600	Settlement has a relatively large population considering its accessibility-based ranking, and is close to the top of its tier in terms of average accessibility scores. This supports promotion from Tier 4 to Tier 3
Rowlands Castle	14	4	3,200	Settlement has a relatively large population considering its accessibility-based ranking, and is close to the top of its tier in terms of average accessibility scores. This supports promotion from Tier 4 to Tier 3
Ropley	14	4	310	Settlement is very small considering its accessibility- based ranking, but is not at the bottom of a tier in terms of average accessibility scores. No change.
Lovedean	13	4	1,000	Small settlement with a relatively good accessibility score. No change.
Medstead	11	4	900	Small settlement with a satisfactory accessibility score. Although it is at the bottom of its tier in terms of average accessibility scores, there is no clear rationale for change. No change.
Beech	6	5	460	Small settlement with a low accessibility score. No change.
Lasham	5	5	170	Small settlement with a low accessibility score. No change.

7. The Revised Settlement Hierarchy

- 7.1. A revised settlement hierarchy has been determined within this background paper using the new East Hampshire Accessibility Study that has been prepared by the transport consultants, Ridge & Partners. This revised hierarchy builds upon the approach of previous work to revise the adopted settlement hierarchy of the East Hampshire Joint Core Strategy (adopted 2014). It recognises the presence of local facilities and services within the settlements of the Local Plan Area of the emerging East Hampshire Local Plan 2021-2040. It does not consider settlements within the South Downs National Park, which are part of another local planning authority's area.
- 7.2. In common with the previous (2022) iteration of the proposed settlement hierarchy, the method of determining a hierarchy prioritises accessibility to services and facilities by walking and cycling modes of transport. This reflects the need to reduce the need to travel by more carbon-intensive forms of transport, in order to tackle the climate emergency. Average accessibility scores for the settlements of the Local Plan Area have been used to form a ranking and establish a hierarchical framework, based on the distribution of these scores for the settlements. Adjustments to the emerging hierarchy have been made (where possible, given the geographical limitations of 2021 Census data for small settlements) in consideration of local population levels. This is to recognise that the resilience of future service provision will be related to the number of potential customers or users.
- 7.3. The changes to the methodology for determining the settlement hierarchy reflect the availability of better quality information on accessibility that has emerged from the Accessibility Study (which is the first step of the new transport assessment for the emerging Local Plan); and respond to comments received on the settlement hierarchy through the Issues & Priorities (Regulation 18) consultation on the emerging Local Plan in winter 2022/23.
- 7.4. The revised settlement hierarchy for the Draft Local Plan 2021-2040 is as follows:

Tier in Hierarchy	Names of Settlements
1	Alton (including Holybourne)
2	Horndean, Liphook, Whitehill & Bordon (including Lindford)
3	Bentley, Clanfield, Four Marks (& South Medstead), Grayshott, Headley, Holt Pound, Rowlands Castle
4	Arford, Catherington, Headley Down, Kingsley, Lovedean, Medstead, Ropley
5	Beech, Bentley Station, Bentworth, Bramshott, Griggs Green, Lasham, Lower Froyle, Oakhanger, Passfield Common, Ropley Dean, Shalden, Upper Froyle, Upper Wield

7.5. Previous versions of the settlement hierarchy have been included in Appendix A, for ease of comparison with the revised hierarchy. The East Hampshire Accessibility Study includes full details of its methodology and is published separately as part of the transport evidence base.

Appendix A: Previous Versions of the Settlement Hierarchy

The East Hampshires Joint Core Strategy (adopted 2014) includes a hierarchy of settlements at paragraphs 4.5-4.11.

Five different settlement categories were established, from market towns to rural villages, and two different hierarchies for the areas to the north and south of the South Downs National Park were defined as follows:

North of South Downs National Park and Whitehill & Bordon	Position in Hierarchy
Alton	Market Town
Whitehill & Bordon	
Liphook	Large Local Service Centre
Four Marks/South Medstead, Grayshott	Small Local Service Centres
Arford, Beech, Bentley, Bentley Station,	Other settlements with a settlement policy
Bentworth, Bramshott	boundary

Southern Parishes	Position in Hierarchy	
Horndean	Large Local Service Centre	
Clanfield, Rowlands Castle	Small Local Service Centre	
Catherington, Lovedean	Other settlements with a settlement policy	
	boundary	
All other settlements	Small rural villages/hamlets within the	
	countryside	

A review of the JCS settlement hierarchy (for areas outside of the South Downs National Park) was undertaken in the summer of 2018. This involved a community facilities audit and desk-based research to score and rank the settlements, taking account of accessibility. A revised settlement hierarchy was proposed and presented in the draft Local Plan consultation of early 2019.

Tier in Hierarchy	Proposed designation	Proposed Settlements
1	Town	Alton, Whitehill & Bordon
2	Large Local Service Centre	Liphook, Horndean
3	Small Local Service Centre	Holybourne, Grayshott, Headley, Rowlands Castle, Clanfield, Four Marks & South Medstead
4	Settlement with a Small Number of Services	Lovedean, Lindford, Bentley, Kingsley, Medstead, Ropley, Catherington, Headley Down, Arford, Bramshott, Holt Pound
5	Rural Settlement	Passfield Common, Ropley Dean, Bentley Station, Upper Froyle, Bentworth, Beech, Griggs Green, Lower Froyle
6	Other settlements in the countryside	Oakhanger, Shalden, Upper Wield, Lasham

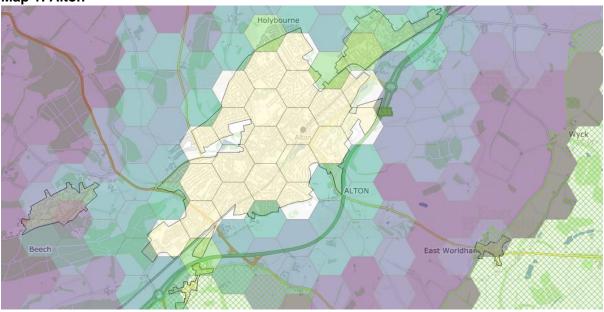
The above proposed hierarchy was revised for purposes of the winter 2022/23 Regulation 18 Local Plan consultation on Issues & Priorities. At that time, and in recognition of the Council's declaration of a climate emergency in July 2019, the settlement hierarchy methodology was changed to prioritise walking and cycling as modes of transport for accessing local services and facilities. This involved the definition of 20-minute neighbourhoods, based on potential walking and cycling catchments for settlements within the Local Plan Area, as a means of understanding which areas have good potential to support the concept of 'living locally'. The revised settlement hierarchy from 2022/23 comprised four tiers and was as follows:

Tier in Hierarchy	Names of Settlement
1	Alton, Liphook, Whitehill & Bordon,
2	Clanfield, Four Marks & South Medstead, Grayshott,
	Horndean
3	Bentley, Bentley Station, Bentworth, Catherington,
	Headley, Headley Down, Holt Pound, Holybourne,
	Kingsley, Lindford, Medstead, Passfield Common, Ropley,
	Ropley Dean, Rowlands Castle
4	Arford, Beech, Griggs Green, Lasham, Lower Froyle,
	Lovedean, Shalden, Upper Froyle, Upper Wield

Consultation responses and new evidence on accessibility has led to the further revisions to the settlement hierarchy that are put forward in this background paper.

Appendix B: Maps to show how settlements have been modelled using tessellated hexagons from the East Hampshire Accessibility Study

Map 1: Alton



Map 2: Arford

