

ATLAS

**North Hertfordshire New
Settlement study**

Final Report

April 2016



Contents

Executive Summary	i
1. Introduction	1
2. The Plan-Making Context	2
3. New Settlements	8
4. Creating a Spectrum of 'New Settlements'	22
5. Building a Sustainable Place	33
6. Delivery Options	60
7. Action Plan	80
Appendix 1: Auditing the New Towns	
Appendix 2: Settlement Modelling Assumptions	

Executive Summary

1. The Advisory Team for Large Applications (ATLAS) has been supporting North Hertfordshire District Council (NHDC) in relation to considering the issues related with planning for a ‘new settlement’ in the District. This followed a resolution passed by Full Council on the 12th February 2015 which required NHDC officers to explore the potential for a new settlement / Garden City in the area to address long term housing needs for the future
2. ATLAS commissioned Mott MacDonald in January 2016 to undertake a desk-based assessment considering the potential of a new settlement within the authority of North Hertfordshire.
3. This report is intended to build on work undertaken to date by North Hertfordshire District Council (NHDC) and ATLAS to evolve the Council’s understanding and thinking for the planning of a new settlement.
4. The report draws upon a detailed review of the historic development of new towns within the UK and current best practice to illustrate what the delivery of a new settlement in North Hertfordshire could involve.
5. The report reviews various issues in respect of new settlements, including different settlement typologies and delivery vehicles. At this stage it does not seek to apply judgements or present recommendations as to their appropriateness for North Hertfordshire.
6. The planning of a new settlement will represent a **complex and lengthy process which is likely to take several years.**
7. This recognises that the process involved would require a considerable amount of time and resource, and will require the direct involvement of a broad range of stakeholders including infrastructure providers.

Why are we considering a new settlement?

8. The Local Plan Preferred Options (LPPO) for North Hertfordshire proposed several Sustainable Urban Extensions (SUEs) and Green Belt releases on the edge of existing settlements to accommodate the District’s housing needs. This has been the subject of some local opposition alongside suggestions to consider the possible role of a new settlement. NHDC has therefore resolved to consider various means of accommodating the District’s housing needs, including the potential for a new settlement.
9. Work on the draft Local Plan is continuing to progress. Further evidential assessment of the District’s housing needs has identified that **housing needs are likely to be higher than identified by the LPPO and may prevail over the long-term beyond the plan period.** Under the Duty to Cooperate NHDC may also need to consider whether it has the potential to accommodate additional housing needs arising in Stevenage and Luton. These issues have implications on the plan-making process and have informed NHDC’s rationale for considering the potential to establish a new settlement.

10. The National Planning Policy Framework (NPPF) acknowledges that the supply of new homes “...can sometimes be best achieved through planning for larger scale development, such as new settlements or extensions to existing villages and towns that follow the principles of Garden Cities...” (paragraph 57). The Government has set out its intention to place a renewed emphasis on the delivery of new settlements via the strengthening of the NPPF to provide a more supportive approach for new plan-led settlements.
11. The Government’s support for new settlements was further enshrined within the 2016 Budget, which set out the Government’s backing for the construction of a “new wave” of garden towns and cities across the Country. This was accompanied by a Garden Villages, Towns and Cities Prospectus¹ (2016 prospectus) which was published alongside the Budget and set out the Government’s proposed approach to facilitating the delivery of new settlements. New and updated legislation is expected to help LPAs to facilitate the delivery of new settlements.
12. The provision of a new settlement in North Hertfordshire therefore represents one potential option of providing for significant identified housing needs over the longer-term. Consideration needs to be given to the size and nature of a new settlement and the role it can play in complementing the existing planned provision for housing across the authority.

What might a new settlement in North Hertfordshire look like?

13. At this stage there remains considerable flexibility in determining exactly what a new settlement might look and feel like in North Hertfordshire.
14. This report has sought to illustrate what size of area a new settlement might occupy, and its potential relationship with existing settlements. This has focussed on considering the implications of different scales of settlement and their role relative to the mix of land uses including employment, and the implied social and transport infrastructure requirements.
15. The report has, in accordance with the project brief, considered that a new settlement would include at least 5,000 new dwellings and accommodate a level of employment plus associated social infrastructure. This falls within the range stipulated within the Government’s 2016 prospectus as representing a ‘garden village’ of 1,500 to 10,000 dwellings. Development of this scale would create a requirement for a scale of infrastructure, including but not limited to schools, retail and leisure facilities. The provision and type of transport infrastructure would have an impact on the location of a new settlement as would its economic role i.e. the scale of employment anticipated to be located within and adjacent to a new settlement.
16. At the other end of the spectrum consideration has been given to the implications of a new settlement being as large as 15,000 dwellings, which under the Government’s 2016 prospectus would represent a ‘new town’ (and could potentially also represent a significant new employment location within the authority). Evidently this would create

¹ Locally-Led Garden Villages, Towns and Cities, Department of Communities and Local Government (March 2016)

more significant infrastructure requirements and more likely to have a significant impact on both the rural environment and the existing settlement structure.

17. Consideration has also been given to the potential urban structure and spatial characteristics of a new settlement. This takes into consideration variant densities and potential spatial relationships between the built up and non-built up environments.

Delivering a new settlement within a plan-led system

18. There are no obstacles in principle to the use of a Local Plan to facilitate the delivery of a new settlement via the setting of a supportive policy basis.
19. Research has shown that once they have been adopted, Local Plan policies cannot be quickly modified, albeit plan-making is typically an ongoing iterative process with policy reviews necessary to deal with issues as they arise. In contrast, development proposals are often subject to change because, among other things, they must remain responsive to evolving market conditions. Local Plan policies regarding new settlements must include a degree of flexibility such that they can accommodate a change in the proposals, given that they are typically delivered over a long period of time.
20. It will be necessary to demonstrate that any allocation, be it for a strategic site and/or new settlement in a Local Plan – as well as any associated policies – is “sound”, in accordance with the tests established by the NPPF. A comprehensive, robust and compelling evidence base should be assembled to justify a new settlement, both in terms of the proposed planning strategy for the District and the proposed site itself and to demonstrate its deliverability.
21. The allocation of a new settlement in a Local Plan will require a considerable amount of time and resource. Mindful of NHDC’s current timescales for the preparation of its Local Plan, it is unlikely that a new settlement could be included within it without incurring a significant delay to the plan. Indeed, it would likely be necessary to start the plan-making process afresh, with implications in relation to the ability to meet short term housing needs and risk of planning by appeal.
22. NHDC could explore the potential to undertake a focussed review of the Local Plan following its adoption, mindful of other recent examples of such an approach. This could involve the continued preparation of the current draft Local Plan and inclusion of a clear policy commitment to undertake an early partial review with a particular focus on the identification and planning for a new settlement.
23. Such an approach would enable NHDC to undertake further work in respect of a longer-term strategy for meeting housing needs, including full and proper consideration of a new settlement and its broader implications.
24. An alternative approach could involve the preparation of a stand-alone development plan document such as an Area Action Plan, which relates specifically to the new settlement. However, this would need to be prepared in accordance with the strategy set out in the overarching Local Plan. This would need to include the identification and allocation of a site, or at least a focussed area of search, and an appropriate policy

framework for delivery. It is unlikely that this could be pursued under the current emerging local plan without adding significant delay to that process.

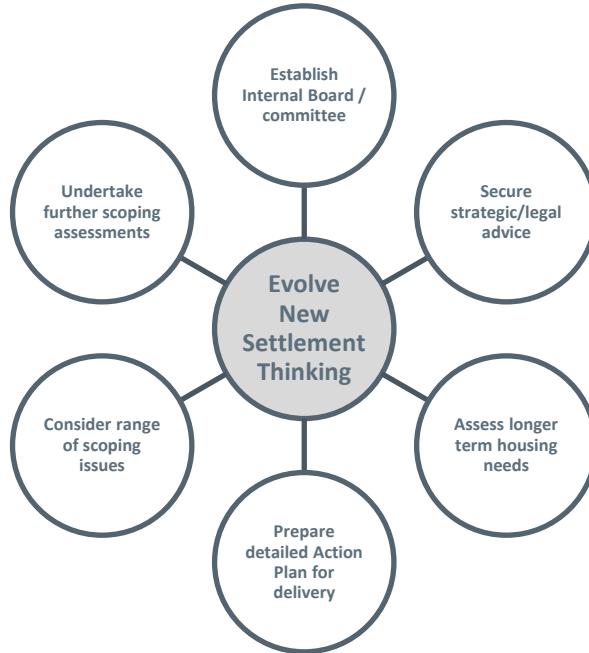
Delivering in partnership

25. The Local Plan itself would not provide the means to deliver the new settlement on the ground. In addition to identifying and making land available for development through the planning system, one of the most important issues for establishing a new settlement will be to create a viable model for its delivery.
26. NHDC is not presently in a position to deliver a new settlement alone and it will be necessary to establish some form of appropriate delivery vehicle to both promote and deliver a new settlement. Examples of delivery vehicles considered in this report include the establishment of a Joint Venture between the Council and at least ‘one other’; the creation of a Local Delivery Vehicle in which the Council takes on greater ownership of the delivery of the settlement; or a ‘Straight Sale’ or ‘External Partner Delivery’ where an identified other party would take primary responsibility for delivery.
27. The selection of delivery vehicle will raise implications for the role the council takes in bringing forward the settlement. Nevertheless all options considered for the delivery of a new settlement will require collective “buy-in” from infrastructure providers and key stakeholders, including Hertfordshire County Council, and a firm commitment to the delivery of infrastructure at the same time as (or in advance of) the new homes.
28. Other key factors which will have a bearing on the delivery of the settlement include the identification of funding and finance and approaches to land assembly; these are also considered in this report.

Priority Actions & Next Steps

29. To move to the next stage the Council now needs to give priority to various matters in order to ensure that the process is undertaken efficiently and will be judged ‘sound’ in its delivery from a plan-making and financial perspective. In particular consideration needs to be given to:
 - The broad objectives for a new settlement (including its preferred location, scale, form and delivery);
 - The evidential justification and preferred planning approach for a new settlement and relationship with / implications for the plan-making process; and
 - The ability to physically accommodate a new settlement within an appropriate location within the District.

30. The following activities are identified, to enable the Council to progress priority actions beyond the content of this report:



31. The following table summarises the objectives and activities of each activity. It is recognised that progress is already underway by the Council against the initial activities and it would be anticipated that the subsequent elements could be progressed within a streamlined timetable.

Establish a bespoke internal “Board” or “Committee” to manage and lead NHDC’s work.

Secure strategic advice / legal opinion which could provide useful advice about:

- The general approach to establishing a new settlement, including the implications for the plan-making process and wider planning strategy; and
- The potential delivery vehicles for a new settlement, in the context of current and/or future planning and legislative frameworks.

Undertake an assessment of longer-term housing needs, beyond the plan period. This will enable NHDC to consider the period over which the new settlement is planned for and the potential scale of development which might be required. This, in turn, will inform future work regarding the potential scale and form of the new settlement.

Undertake initial non-binding and exploratory scoping assessments in respect of:

- The physical capacity of the District to accommodate a new settlement; and
- A potential “area of search” for a new settlement.

This would comprise a high level review of key constraints and opportunities, including: infrastructure, areas of Green Belt and / or other environmental sensitivity and land

ownership. It would most likely need to be prepared on a strategic or “larger than local” approach.

Consider a range of initial scoping issues, including:

- The “case” and justification for a new settlement relative to and mindful of other potential forms of development which could accommodate the District’s needs;
- The form of the new settlement, including its potential scale, development uses and general extent;
- The extent to which NHDC wishes to retain ‘hands-on’ control of the new settlement or alternatively to step-back into a managerial role, for example via the Development Management process. This should be considered in respect of both the preliminary stage of works (e.g. to identify and assemble the land, establish a policy framework and masterplan, and/or navigate the planning approval process) and over the longer-term as it is delivered on the ground;
- The extent to which NHDC wants to commit resources to the delivery of the new settlement, in terms of both time and financial investment, and is willing to bring-in private sector input, including from an early stage; and
- The preferred means of delivering the new settlement, mindful of the opportunities offered by the planning system, legislative framework and potential delivery vehicles.

Consideration of the above issues could be summarised in a high-level and non-binding briefing paper.

Prepare a detailed action plan for future stages of work regarding the delivery of the new settlement. This should encompass, *inter alia*:

- The plan-making process;
 - Engagement with all key stakeholders including third parties, infrastructure providers, developers and local communities;
 - Site identification and land assembly;
 - Key delivery matters, including the establishment of delivery vehicles; mindful of policy and legislative frameworks; masterplanning, infrastructure requirements, and funding/finance.
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32. It is essential that consideration and planning of a new settlement is undertaken with transparency and includes formal public consultation and ongoing input from key stakeholders (e.g. other key stakeholders, infrastructure providers and the development industry).
33. However, mindful that the planning and delivery of a new settlement is a highly complex process in which the control of land is particularly important, NHDC should seek to explore whether it is possible and appropriate to undertake at least some preliminary assessment of options on an informal, non-prejudicial and non-binding basis.

1. Introduction

- 1.1 ATLAS commissioned Mott MacDonald in January 2016 to undertake a desk-based assessment considering the potential of a new settlement within the authority of North Hertfordshire.
- 1.2 Prior to the commissioning of this research ATLAS has been supporting North Hertfordshire District Council (NHDC) on the issue of facilitating a new settlement through the plan making process. This followed a resolution passed by Full Council on the 12th February 2015 which required NHDC officers to explore the potential for a new settlement / Garden City in the area to address long term housing needs for the future.
- 1.3 This report is intended to build and evolve the Council's understanding and thinking for the planning of a new settlement. The report draws upon a detailed review of the historic development of new towns within the UK and current best practice to illustrate what the delivery of a new settlement in North Hertfordshire could involve.
- 1.4 This includes a detailed consideration of the potential variant scale, nature and role of a new settlement within North Hertfordshire. Conceptual illustrations of the different types of new settlement which could be advanced are presented.
- 1.5 The report then considers the implications of this spectrum of different new settlements with regards to their contribution to the authority, their role and function and potential delivery timescales.
- 1.6 A penultimate section looks in detail at potential different delivery options reflecting on existing regulation and legislation as well as considering published thoughts on amendments and changes to this framework.
- 1.7 The report concludes with a structured action plan / route map as to the future steps required to enable further consideration of a potential new settlement within the authority. This takes account of the current plan-making process in North Hertfordshire and neighbouring authorities of which, it is recognised, the authority shares functional housing and/or economic relationships.
- 1.8 The views expressed are those of the consultancy team and not necessarily those of the Council.

Report Structure

- 1.9 The report is structured to cover:
 - Section 2: The Plan-Making Context
 - Section 3: New Settlements
 - Section 4: Creating a Spectrum of 'New Settlements'
 - Section 5: Building a Sustainable Place
 - Section 6: Delivery Options
 - Section 7: Action Plan

2. The Plan-Making Context

- 2.1 It is important to place a potential new settlement in North Hertfordshire in the context of the on-going plan making process.
- 2.2 This section is not intended to provide an exhaustive review of local planning policy but to summarise the key factors influencing and shaping the rationale for considering the development of a new settlement within North Hertfordshire.

National Policy

- 2.3 The National Planning Policy Framework (NPPF) sets the Government's planning policies for England. One of the main tenets of the NPPF is the 'presumption in favour of sustainable development' (paragraph 14). The NPPF also states that local authorities should significantly boost their supply of housing.
- 2.4 The NPPF acknowledges that the supply of new homes "*...can sometimes be best achieved through planning for larger scale development, such as new settlements or extensions to existing villages and towns that follow the principles of Garden Cities...*" (paragraph 57). It informs that:

"...local planning authorities should consider whether such opportunities provide the best way of achieving sustainable development. In doing so, they should consider whether it is appropriate to establish Green Belt around or adjoining any such new development."

- 2.5 A recent consultation² set out the Government's intention to place a renewed emphasis on the delivery of new settlements. It proposes to amend the NPPF to strengthen national planning policy to provide a more supportive approach for new plan-led settlements. The Government set out its view that LPAs should:

"...take a proactive approach to planning for new settlements where they can meet the sustainable development objectives of national policy...In doing so local planning authorities should work proactively with developers coming forward with proposals for new settlements in their area..."

- 2.6 The Government's support for new settlements was further enshrined within the 2016 Budget³, which set out the Government's backing for the construction of a "new wave" of garden towns and cities across the Country. It stated that:

"For areas that want to establish smaller settlements, the government will provide technical and financial support to areas that want to establish garden villages and market towns of between 1,500 to 10,000 homes..."

The Government's proposed approach to facilitating the delivery of new settlements – including the proposed planning and financial powers which it intends to introduce – are

² Consultation on proposed changes to national planning policy, Department for Communities and Local Government (December 2015)

³ Budget 2016, HM Treasury (March 2016)

set out in the Garden Villages, Towns and Cities Prospectus⁴ which was published alongside the Budget and is discussed in more detail in later sections of this report.

- 2.7 The NPPF sets out that planning policy should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities. Additionally, for larger scale residential developments in particular, planning policies should promote a mix of uses in order to provide opportunities to undertake day-to-day activities. Where practical, particularly within large-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties.

North Hertfordshire Local Plan

- 2.8 NHDC is in the process of preparing a new Local Plan which will replace the saved policies of the 1996 Local Plan. The emerging Local Plan covers the period 2011-2031 and establishes targets for new homes, employment and retail development, as well as identifying areas of land where these developments should be built.
- 2.9 The consultation of the Local Plan Preferred Options (LPPO) was held between December 2014 and February 2015. It proposes the release of sufficient land to accommodate at least 14,200 dwellings over the plan period. This level of provision was identified as meeting North Hertfordshire's own objectively assessed need (OAN) of 12,100 dwellings, plus an additional 2,100 dwellings to accommodate unmet need arising from Luton. The LPPO also informs that longer term housing needs arising from Stevenage could be accommodated on land west of the A1(M) for up to 3,100 dwellings, with this housing provision not included within the 14,200 target.
- 2.10 The LPPO proposes to focus the majority of new development on the four towns of Hitchin, Letchworth Garden City, Baldock and Royston. This has included the release of land on the edges of these towns to establish Sustainable Urban Extensions ('SUE'). General development is also identified as being allowed with the defined settlement boundaries of Category A villages and infill development within Category B villages. The LPPO identifies a number of Green Belt releases adjacent to several villages and to the towns of Hitchin, Letchworth Garden City and Baldock to accommodate the identified housing need, on the basis that a shortage of deliverable housing land establishes the "exceptional circumstances" necessary to justify amendments to the Green Belt boundaries.
- 2.11 The LPPO consultation received approximately 8,400 representations. NHDC identified that a number of these comprised local objections to the proposed focus on SUEs and the scale of Green Belt release around settlements. Others referenced the potential role of a new settlement.
- 2.12 Following a resolution passed by Full Council on 12th February 2015, NHDC Officers are tasked with exploring the potential for new settlement(s) to address the long term housing needs of North Hertfordshire. The resolved motion stated NHDC:

⁴ Locally-Led Garden Villages, Towns and Cities, Department of Communities and Local Government (March 2016)

“...instructs officers to continue to explore the long term housing needs of North Hertfordshire with other Local Authorities, the DCLG, and other relevant bodies, and the extent to which there may be reasonable options for new settlements for the future in North Hertfordshire together with the required infrastructure and funding.”⁵

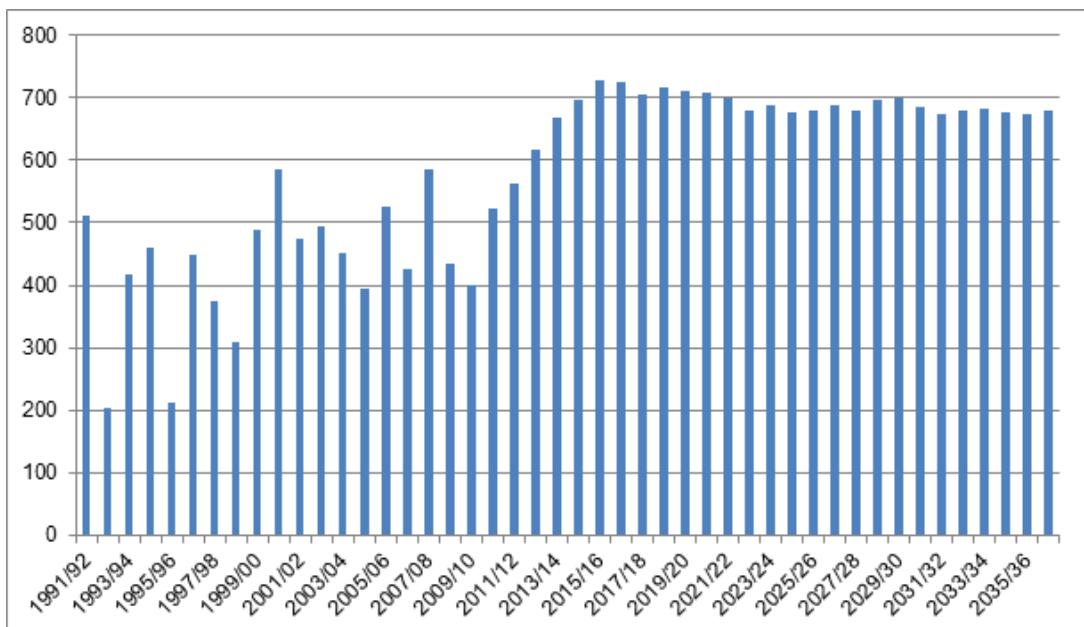
Evidence of Housing Need

- 2.13 Following the LPPO consultation and subsequent Full Council resolution, work has continued to progress on the draft Local Plan. This has included the publication of an updated Strategic Housing Market Assessment (SHMA) in June 2015 conducted jointly across North Hertfordshire and Stevenage.
- 2.14 The SHMA took account of the 2012 Sub National Household Projections (SNHP) that published in February 2015. A total OAN of 21,700 dwellings was identified across both authorities over the period 2011 to 2031. Of this, 14,400 dwellings were identified as being needed in North Hertfordshire (720 per year) – approximately 2,300 dwellings higher than identified by the LPPO. The elevated level of need was based on a lower level of projected population and household growth (drawing on a longer-term 10 year migration trend) but reflected the application of a 10% additional allowance to address evidence of worsening market signals.
- 2.15 The SHMA only provided a projection of need to 2031. The 2012 SNHP provides a projection of household growth forward to 2037. Whilst the SHMA preferred an alternative population projection based on longer-term trends, the Planning Practice Guidance identifies the 2012 SNHP as forming the ‘starting point’ for considering housing need; it is useful to consider the projected need over this longer period in the context of considering a new settlement.
- 2.16 Figure 2.1 shows the 2012 SNHP forecasts total growth of approximately 17,200 households over the period 2012 to 2037 in North Hertfordshire. Applying the vacancy rate of 2.9%⁶ identified by the SHMA, this implies a total ‘starting point’ need for approximately 17,700 dwellings up to 2037. It is clear that the projections anticipate that the need generated by new households will be sustained beyond 2031; indeed, between 2031 and 2037 it is forecast that North Hertfordshire will grow by approximately 679 households per annum.

⁵ Council Minutes, Thursday 12th February 2015

⁶ Paragraph 2.74 of the Stevenage and North Hertfordshire SHMA Update 2015 (ORS)

Figure 2.1: 2012 SNHP Projected Household Growth – North Hertfordshire



Source: DCLG, 2015

- 2.17 The projection of need over the longer-term will inevitably be subject to change. Nevertheless, it provides an important starting point and evidently indicates a long-term need for housing in the District, significantly above that identified by the LPPO. This presents an important context for considering the role of a new settlement in meeting longer term housing needs.

Housing Market Area Updated Considerations

- 2.18 North Hertfordshire, alongside six other Councils, commissioned a study '*Housing Market Areas in Bedfordshire and the Surrounding Areas*' that was published in December 2015. The aim of the study was to build a consensus around the most appropriate HMAs to be used by the partner councils to identify an OAN. This study identifies that:

"Based on the evidence, it seems reasonable to conclude that the combined areas of Stevenage borough and North Hertfordshire district provide an appropriate "best fit" for Stevenage functional HMA." (Paragraph 5.38)

- 2.19 The study conclusion was based upon a 'best fit' geography which aligned with administrative boundaries. The research, however, also identified functional 'HMAs' which were not limited to adhering to authority boundaries. The functional HMA definition identified that North Hertfordshire is predominantly included within the Stevenage HMA⁷. The boundary of this HMA also extended beyond Stevenage and North Hertfordshire to include parts of Central Bedfordshire, East Hertfordshire and Welwyn Hatfield.

⁷ 98.7% of North Hertfordshire's resident population falls within the Stevenage HMA with the remaining 1.3% falling within the Luton HMA.

- 2.20 Whilst almost 99% of North Hertfordshire's population is included within the Stevenage HMA just over 1% falls within the Luton HMA, which also includes parts of Central Bedfordshire and Aylesbury Vale.
- 2.21 In this context it is important to continue to consider the establishment of future housing provision of this HMA definition with Stevenage in particular but also recognising the relationships with other adjacent authorities. As set out above, the LPPO identified a potential additional level of provision to accommodate (para 2.7) potential unmet needs from Stevenage.

Stevenage

- 2.22 The Publication draft of the Stevenage Local Plan was consulted upon in January and February 2016. The Plan provides for at least 7,600 new homes within Stevenage Borough between 2011 and 2031, slightly exceeding the OAN identified in the 2015 SHMA of 7,300 dwellings. It includes two significant extensions to Stevenage itself which account for 2,700 new dwellings and recognises that work will be undertaken with NHDC to ensure any homes provided on the edge of Stevenage but outside the Borough boundary are successfully integrated into the urban fabric of the town. This recognises the current LPPO for NHDC, which it is noted in the Stevenage Plan could deliver almost 2,000 additional homes around the town by 2031.
- 2.23 Stevenage Borough Council also acknowledge that the ability to physically accommodate additional residential development in the Borough – beyond that accounted for by its current draft Local Plan – is limited. This is likely to have implications for the scale of Stevenage's needs which will need to be considered via the duty to cooperate in North Hertfordshire during the next plan period (i.e. post-2031).

Other Authorities with Functional Market Relationships with North Hertfordshire

- 2.24 The authorities of Central Bedfordshire, East Hertfordshire and Welwyn Hatfield are all at different stages of the plan-making process.
- 2.25 Central Bedfordshire has embarked upon the creation of a new Local Plan following the withdrawal of its previous plan following concerns raised by the Planning Inspectorate at the EIP. The Council is committed to working closely with neighbouring authorities but given the early stages of the plan-making process no formal positions have been made around any distribution of unmet housing need.
- 2.26 East Hertfordshire is progressing its Local Plan preparation following consultation in 2014. The latest published Duty to Cooperate Meeting notes between East and North Hertfordshire (July 2015) whilst a number of capacity constraints were discussed no requests for the provision of unmet housing needs were presented.
- 2.27 Welwyn Hatfield consulted on its latest version of the Local Plan in 2015 with a further round of consultation proposed in summer 2016. The latest consultation identified that the authority may not have sufficient suitable and available residential land to meet its OAN. The extent to which unmet needs may need to be met elsewhere has not to date been identified.

- 2.28 As set out in the recent HMA report a small part of North Hertfordshire falls within the Luton HMA. The Pre Submission Luton Draft Plan (October 2015) identifies that 17,800 new dwellings are needed in Luton Borough by 2031.
- 2.29 However, it makes provision for the delivery of just 6,700 dwellings on the basis that there is limited developable land within the built up area. This generates an unmet need of around 11,100 net additional dwellings over the plan period. Whilst the overlap in housing market areas between North Hertfordshire and Luton is very limited the Luton Draft Plan identifies that opportunities will be explored for neighbouring authorities to meet its unmet housing needs. The LPPO includes an allowance of 2,100 dwellings.

Consideration of Available Supply

- 2.30 The latest Strategic Housing Land Availability Assessment (SHLAA) published in 2014 has identified sufficient sites for up to 20,582 dwellings. The assessment notes that the vast majority of these sites are currently within the Green Belt. Most are in and around the North Hertfordshire towns and villages, although a sizeable minority of the dwellings are on the edges of Stevenage and Luton.
- 2.31 The SHLAA indicates that the maximum amount of development that can be delivered without releasing Green Belt is 4,629 dwellings. This is well short of the requirement identified by the LPPO and the estimates of OAN discussed above.

Summary and Implications

- 2.32 The LPPO for North Hertfordshire proposed several SUEs and Green Belt releases on the edge of existing settlement to accommodate the District's housing needs. This has been the subject of significant local opposition. NHDC has therefore resolved to consider alternative means of accommodating the District's housing needs, including the potential for a new settlement.
- 2.33 Work on the draft Local Plan is continuing to progress. Further evidential assessment of the District's housing needs has identified that housing needs are likely to be higher than identified by the LPPO and may prevail over the long-term beyond the plan period. On the basis of the current process of plan-making across a wider functional area NHDC may also need to consider under the duty to cooperate the potential of the District to accommodate potential long term housing needs arising in Stevenage and Luton.
- 2.34 These issues might present challenges to the plan-making process and have informed NHDC's rationale for considering the potential to establish a new settlement recognising the important role this could play in contributing towards housing provision over the longer-term.

3. New Settlements

- 3.1 There is a wealth of information available regarding the historic development of new Garden Cities and Towns.
- 3.2 It is apparent from the literature which has been published examining this topic that there is a broad range of different scales of new towns, which in turn take different forms and perform different functions.
- 3.3 This section seeks to draw upon this information, augmented by a statistical audit of the main New Cities, towns and emerging settlements in England and Wales, to illustrate the spectrum of new settlements which have grown up and continue to be developed.
- 3.4 The concept of new settlements, however, is very familiar to North Hertfordshire, with the authority accommodating the first ever Garden City. This section therefore initially considers the evolution of Letchworth Garden City with this forming an important context in understanding the foundations upon which new settlements can be considered in the authority.

The North Hertfordshire New Settlement Context

- 3.5 North Hertfordshire is home to the first Garden City. First Garden City Ltd was formed in 1903 and began construction of the new settlement of Letchworth Garden City in the same year.
- 3.6 In the context of subsequent generations of new towns and settlements Letchworth remains an exemplar with regards to the quality of its built environment and public realm⁸.
- 3.7 Whilst the development of the settlement was impacted by global events including two world wars and an intervening period of economic uncertainty the City has as of the current day grown to a size originally envisaged by Ebenezer Howard's Garden City model. The 2011 Census indicated the settlement was home to some 33,249 people compared with the original population of 32,000 planned for. This population is housed in some 14,300 dwellings according again to the 2011 Census.
- 3.8 In terms of the evolution of the settlement Letchworth reached half its planned population by 1938 and was 'completed' after the Second World War⁹. The City is now evidently a major settlement in terms of its development and community.
- 3.9 Importantly the provision of employment within the City was a key feature of Howard's model, with land allocations set aside to attract and accommodate craft-based trades. A review of the 2011 Census statistics suggests that Letchworth is home to almost 16,000 jobs with approximately 47% of residents commuting less than 5km to work.

⁸ 'New Towns and Garden Cities – Lessons for Tomorrow' Stage 1: An Introduction to the UK's New Towns and Garden Cities(TCPA), December 2014

⁹ 'New Towns and Garden Cities – Lessons for Tomorrow' Stage 2: Lessons for Delivering a New Generation of Garden Cities (TCPA), December 2014

- 3.10 The success of Letchworth sets an important local context for considering the creation of a new settlement in North Hertfordshire. It is, however, important to recognise that the City's significant period of growth occurred some 70+ years ago. This period has seen the evolution of different types of new settlements and changing needs and demands placed upon our urban areas.

Auditing the Existing New Towns

No One Size Fits All

- 3.11 There is significant merit in drawing upon a review of the development of subsequent generations of new towns within the UK. These settlements represent a broad diversity of scale and mix of uses reflecting their varying anticipated roles and geographic locations.
- 3.12 By way of a resource for comparing and contrasting the new towns developed over the course of the last century Appendix 1 presents a statistical audit of each of the settlements. This provides an insight into important features such as their scale in terms of population, dwellings and jobs as well as the efficiency of land occupation indicated through estimated gross densities. The maturing of these settlements is also reflected when considering the household and population profiles recognising that in the majority of cases these settlements have been home to a number of generations of families.

Size of Settlement – Dwellings

- 3.13 A significant number of the New Towns have grown beyond the scale of Letchworth Garden City. Third Generation New Towns such as Milton Keynes, Peterborough, Warrington and Northampton range in size from approximately 70,000 to 90,000 dwellings. These evidently dwarf the scale of the original garden cities. This scale of development means that each of these settlements represents a significant economic hub within its respective hinterlands with the numbers of jobs located in the towns ranging from around 90,000 to 120,000.
- 3.14 This scale of settlement evidently extends well beyond that which would be considered appropriate in the context of the planning need and evidence considered in section 2.
- 3.15 Importantly, however, a number of the first and second generation new towns are of a scale more akin to the original Garden Cities of Letchworth and Welwyn, with numbers of dwellings closer to 15,000 to 20,000. This includes Skelmersdale, Peterlee, Hatfield, and Newton Aycliffe. These fall at the lower end of the spectrum of the New Towns in terms of size.

Jobs and Homes Relationship

- 3.16 Whilst it is recognised that the New Towns are on average larger than the scale of settlement considered for North Hertfordshire they provide an important indicator as to the evolved role of the settlements as not only dormitory residential settlements but also locations of employment.
- 3.17 Looking at a simple ratio between workplace jobs within each of the New Towns and dwellings shows a broad range.

- 3.18 At the lower end of the range by someway Peterlee has only 0.7 jobs per dwelling. On average the New Towns suggest a ratio of closer to 1.3 jobs to every dwelling.
- 3.19 Letchworth Garden City itself has a relatively balanced ratio of approximately 1.1 jobs for every dwelling with this broad ‘balance’ also evident in a number of other settlements including Harlow, Newton Aycliffe, Runcorn, Redditch and Stevenage.
- 3.20 At the other end of the spectrum Hatfield stands out for containing close to 2 jobs for every dwelling with Crawley also approaching this ratio.

Social Infrastructure

- 3.21 GIS analysis has enabled a review of the scale of the social infrastructure which has evolved in each of the New Towns with the numbers of education facilities, doctors, leisure and sports centres as well as the gross retail floorspace of each of the New Towns included in Appendix 1.
- 3.22 Recognising that the New Towns have ‘grown-up’ and evolved provides a useful context for understanding the scale of social infrastructure and the size of the ‘town-centre’ which serves these more mature incarnations of New Towns in the country.
- 3.23 Importantly the statistics illustrate a diverse mixture of ways in which quantified aspects of social infrastructure have developed.
- 3.24 For example, on average across the New Towns there are almost 1,500 dwellings per primary school. However, across the New Towns there are considerable variations on this ratio, with, for example, Skelmersdale having approximately only 700 dwellings per primary school but Telford and Peterborough having in excess of 2,500 dwellings per primary school. This is likely to reflect the differing size of primary schools within the settlements which have evolved to meet the needs of their populations.
- 3.25 Looking at secondary school provision again illustrates a level of variance. On average the New Towns suggest one secondary school for every 8,000 dwellings. A number of the New Towns show considerably lower ratios closer to 5,000 – 5,500 with some as low as around 3,500 with others showing ratios which exceed 10,000. This illustrates the differing approaches taken to provide education facilities of differing sizes in the settlements relating in part to their urban form, but also potentially a reflection of the function of the town in serving a wider hinterland and hub for outlying settlements.
- 3.26 With regards to wider social infrastructure aspects comparison can be made between the numbers of doctor’s surgeries, on average approximately one per 6,600 people and the number of sports centres, approximately one per 23,000 people. There is considerable variation between the New Towns with the numbers of GP practices per person varying from 1 for every 4,000 up to over 1 per every 16,000 persons. Equally the number of leisure and sports centres per person varies from 1 for every 7,000 up to over 1 for every 50,000.
- 3.27 In the context of leisure and sports centres it is recognised that this is only a broad indicator as the scale and offer of individual centres is likely to vary significantly.

Gross Density

- 3.28 Whilst many of the New Towns were planned for and have grown to a size which considerably exceeds the scale of new settlement envisaged within North Hertfordshire a review of the 'gross density' of development enables comparisons to be made reflecting the urban form and 'feel' of the settlements.
- 3.29 Gross density is essentially an estimation of the number of dwellings per hectare of the full land-area of the settlement within its built up area boundary.
- 3.30 Looking at the two Garden Cities the emphasis on the creation of settlements which moved away from high urban densities is reflected in the gross densities of both which are around 15 dwellings per hectare.
- 3.31 By contrast the first generation New Towns suggest slightly higher average gross density of around 16dph. Within this generation of settlements almost half have a gross density of 18dph or higher.
- 3.32 Subsequent generations appear to suggest a return to lower densities on the whole, with the average across all of the second and third generation New Towns' closer to the original Garden Cities at 15dph.

The Effectiveness of New Towns

- 3.33 In July 2002 the Select Committee on Transport, Local Government and the Regions published the results of their findings into the effectiveness of new towns. As part of the study, the Select Committee visited Telford, Corby and Harlow as well as receiving written submissions from 16 new town local authorities and 50 other organisations.
- 3.34 Whilst the report acknowledged that many of the New Towns have been economically successful, it also highlighted that most are experiencing major problems associated with the synchronised aging of infrastructure coupled with social and economic challenges. This is reflected in the sustained need for new investment in their built fabric and infrastructure.
- 3.35 The report highlights a concern that their design was inappropriate to the need of the 21st Century. It recognises that the New Towns were developed in large amounts of open spaces which have resulted in low development densities. The comparatively dispersed nature of the settlements has led, in many instances, to residential areas being typically segregated from jobs, shopping and business services. As a result, the sustainability of travel in the towns is typically poor and car use is high. Notably in this context of transport issues, stemming from its design to cater for 'unrestricted car use', Milton Keynes Council has had to retrospectively control car use through the introduction of town centre parking charges and new bus-friendly road layouts and services.

"While many New Towns have been economically successful, most now are experiencing major problems. Their design is inappropriate to the 21st Century. Their infrastructure is ageing at the same rate and many have social and economic problems. Low density developments are expensive to maintain; extensive stretches of roads and sewers are in need of expensive upgrades"

- UK Government Transport Select Committee

- 3.36 The Department for Communities and Local Government published Transferrable Lessons from the New Towns in July 2006, a substantial guidance document for the development of new settlements. Notably, the document emphasised that New Towns '*integrated housing and employment provision, and aimed for self-containment*' however many people today travel significant distances to get to their place of work and therefore the notion of self-contained settlements is largely unsuitable for contemporary masterplanning.
- 3.37 Key lessons were documented in relation to settlements and transport including that optimal use of public transport requires a concentration of travel generators (i.e. housing, employment and retail centres) within easy reach of a transport node and residential density should be increased towards public transport routes.
- 3.38 Furthermore, the operational needs of public transport and pedestrian access should be the basis for determining the urban design of a town. More specifically, it was noted that public transport becomes more economically sustainable the more people live within a five minute walking distance of a stop.
- 3.39 Recognising the differing societal and housing market pressures today than those which existed when the New Towns were being planned, the future evolutions of emerging new settlements are considered in the remainder of this section to appraise how their design and mix of uses are more reflective of 21st Century needs.

Pipeline New Settlements / Urban Extensions in the UK

- 3.40 Following the unprecedented period of delivery of New Towns there have been relatively few examples of new planned stand-alone settlements across the UK over recent years.
- 3.41 A range of settlements have more recently been developed, started on-site or in advanced planning stages. These include, for example:
- Northstowe in South Cambridgeshire;
 - Hampton in Peterborough;
 - Sherford in Plymouth;
 - North West Bicester in Cherwell;
 - Cranbrook in Exeter; and
 - Whitehill Borden in East Hampshire.
- 3.42 A number of these settlements are considered in more detail below. Specific focus is placed upon the nature of the proposed settlements, the mix of uses proposed and specific design principles advanced as well as the timescales of their delivery.

Northstowe – South Cambridgeshire

Development Mix

- 3.43 Northstowe has been planned to accommodate up to 10,000 new dwellings. The intention is for the new stand-alone settlement to be an exemplar and vibrant 21st century town, built to high environmental standards and enabling sustainable patterns of living and lifestyle choices.

- 3.44 The settlement has been designed around a clear transport strategy. Improvements to the A14 are integral to ensuring strong road connections for the settlement. The planning framework for Northstowe also calls for high quality public transport and associated infrastructure, including a dedicated local busway. A priority busway through the centre of Northstowe will link to the Cambridge Guided Busway with the majority of residents within only 400m of a bus stop.
- 3.45 The settlement is planned around an average density of 40 dwellings per hectare with higher densities at the centre reducing towards the settlement edge. Higher densities (61 dph +) around the town centre are proposed with lower densities (35 and 40 dph) in the more sensitive areas of the development site.
- 3.46 The settlement exemplifies 'green' credentials with the extensive inclusion of informal and formal open spaces as well as a water park. The plan also identifies a clear green separation between Northstowe and the surrounding settlements of Longstanton and Oakington.
- 3.47 Alongside the provision of a significant amount of new housing the settlement includes a number of employment centres cumulatively representing around 20 hectares of dedicated employment land. The settlement planned to accommodate a town centre area with approximately 57,500 sqm of town centre uses.
- 3.48 Northstowe is intended to accommodate a secondary school (12 form entry) as well as seven primary schools (range of 2 and 3 form entry). Wider social infrastructure provision is made in for four sports hubs.
- Planning and Delivery**
- 3.49 The principle of a new settlement at Northstowe stems back to the Regional Planning Guidance for the East of England (RPG 6) which in November 2000 first identified the need for a new settlement to serve growth of the Cambridge Sub-Region.
- 3.50 The physical site of the settlement was allocated within the 2003 Cambridgeshire & Peterborough Structure Plan. The site was subsequently included within the adopted South Cambridgeshire District Council's Local Development Framework including the



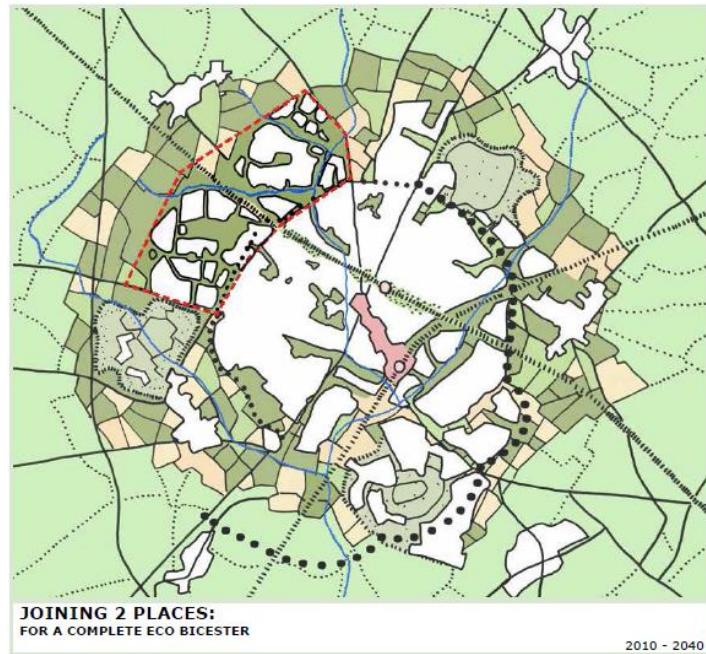
Core Strategy (2007) and the Northstowe Area Action Plan (AAP) which was adopted in July 2007.

- 3.51 Outside of the Local Plan system an outline application was submitted in 2005 for approximately 8,000 dwellings. This was subsequently withdrawn and a new outline application submitted in 2007 for 9,500 dwellings in accordance with the Core Strategy and AAP.
- 3.52 However, this application was not determined as a result of the Government's Comprehensive Spending Review ('CSR') in 2010 withdrawing support for the A14 improvement scheme, which as noted above is a central plank of ensuring sustainable transport connections for the settlement.
- 3.53 Subsequent to this decision a standalone Development Framework Document (DFD) was prepared by the joint promoters and the planning authorities (South Cambridgeshire District Council and Cambridgeshire County Council). This included a Framework Masterplan to illustrate the phasing of development.
- 3.54 A resolution to grant planning permission on Phase 1 of the Masterplan was made in 2012 with planning permission subsequently granted in April 2014 following completion of a S106 agreement. This phase included the development of 1,500 dwellings alongside a local centre, primary school and 5 hectares of employment land.
- 3.55 A planning application for phase 2 for another further 3,500 dwellings, 2 primary schools, a secondary school and a town centre including employment uses was submitted in 2014. It is important to note that both phases to date have included a sustainable mixture of uses in accordance with the principles in the masterplan.
- 3.56 The South Cambridgeshire Local Plan was submitted for Examination in 2014. Following the EiP the Council has undertaken additional work responding to a number of points raised by the Inspector and consulted upon a set of proposed Main Modifications in 2015/16. These do not directly impact on the development principles for Northstowe. It is not anticipated that the EiP will resume until June 2016.
- 3.57 The latest housing supply update published by South Cambridgeshire (November 2015) indicates the construction of dwellings on Northstowe not starting until 2016/17 with development quickly elevating up to an assumed provision of 250 dwellings per annum. At this rate of delivery, however, it is of note that the trajectory only anticipates approximately 3,500 dwellings being delivered on Northstowe by 2031.
- 3.58 The housing supply update document cites this as a 'cautious approach' noting that there was a consensus in the hearing statements at the EiP that an average annual rate of completions of new settlements of 250 dwellings would be justified.
- 3.59 It is evident that the timetable for delivery on the settlement has been significantly protracted following its formal allocation in 2007 and grant of the first planning application for development some 7 years later. The actual delivery of housing is not envisaged to start for a further two years meaning that within the plan period, which stretches forward a further 15 years, only approximately a third of the development, or 3,500 homes, is anticipated to be delivered on the ground.

North West Bicester, Cherwell

Development Mix

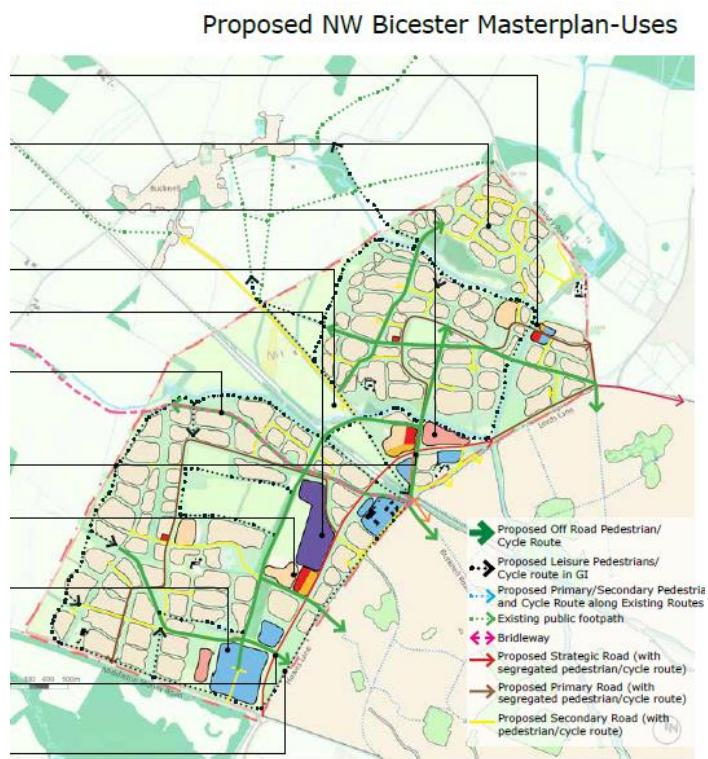
- 3.60 North West Bicester refers to land to the north west of the existing settlement of Bicester which is located within Cherwell District.
- 3.61 The settlement is intended to deliver 6,000 new homes while retaining 40% of the environment as green space. The total site area of the site is identified as 390 hectares within the adopted Cherwell Local Plan. The overall design of the settlement is centred around two 'villages' of approximately 3,000 dwellings each with its own local centre with an adjacent primary school. The North West Bicester site directly adjoins Bicester, acting as a large extension to the town as opposed to a stand-alone new settlement.
- 3.62 This design evolved from an original concept of four villages of 1,000 – 1,500 homes on the basis that these were not ultimately considered to be able to deliver critical mass or for viable convenience retail and a cohesive local centre.
- 3.63 The settlement has a comparatively low average density of 35dph for the residential areas, comparable to the adjacent residential areas of Bicester where density is around 30dph, and an approximate gross density of 15dph, comparable to the original Garden Cities. The densities vary, however, from around 20dph on the peripheral areas up to 50dph closer to the centres.
- 3.64 The stated vision for the settlement requires the provision of one job for each home built within a sustainable travelling distance. The geographic location of the settlement recognises the linkages to existing employment opportunities with the proposed level of employment land / facilities specifically intended to not undermine existing employment opportunities in the wider area.
- 3.65 On this basis specific land designations for employment purposes are limited to a number of business centres located on the periphery of the existing town with the adopted Local Plan specifying that these shall occupy a minimum of 10ha. The masterplan envisages that up to 2,000 of the 4,600 jobs will be on these employment land designations (B-use, stated in the adopted Local Plan as being predominantly B1 use) with 1,400 jobs being local service jobs in the centres, 140 construction related jobs and just over 1,100 home-based jobs.



- 3.66 An important strand of the vision for the settlement is to achieve a shift in car use to below 50%, with emphasis on other more sustainable forms of transport. The masterplan incorporates a number of envisaged bus-routes as well as a bus priority link criss-crossing the settlement. The distribution of social infrastructure, including schools, is also designed to encourage residents to walk or cycle for daily journeys.

Planning and Delivery

- 3.67 The District Council identified the potential of the site to sustainably meet growing housing needs and in 2007 North West Bicester was announced as one four Government designated eco-towns in the UK.
- 3.68 The development is led by a private developer A2Dominion who are a residential property group with property holdings of some 35,000 homes across London and the South East.
- 3.69 The developers submitted a Masterplan to the Council in 2014 as well as a vision statement. The Masterplan is intended to become a Supplementary Planning Document (SPD) to the Local Plan.
- 3.70 The Cherwell Local Plan Part 1 was adopted in July 2015 incorporating an allocation for North West Bicester.
- 3.71 An initial phase of development, the Exemplar phase known as Elmbrook, consisting of 393 new homes was commenced in April 2014 following a grant of permission in 2012. Two outline applications have subsequently been submitted and approved by the District Council in 2015 for a further 206 of the total 390 hectares. These applications comprise 3,500 new homes, including 30% affordable homes, social infrastructure including two primary schools (two form entry) and a single secondary school (eight form entry), two community halls, a GP and employment space.
- 3.72 The adopted Local Plan's housing trajectory shows delivery occurring from 2014 with 71 units developed the first year. The build out of the whole settlement is anticipated to take it well beyond the horizons of the adopted Local Plan which runs to 2031.
- 3.73 The adopted Local Plan anticipates that only 3,293 homes, or just over 50% of the total, will be developed in the new settlement by the end of the plan period, approximately 200 dwellings per annum. Complementing this, the Plan suggests at least 3,000 jobs will



also have been delivered within this time frame with approximately 1,000 of these on B use class land on the site.

- 3.74 It took approximately 7 years for development to start on the site following its conception in 2007. The phasing of the development to include a small preliminary component enabled planning permission to be granted within a 5 year timetable but the anticipated build-out means that only just over half of the capacity of the site will be built out by 2031.

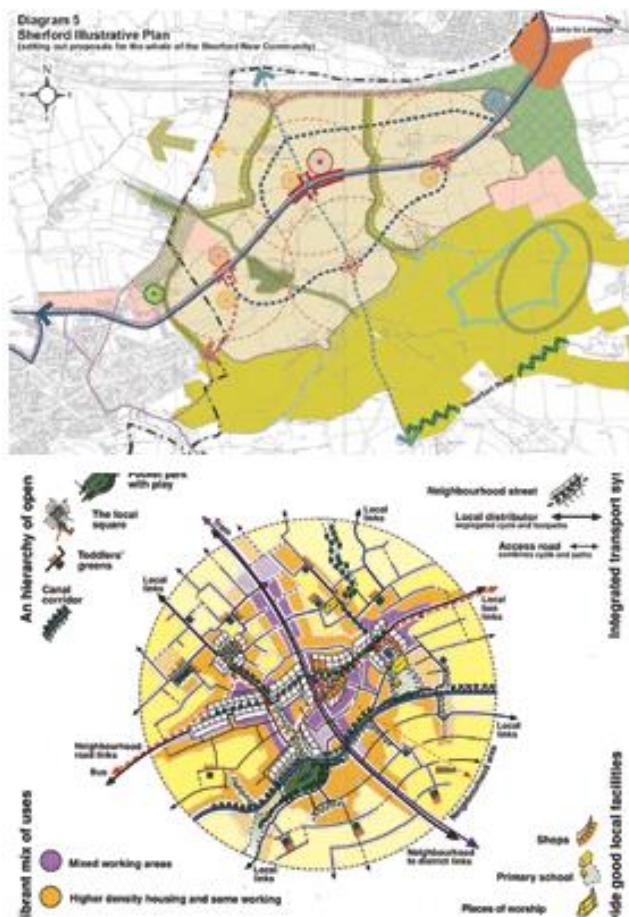
Sherford, Plymouth

Development Mix

- 3.75 Sherford is a new settlement to be developed in South Hams in close proximity to Plymouth. The development site spans the two Council administrative areas.

- 3.76 The original plan for Sherford dated back to 2004 with the original concept centred around four separate new hamlets.

- 3.77 In total the settlement is planned to accommodate 5,500 new dwellings. The total land budget for the site is 490 hectares implying a gross density of approximately only 11dph. The residential area of the site is identified as 121ha suggesting a density of approximately 45dph across the settlement. The core development area of the settlement is considerably smaller at 217.3ha with a significant 'green' area on the periphery constituting a significant element of the overall site area.



- 3.78 The residential component of the site is supported by up to 67,000sqm of business and commercial space on 14ha of land (non-town centre) and up to 16,470sqm of mixed retail accommodation on 10ha of land. The mastperlan suggests that this is likely to include two supermarkets. The settlement will also include three primary schools and one secondary school as well as a single health centre.

3.79 A significant proportion of the overall land area, some 52%, is taken up by strategic open space with a community park included in the town occupying almost 230ha.

- 3.80 It is envisaged that the settlement will support approximately 5,000 jobs. This is approximately 1 job for every dwelling and recognises the proximity of the settlement to the larger economic centre in Plymouth. The masterplan document suggests that up to 2,000 jobs in the settlement could be derived from the resident population with this including those that work from home or are employed in occupations which are not directly associated with B-use facilities.
- 3.81 Designing out reliance on car use is at the heart of the vision for the settlement with all homes intended to be within a five minute walk of the main high street.

Planning and Delivery

- 3.82 The provision of Sherford as a new settlement was first established within the Devon Structure Plan 2001 – 2015 which was adopted in October 2004. This identified Sherford as a socially and economically sustainable town with 4,000 dwellings.
- 3.83 The scale of Sherford was expanded within the draft RSS for the South West which supported '*a strategic urban extension to Plymouth*' at Sherford of 6,000 dwellings offering employment opportunities and high quality public transport.
- 3.84 A masterplan for the settlement was prepared by Red Tree and adopted as the Sherford and North Plymstock Area Action Plans (AAPs) in August 2007.
- 3.85 Prior to the adoption of the AAPs Red Tree LLP submitted a planning application in November 2006 with additional information submitted up to 2009. The Councils made a joint 'Resolution to Grant' subject to planning conditions and the completion of a S106 agreement.
- 3.86 Reserved matters planning consent was granted in July 2015 from the two Councils. Following the granting of permission the Sherford Consortium of developers, Bovis Homes, Linden Homes and Taylor Wimpey was launched.
- 3.87 Whilst the concept of the settlement was envisaged back in 2004 over twenty years later the first home has not yet been built. The recent grant of permission and establishment of a consortium of home builders means that development is now progressing but it is anticipated that the full build out of the settlement will take between 15 and 20 years.
- 3.88 200 new homes are expected to be completed in the town by 2017. Plymouth City Council's five year land supply document indicates an anticipation that 300 units per annum will be delivered within the Principal Urban Area to 2031 which includes Sherford in South Hams¹⁰. To date the HCA has invested over £32 million in progressing the settlement to this stage.

Summary of Case Studies

- 3.89 The table below summarises a number of key conclusions regarding the timescales for delivery and proposed mix of land uses.

¹⁰ '5 Year Supply' Plymouth City Council, January 2016

Figure 3.1: Overview of the Case Studies – Key Metrics

Case Study / Metric	Northstowe	NW Bicester	Sherford
Local Authority	South Cambridgeshire	Cherwell	South Hams
Number of dwellings	10,000	6,000	5,500
Average density (net)	40dph	35dph	45dph
Employment land	20 ha	10 ha	14 ha
Date of first housing delivered	2016/17 (anticipated)	2014 (exemplar phase)	2016
Date of first policy reference	2000 (RPG)	2007 Eco-town	2004 (Structure Plan)
Date adopted	2007 (AAP / Core Strategy)	2015 (Local Plan)	2007 (Masterplan adopted as an AAP)
Date Planning Approved	2012 - resolution to grant pp (Phase 1)	2012 Exemplar phase (393 dwellings). Subsequent applications granted in 2015	2009 (resolution to grant, reserved matters consent in 2015)
Delivery trajectory	250 dwellings per annum (3,500 by 2031)	200 dwellings per annum (3,300- units by 2031)	Approx. 300 dwellings per annum (4,000 units approx. by 2031)

Source: Various documents referenced above, Turley, 2016

3.90 The summary of the case study settlements highlights:

- The significant time taken in all cases to advance from formal recognition of a new settlement to its adoption in policy and subsequently the granting of planning permission.
- Whilst all three settlements were conceived in policy terms prior to 2007 the earliest development started was 2014. Two of the three settlements have yet to complete housing for sale.
- The anticipated trajectory for development reinforces the long-term nature of provision. All three settlements do not anticipate delivering more than 4,000 dwellings by 2031.
- All of the settlements recognise the importance of planning for a mix of uses including housing and employment land allocations. The underpinning masterplanning emphasises the need to realise a critical mass to support planned infrastructure.

NHS Healthy New Towns

- 3.91 In March 2016, the head of NHS England announced plans to create ten NHS-supported ‘healthy new towns’ across the UK, covering more than 76,000 new homes with a potential capacity for around 170,000 residents. As part of the programme to assess how community health, well-being and independence can be improved, the NHS will work alongside developers to help to shape the way that the sites develop.
- 3.92 The first ten settlements range in size from 393 houses in the Elmsbrook project, Bicester, to Ebbsfleet Garden City in Kent where up to 15,000 new homes are planned as part of the first garden city for 100 years.
- 3.93 The type and scale of transport infrastructure, particularly encouragement of non-car modes, is central to the concept of these ‘healthy new towns’; encouraging active lifestyles through walking and cycling as part of the daily routine. Other options to be tested at the ten sites are fast food-free zones near schools, designing safe and appealing green spaces, building dementia-friendly streets and ensuring people are able to access new GP services through the use of digital technology.
- 3.94 NHS England will support the new towns as part of a series of long-term partnerships, aiming to stimulate closer collaboration between local authorities, planners, developers and the NHS.

New Towns in the Netherlands

- 3.95 In the Netherlands, ‘new towns’ were built in the late 1960s, 1970s and 1980s to alleviate housing pressures in larger cities, based on a series of national spatial plans. In these national spatial plans the Dutch Government designated a number of locations, mainly existing small villages within commuting distance from larger cities, as ‘growth core’ towns (Groeiernen).

What Can We Learn?

- 3.96 Houten is a municipality in the province of Utrecht, located to the south east of the city of Utrecht. It has a population of 48,772. Houten’s infrastructure is fairly distinctive compared to most other Dutch new towns.
- 3.97 Its central transport concept was initially created for the northern new town, and later maintained as the southern urban expansion was constructed.



- 3.98 This concept placed the bicycle at the top of the model hierarchy and aimed to minimise car use in residential areas as much as possible. The ring road was also intended to act as a natural boundary between the town and the surrounding greenbelt around Houten.
- 3.99 This infrastructure concept led to the creation a 14km ring road around the built-up area for motorists to provide a connection between the residential areas, each of which is connected to the ring road via a central access point.
- 3.100 It is not possible to drive directly from one residential area to another. Because all car traffic has been moved out to the ring road, routes within the town are dominated by pedestrian and cycling infrastructure and green spaces, and as a result cycling is often the quickest way to get around within the town.

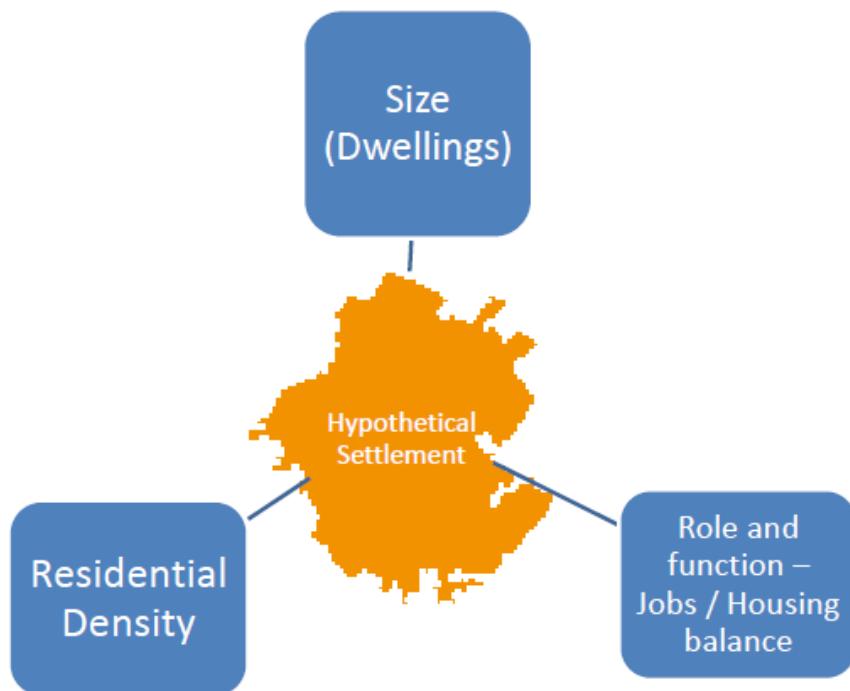
Summary and Implications

- 3.101 The analysis in this section forms an important context for understanding the form and scale a new settlement in North Hertfordshire could take based on precedents before it.
- 3.102 North Hertfordshire is no stranger to the concept of a new settlement with the first Garden City located within the District. Subsequent to the Garden Cities a series of New Towns were developed across the UK. It is apparent that these have developed to reflect a range of sizes and roles depending upon their original remit and relationship with surrounding areas. The majority of these New Towns considerably exceed the Garden Cities and in the context of North Hertfordshire considerably exceed the size of Letchworth Garden City which includes approximately 14,300 dwellings (housing approximately 33,000 people).
- 3.103 Reviewing the New Towns provides a useful comparison as to the density of development and the provision of social infrastructure and key supporting aspects such as services and employment provision.
- 3.104 It is important to recognise, however, that the New Towns, in particular the early examples, were advanced and founded through a very different planning environment and context. There existed an agreed national justification for the development of new settlements and a developing planning system which was considerably less regulated than that in existence now. A national evaluation of New Towns has also identified a number of shortcomings in their planning and development. Consideration has therefore been given to a number of the emerging larger new settlements across England.
- 3.105 These new settlements have been slow in the making with all three of those selected either only just starting to see construction on the ground or in the very early stages of releasing housing to the market. There have been limited examples of new settlements being advanced over more recent years and the three example settlements selected are not untypical illustrating the complexities.
- 3.106 The new settlements considered whilst all lauding sustainable transport credentials rely heavily on layout to encourage non-car use and in linking with other urban areas, roads and bus-ways. In concluding the section further consideration has been given to the development of settlements based around more significant infrastructure investment in European example.

4. Creating a Spectrum of ‘New Settlements’

- 4.1 It is apparent from the review of the new settlements considered in section 3 that there is a significant level of variation with regards to the size, ‘feel’ and function or role of precedent new settlements.
- 4.2 In order to advance an understanding of what a new settlement could look like in North Hertfordshire this section presents a matrix of potential new settlement ‘models’. These are influenced by a range of factors which form an important context for distinguishing between different typologies of new settlement.
- 4.3 Three primary factors are considered to narrow down the potentially significant range of variants that could be applied:

Figure 4.1: Creating a spectrum of ‘new settlements’



Source: Turley, 2016

Size - The number of homes

- 4.4 For this exercise a reasonable range of ‘sizes’ of settlement are considered. The settlement sizes fall within the range of new ‘garden villages and towns’ as set out within the Government’s *‘Locally-led Garden Villages, Towns and Cities’* prospectus (March 2016) and broadly reflect the spectrum of new settlements currently being progressed and designed as considered in the preceding section. The settlement sizes are:

- A ‘Small’ settlement of 5,000 homes – This settlement size falls broadly midway within the range identified for a ‘garden village’ (1,500 to 10,000 homes) in the Government’s 2016 prospectus.
 - A ‘Medium’ settlement of 10,000 homes – This represents the minimum threshold for a new ‘garden town or city’ as stipulated in the Government’s 2016 prospectus.
 - A ‘Larger’ settlement of 15,000 homes – This would represent a larger new garden town or city and be comparable in size to Letchworth Garden City. This is considered to represent a reasonable upper end of the range.
- 4.5 Considering the size scenarios it is important to recognise that the larger the settlement the longer it would take to deliver out in full. The analysis of three case study current planned settlements in section 3 suggested build out rates of between 200 and 300 dwellings per annum, with no significant correlation in the rate of delivery and the size of settlement.
- 4.6 Recognising that Local Plans are required to have a minimum 15 year plan period (from adoption) even assuming the higher end of this range a 5,000 dwelling settlement and development starting at the beginning of the plan period would not be built out in full over the plan period. As the review of the case studies identified in reality the time period from inclusion within an adopted plan and development starting on site has on the whole been over a number of years. This would further impact on the scale of provision in a new settlement within a plan period.
- 4.7 The larger settlements would therefore be anticipated to deliver over a number of ‘plan periods’ providing for housing needs over the longer-term.

Density - The Nature or Density of the Residential Area

- 4.8 It is apparent from the review of historic and evolving new towns/ settlements in section 3 that they have grown up to represent a range of densities.
- 4.9 To help illustrate the implication of differing density assumptions three variant options are explored. These reflect a transition from a ‘compact’ to a more ‘dispersed’ urban form, albeit across a fairly narrow – realistic - range. The densities applied are based on professional judgement and experience of settlement planning (NB all example images below are taken from *Shaping Neighbourhoods for Local Health and Sustainability* (Barton et al, 2003)).
- Compact – Net density of 50 dwellings per hectare (dph) with an adjustment of 15% to allow for road infrastructure, lowering the composite density to 43dph. This is intended to represent a ‘text book’ density referencing an aspiration towards sustainable development principles. The Eco-town movement advocated c.50dph as a minimum average density.



**‘Compact’
50dph**

‘textbook’ sustainability. Eco-town exemplar. Georgian roots.

- Median – Net density of 40 dwellings per hectare (dph) with an adjustment of 17.5% to allow for road infrastructure, lowering the composite density to 33 dph. This ‘average’ density most closely reflects that been advanced in a number of planned new settlements including Northstowe as well as being closer to those resulting in the first generation new towns.



'Median'

40dph

1st Generation New Towns, contemporary large scale development planning.

- Dispersed – Net density of 30 dwellings per hectare (dph) with an adjustment of 20% to allow for road infrastructure, lowering the composite density to 24 dph. The lower density assumed under the ‘dispersed’ settlement typology relates most closely to the ‘Garden City’ principles which underpinned the planning of Letchworth Garden City.



'Dispersed'

30dph

More closely reflects ‘Garden City’ principles and represents typical market housing in the UK

- 4.10 The above net densities have been applied to the residential component of each settlement. In estimating the overall land-take of each hypothetical settlement the scale of other uses, with the exception of employment considered in the following sub-section, have been based on proportionate relationships to the size of dwelling. The gross density of development is therefore not significantly varied in the calculation of the land-take.
- 4.11 Note that the potential for different urban area densities to be coupled with differing approaches to the use and location of green spaces within a settlement is considered further in section 5.

Role and Function

- 4.12 Our review of historic new towns and settlements highlights that, whilst in the majority of cases the rationale was to accommodate overspill from larger neighbouring cities / urban areas, there is variation in the extent to which they have evolved as settlements with a broader / strategic role, as reflected in differing levels of employment provision.
- 4.13 The level of employment (in the broadest sense, including retail, community and leisure uses) has an important bearing upon the role of settlements making a distinction between a primarily dormitory or supportive role to one which is more clearly an independent settlement with a stronger and defined functional economic and housing market area.
- 4.14 In order to illustrate these varying roles four variant scenarios have been used to illustrate the relationship between jobs and dwellings. This stretches beyond the range

of ratios illustrated across the new towns¹¹ to provide a strong illustration as to the differing economic roles of a potential settlement. The variant scenarios are:

- 0.5 jobs for every dwelling
 - 1 job for every dwelling
 - 1.5 jobs for every dwelling
 - 2 jobs for every dwelling
- 4.15 The upper end of the scenarios, i.e. 2 jobs per dwelling, is likely to represent a significant 'stretching' ratio for a new settlement in North Hertfordshire. Even for the smallest settlement (5,000 dwellings) this would imply the provision of 10,000 jobs which would be significant in the context of the largest settlement in the authority, Letchworth Garden City, which is estimated as having almost 16,000 jobs.
- 4.16 This scale of employment within a new settlement would in reality be most likely to be associated by a single new employment generator, for example, a University (as in the case of Hatfield where the ratio is close to 2) or a new regional hospital. Alternatively it could be driven by the development of a significant new business park / industrial site for which the existence of strong transport networks would be critical.
- 4.17 The above ratios do not anticipate that settlements represent 'self-contained geographies' but are intended to reflect a differing role based around the scale of employment balanced with dwellings. For example, whilst the 2011 Census shows that the number of people working in Letchworth Garden City (15,825) is close to a 1:1 relationship with the number of dwellings (14,271).
- 4.18 However, this does not suggest that the town is self-contained economically with the Census¹² also showing that only 33% of people living in Letchworth Garden City work locally in the town. This shows that the majority of residents commute elsewhere to work, while the town also draws upon a wider labour force including those commuting in from elsewhere. Whilst the emphasis would be on ensuring a sustainable settlement the same movement of commutes in and out would be anticipated in any of the hypothetical settlements considered.

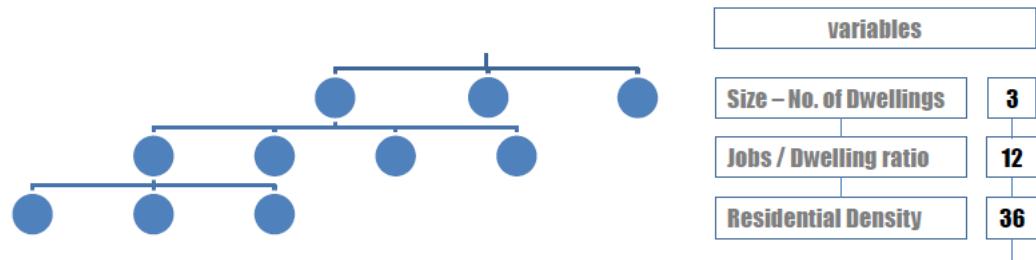
Creating a Matrix of Settlements

- 4.19 Using a traditional 'logic gate' approach the three factors above can be used to provide a wide spectrum of potential new town settlement typologies.

¹¹ The range of ratios is discussed at paragraphs 3.16 – 3.20 of this report.

¹² Based on best-fit middle super output area (MSOA) geographies

Figure 4.2: Hypothetical settlement variants



Source: Turley, 2016

- 4.20 In order to limit the full range of variations and recognising the realities of extremes of settlement typologies associated with the size of the settlement and the scale of associated employment, a number of iterations have been omitted from this analysis.
- 4.21 For example, for the smaller size settlement it is assumed that a principal driver for the settlement is to meet recognised housing needs in the authority and the level of employment is unlikely to exceed a 1:1 ratio with dwellings. Equally for the larger settlement iterations have been excluded where the jobs to homes ratio drops below 1:1 on the basis of sustainability principles.
- 4.22 The following 21 settlement permutations, those shown in green, are therefore taken forward as being representative of a potential 'hypothetical settlement' in the context of North Hertfordshire.

Figure 4.3: North Hertfordshire Settlement Permutations



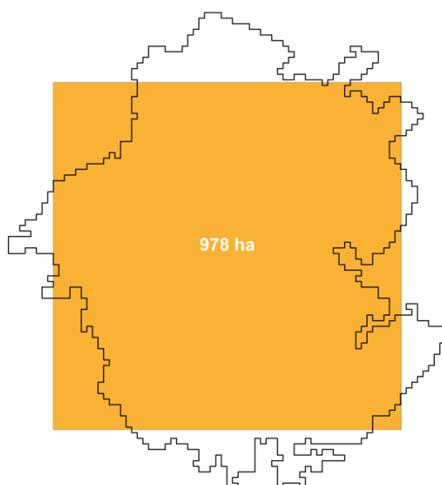
Source: Turley, 2016

New Settlement Permutations

- 4.23 At its simplest level the settlement typologies will result in different land budgets or more simply the size of footprint for the mix of uses. Each of the settlement typologies has been 'built' to arrive at an overall land budget in order to illustrate the physical scale of the settlement.
- 4.24 This process has involved identifying a land budget not only for the residential and employment uses in the settlement, as defined by the settlement variables, but also taking into account green space, social infrastructure and retail uses.

- 4.25 In considering the green and social infrastructure as well as the scale of retail required to represent a sustainable community it is apparent that this is closely related to the overall size of the settlement in terms of the number homes. Evidently, the larger the size of a settlement the greater its potential need for new infrastructure and supportive environmental and amenity uses.
- 4.26 Best practice literature alongside a consideration of the mix of uses and provision in existing 'new' settlements and those in the pipeline, as reviewed in section 3, has been used to generate a set of representative assumptions to 'add' in these important aspects of a sustainable settlement. A full list of the assumptions used to drive this modelling is set out in Appendix 2.
- 4.27 The result of this analysis is a geographic 'footprint' for each settlement type recognising the following land uses:
- Residential
 - Employment
 - Retail
 - Social infrastructure (education, healthcare, sport & leisure and community uses)
 - Open space (parks & gardens, amenity green space, outdoor play areas etc...)
- 4.28 In benchmarking these 'footprints' the existing settlement of Letchworth Garden City has been used as a comparator. The settlement boundary of Letchworth Garden City encompasses approximately 978ha. This can be represented in a grid-square format as shown below.

Figure 4.4: Letchworth Garden City – Land Budget



Source: Turley, 2016

- 4.29 The comparative land requirement of each of the hypothetical settlements is applied to the representative 'grid-square' for Letchworth Garden City based on the land requirements of the different land uses. This is shown diagrammatically through the following illustrations, enabling comparison between different densities and relative balance of jobs.

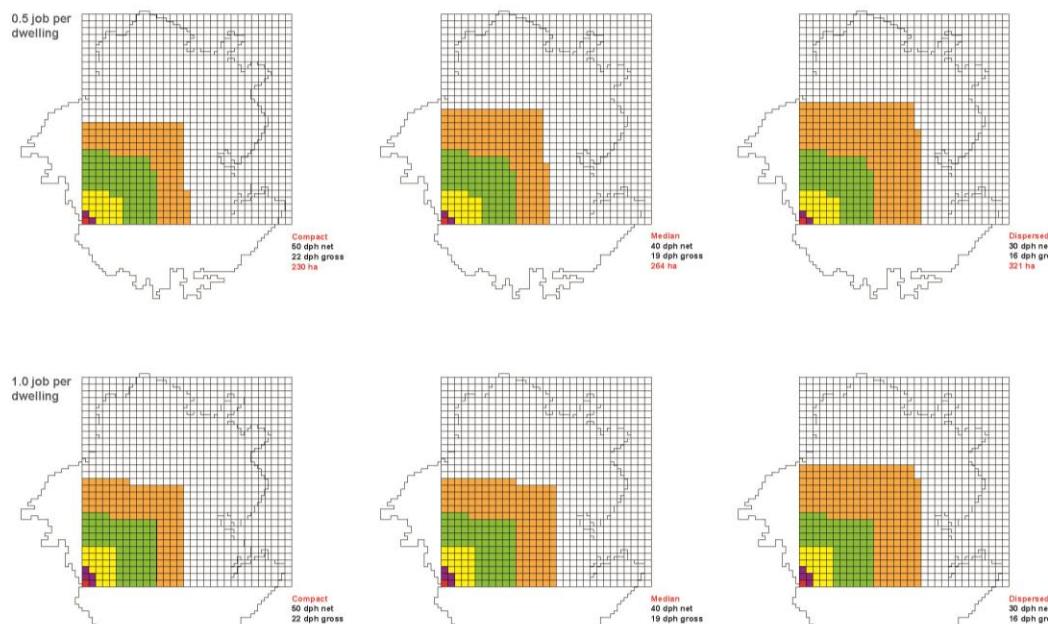
Comparing the Land Budget of the 5,000 Dwelling Settlements

- 4.30 The following table shows the calculated land budget for the 5,000 dwelling hypothetical settlements including a breakdown by the main land components.

Figure 4.5: 5,000 dwelling settlements – Land Budget by Component

Density of Development	Compact		Median		Dispersed	
Jobs per Dwelling	0.5	1	0.5	1	0.5	1
Retail			1			
Employment	2	4	2	4	2	4
Social Infrastructure			25			
Open Space			84			
Residential	118	118	152	152	208	208
Total Land Budget	230	232	264	266	321	323
% of Letchworth Land Area	24%	24%	27%	27%	33%	33%

Source: Turley, 2016



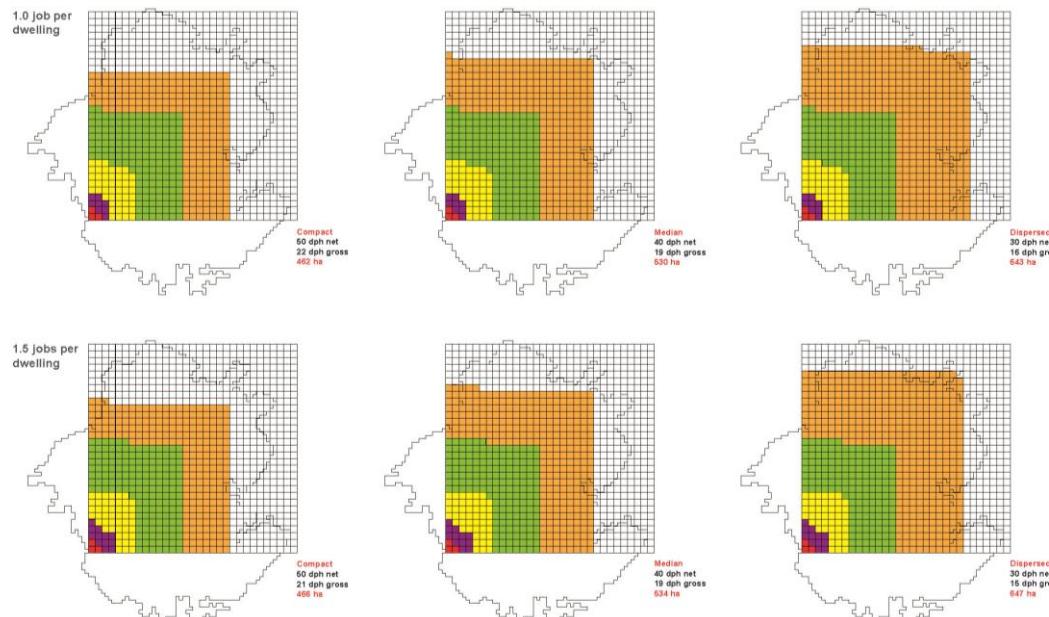
Comparing the Land Budget of the 10,000 Dwelling Settlements

- 4.31 The following table shows the calculated land budget for the 10,000 dwelling hypothetical settlements including a breakdown by the main land components.

Figure 4.6: 10,000 dwelling settlements – Land Budget by Component

Density of Development	Compact		Median		Dispersed	
Jobs per Dwelling	1	1.5	1	1.5	1	1.5
Retail			3			
Employment	8	12	8	12	8	12
Social Infrastructure			48			
Open Space			168			
Residential	235	235	303	303	417	417
Total Land Budget	462	466	530	534	643	647
% of Letchworth Land Area	47%	48%	54%	55%	66%	66%

Source: Turley, 2016



4.32

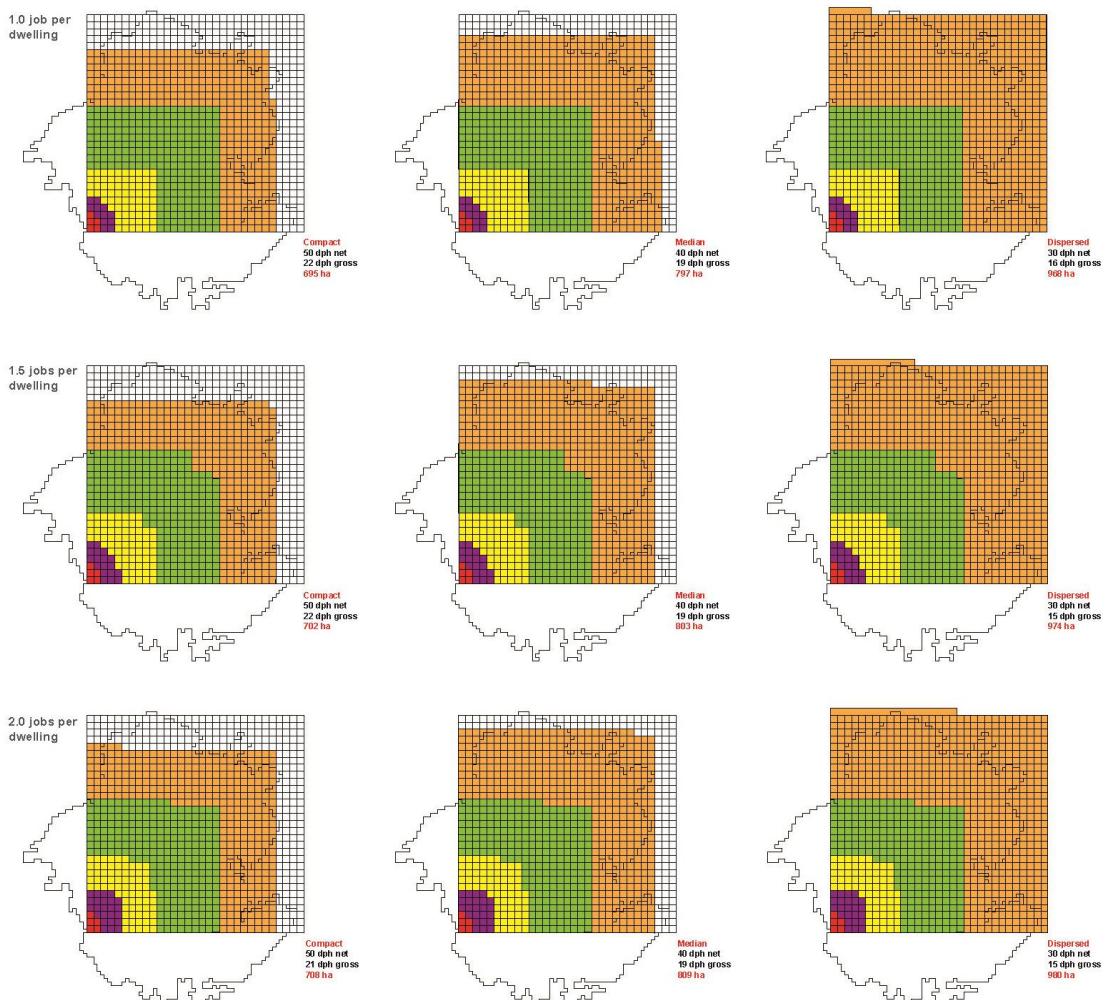
Comparing the Land Budget of the 15,000 Dwelling Settlements

The following table shows the calculated land budget for the 15,000 dwelling hypothetical settlements including a breakdown by the main land components.

Figure 4.7: 15,000 dwelling settlements – Land Budget by Component

Density of Development	Compact			Median			Dispersed		
Jobs per Dwelling	1	1.5	2	1	1.5	2	1	1.5	2
Retail				5					
Employment	12	18	24	12	18	24	12	18	24
Social Infrastructure				73					
Open Space				252					
Residential	353	353	353	455	455	455	625	625	625
Total Land Budget	696	702	708	797	803	809	968	974	980
% of Letchworth Land Area	71%	72%	72%	82%	82%	83%	99%	100%	100%

Source: Turley, 2016



Assessing the Implications

Potential 'land-take' of the settlement

- 4.33 The analysis presented within this section has illustrated that the land-take of a new settlement could range between approximately 230 ha and 980 ha. This evidently represents a broad range of some 750 ha.
- 4.34 At the upper end the largest hypothetical settlement suggests a comparable population level and scale of footprint of that occupied by Letchworth Garden City with a comparable gross density of approximately 15 dwellings per hectare.
- 4.35 Looking at the 15,000 dwelling settlement options the impact of the residential density evidently has the most significant impact on the overall land-take since this, alongside green space, comprises the major occupier of land.
- 4.36 The 'dispersed' settlement profile which also seeks to provide employment land to accommodate some 30,000 jobs requires almost 1,000 hectares with open space outside of residential areas representing approximately 25% of the overall land-area.
- 4.37 At the other end of the spectrum applying a 'compact' residential density albeit with the same quantum of employment land suggests a land budget of almost 710 hectares, a figure which is just over two thirds of the larger settlement. This implies a gross density of some 21 dwellings per hectare. This density is lower than the New Towns / Settlements on the whole reviewed in section 3 and would represent a notably different urban form than these earlier new settlements.
- 4.38 Reducing the ratio of jobs to dwellings has a comparatively minor impact on the land take, with a 1:1 ratio, which is comparable to Letchworth Garden City itself, only netting off approximately 12 hectares for the largest settlement. Applying that employment ratio the dispersed settlement area is closer to 970 hectares and the compact 695 hectares. In the 'compact' settlement form open space outside of the residential areas constitutes a higher proportion of land, closer to 33% of the total land area.
- 4.39 As would be expected the 'median' residential density presents a land-area which sits between the compact and the dispersed formats, generating a land area of approximately 800 hectares. This implies a gross density per dwelling which is closer to many of the 1st Generation New Towns including for example Stevenage, Basildon, Crawley and Hatfield.
- 4.40 At the other end of the 'size' spectrum the 5,000 dwellings settlements show a narrower overall 'range' of land-takes of between approximately 230 hectares and 320 hectares driven almost exclusively by the implications of the residential density. This reflects the comparatively limited variance assumed with regards to the scale of employment within the settlement, recognising issues of both scale and likely 'role' of a smaller settlement within the hierarchy of the district. The gross densities and the proportional land-take of open space outside of residential areas are broadly comparable to the 15,000 dwelling settlement iterations.
- 4.41 Finally, the 10,000 dwelling settlement iterations suggest a range of land-areas of between approximately 460 hectares and 650 hectares. At the lower end this is

approximately half the size of Letchworth Garden City but with two thirds of the dwelling numbers, Letchworth has 14,300 dwellings but 33,000 people. This reflects the significantly higher gross density of approximately 22 dwellings per hectare compared to Letchworth Garden City's 15 dph. The other end of the spectrum more closely mirrors the gross density of Letchworth Garden City with this also reflected in it occupying an area approximately two thirds of the principal settlement in the authority.

- 4.42 The modelling approach taken within this section has applied a set of assumptions or 'rules' to calculate land areas. In reality there is considerable flex in many of these assumptions.
- 4.43 For example, the compact urban form envisaged here may have a different impact on the delivery of infrastructure, both transport and social, with a central nucleus representing the potential to consolidate uses and reduce their land requirements.
- 4.44 At the other end of the spectrum the creation of a dispersed settlement may result in retail / employment land uses cumulatively representing a greater land-take to provide adequate provision to support communities within sustainable catchments. These issues are considered in greater detail in the following section.

Green Belt Context

- 4.45 The emerging draft Local Plan confirms that the vast majority of the land across the authority is designated as 'countryside' with the land areas of the towns in the district covering less than 7% of the district.
- 4.46 The Green Belt Review (part 1) identifies that the current designated area of Green Belt in North Hertfordshire is 14,247ha representing approximately 38% of the total land area of the district (37,537ha).
- 4.47 The current draft Local Plan identifies a need to alter the Green Belt around a number of the existing settlements under exceptional circumstances in order to meet its housing need, . This follows the conclusions of Part 2 of the Green Belt Review. This would suggest a slight increase in the proportion of the overall land area occupied by the expanded towns.
- 4.48 Green Belt is important context for considering the range of potential settlement sizes considered in this section. At the lowest end the most 'compact' 5,000 dwelling settlement would represent only 0.6% of the overall land area of the authority but if it was located in the Green Belt, based on the existing quantum, would represent the removal of 1.6% of the total Green Belt area.
- 4.49 At the upper end of the spectrum the 'dispersed' 15,000 dwelling settlement would represent 2.6% of the overall land area of the authority and almost 7% of the existing Green Belt area.

5. Building a sustainable place

Overview

- 5.1 Section 5 develops a more qualitative narrative around strategic and local placemaking concepts, covering;
- a) Strategic issues around the relationship between any new settlement and existing towns, villages and transport infrastructure, and how a new settlement might support patterns of sustainable development at a North Hertfordshire level.
 - b) Consideration and illustration of potential urban structure and supporting infrastructure, and how this might be distributed and sustained within the new settlement itself.
- 5.2 This allows us to begin to consider how a new settlement could support and sustain a community, evolving as a people-friendly environment over time.
- 5.3 The work here is intended to provide the basis for further discussion and more detailed studies into the locational and spatial attributes of development, relative to further assessment of economic role and social infrastructure provision. Our work considers and addresses the objectives set out in the government prospectus *Locally-Led Garden Cities*;

"We want to encourage more local areas to come forward with ambitious locally-led proposals for new communities that work as self-sustaining places, not dormitory suburbs..." Locally-Led Garden Cities, DCLG

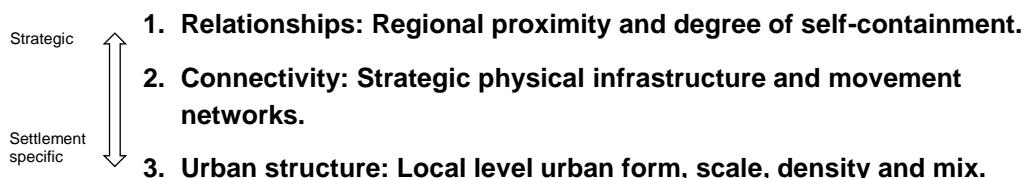
Proposition

- 5.4 All large scale development, whether in the format of a new settlement or urban extension, should aim to deliver a mix of uses and a movement network that enables and promotes travel by sustainable modes, allowing residents and employees to undertake day to day activities within 'their neighbourhood', and fostering a sense of community and togetherness: a positive sense of place.
- 5.5 In this context urban extensions have long been promoted as an ideal means of accommodating large scale housing growth whilst ensuring that physical and social infrastructure can be delivered and sustained. New housing 'taps into' and extends established infrastructure. Urban extensions have provided some of the best examples of contemporary development planning and implementation in the UK over the last 20 years.
- 5.6 Notwithstanding, it is increasingly recognised (especially in certain high growth locations) that the urban extension model will, or in some places already has, reached saturation point. As a means of delivering sustainable growth, urban extensions cannot be infinite. Multiple, repeated extensions to the same settlement, or extensions to unsuitable settlements through lack of alternative choice, risks being counter-productive to strategic placemaking, e.g. pressuring the capacity and sustainability of physical and social infrastructure, stretching spatial proximity.

- 5.7 Excessive, extension can also erode the sense of association between communities and the distinctiveness of places, with communities becoming increasingly detached (physically and psychologically) from the heart of settlements and authentic neighbourhoods. As Sir Frederic Osborn (leading member of the UK Garden City movement and former chairman of the TCPA) succinctly put it:

“Towns must have a stop” (Osborn, F., and Whittick, A. (1963) *The New Towns: The Answer to Megalopolis*).

- 5.8 We appreciate that NHDC has already reached this point in its thinking and considers the principle of new settlement, as opposed to continued urban extension, as the right way to plan for future growth in North Hertfordshire.
- 5.9 In considering this prospect we explore key themes and concepts that will combine to affect the nature, scale and ultimately success of any new settlement:



- 5.10 These will be key aspects for further consideration going forward in planning the optimum size, composition and location of a new settlement for North Hertfordshire, and should be considered further as part of any future site identification / area of search exercises.

1. Relationships: Regional proximity and degree of self-containment

i) Relationship with the North Hertfordshire settlement hierarchy

- 5.11 Traditional settlement patterns emerge from organic growth shaped by economic and social forces over time, constrained by physical environment. Any given settlement will be influenced by other settlements locally, regionally and nationally, defining relative role and hierarchical position – its relative ‘gravity’.
- 5.12 Any strategic decision to artificially locate a new settlement of a pre-determined size therefore needs to be based on a clear understanding of the gravitational forces it will impose upon the existing settlement hierarchy.
- 5.13 Decisions will need to be informed by impact assessment: will the new settlement ‘draw from’, ‘help sustain’ or ‘invest in’ other settlements? Is there a risk it could ‘detract from’ existing settlements? These aspects will all need further research going forward
- 5.14 As part of this early stage study it is helpful to explore these themes at a high level: simply, the relative scale of the model settlement permutations identified relative to the established North Hertfordshire settlement hierarchy, as illustrated in figure 5.1 below.
- 5.15 This provides a locally relevant point of reference: an early indicator of the potential role a new settlement could play within that hierarchy, and in turn potential impacts and requirements relative to other places. It also demonstrates which existing settlement it

might relate most closely to, in terms of scale and composition, and how it might evolve over time.

- 5.16 The purpose of this comparison exercise is to prompt future discussions around the potential role, relationships and connectivity between the new and existing settlements.

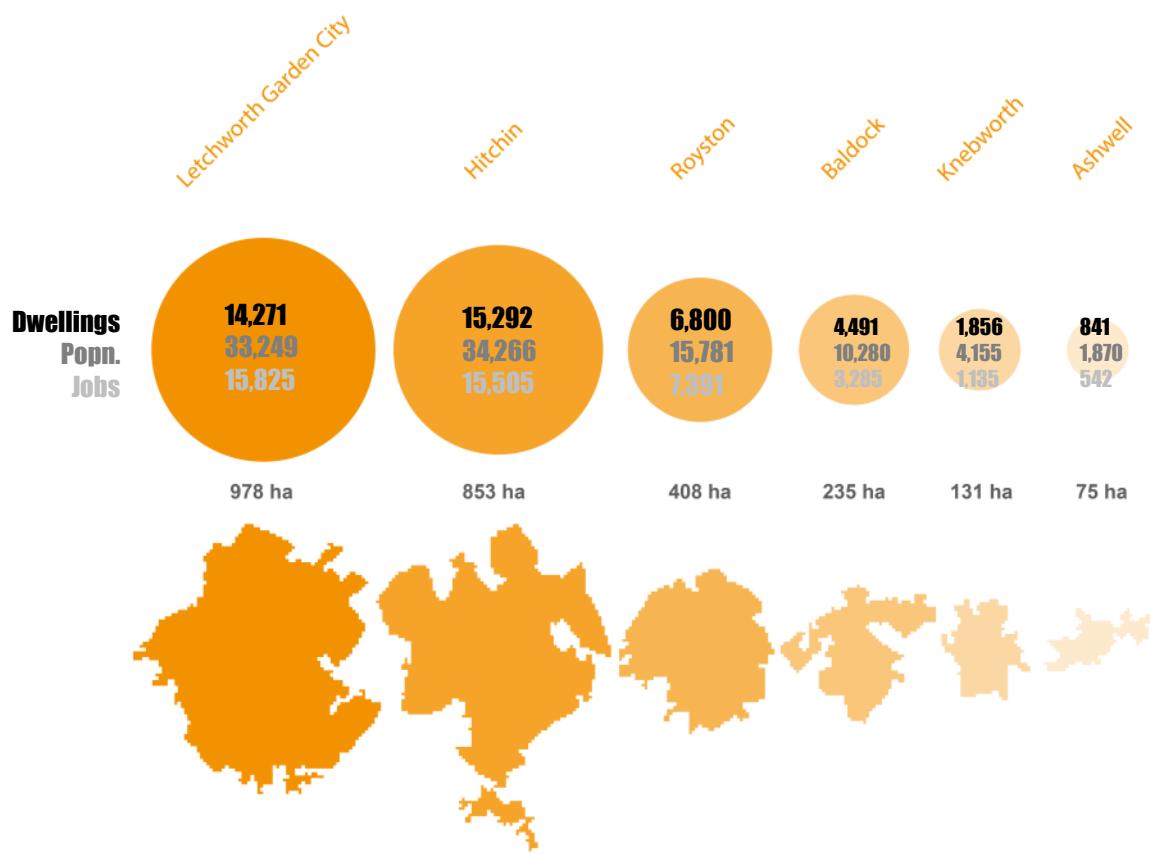


Figure 5.1: Existing North Hertfordshire Settlement Hierarchy

- 5.17 Figures 5.2 – 5.4 below illustrate how a hypothetical new settlement of the scale considered in the new settlement permutations (paras 5.11 – 5.22) might relate to the existing settlement hierarchy (figure 5.1).
- 5.18 This comparison reveals, *inter alia*;
- *5,000 dwelling new settlement*: in its compact form, this could be comparable in size to Baldock but could deliver 500 more homes (albeit fewer jobs)
 - *10,000 dwelling new settlement*: in its compact form, this could be around 13% larger than Royston, yet deliver nearly 50% more dwellings (47%).
 - *15,000 dwelling new settlement*: in its compact form, this could deliver a similar development mix to Hitchin, but within a footprint that is 18% smaller.

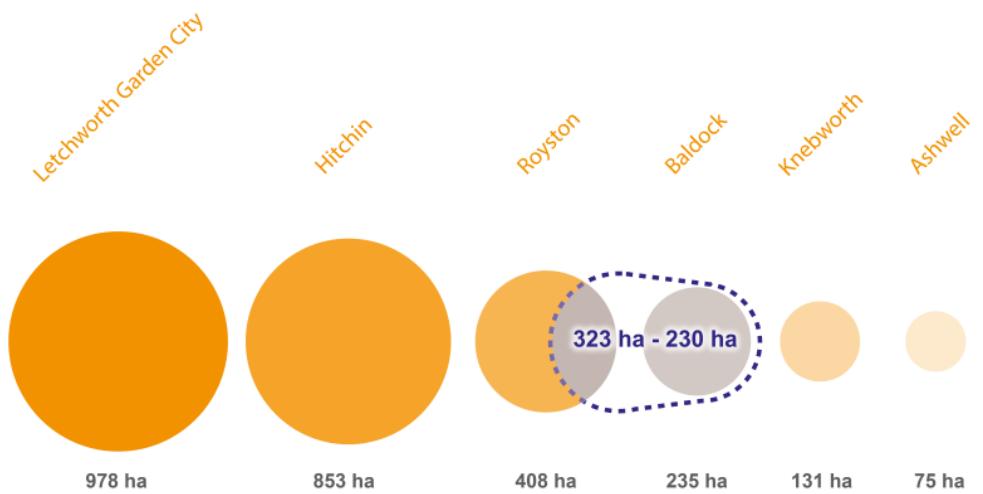


Figure 5.2: Relative settlement footprint: 5,000 dwelling new settlement

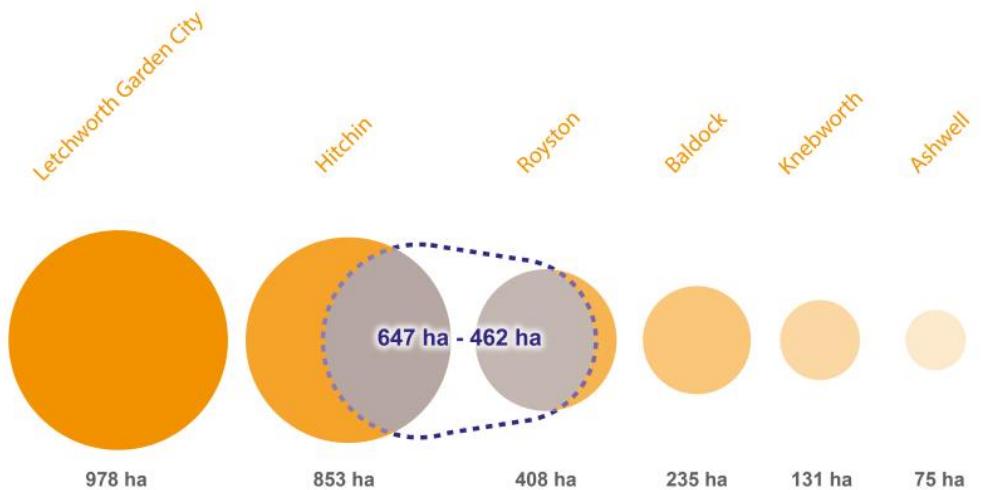


Figure 5.3: Relative settlement footprint: 10,000 dwelling new settlement

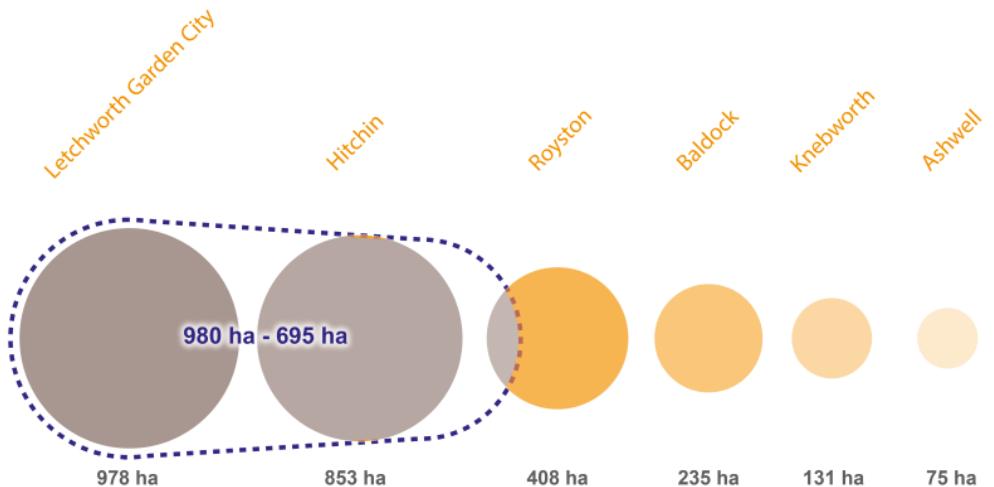


Figure 5.4: Relative settlement footprint: 15,000 dwelling new settlement

ii) Proximity

5.19 In pursuing new settlement over urban extension in the plan-making process a key challenge will be to balance (a) location, (b) size (units and footprint) and (c) ability to

deliver a critical mass population to support a meaningful scale of social infrastructure and key services.

- 5.20 These key considerations relate to the concept of *proximity*; a fundamental principle of sustainable development and a central pillar of contemporary large scale development.
- 5.21 At the local level, within any given settlement, neighbourhood or development, proximity between homes and community facilities facilitates social and economic sustainability and community interaction. This is captured in all key texts as a fundamental principle, including for example *Towards an Urban Renaissance* (Urban Task Force, 1999) and *Shaping Neighbourhoods for Local Health and Sustainability* (Barton et al, 2003).

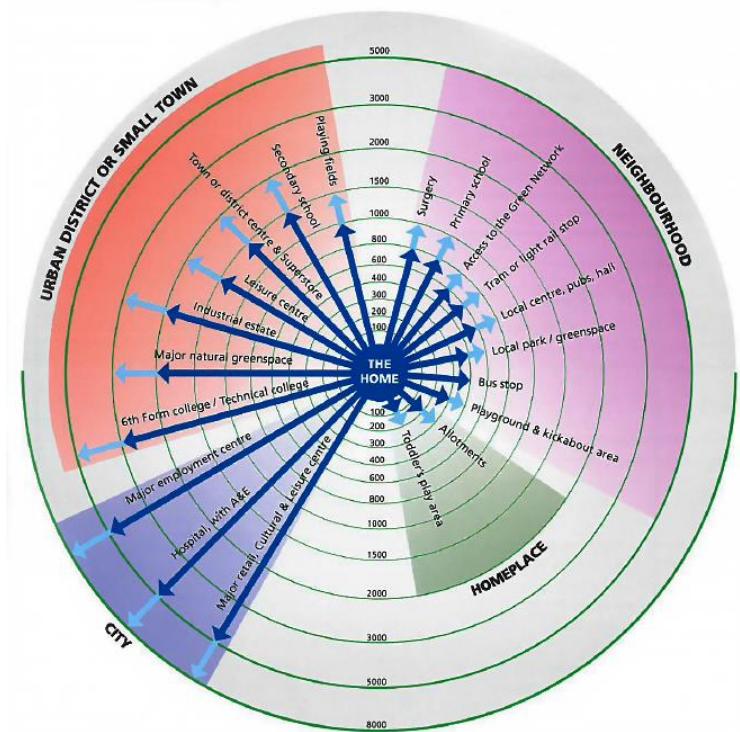
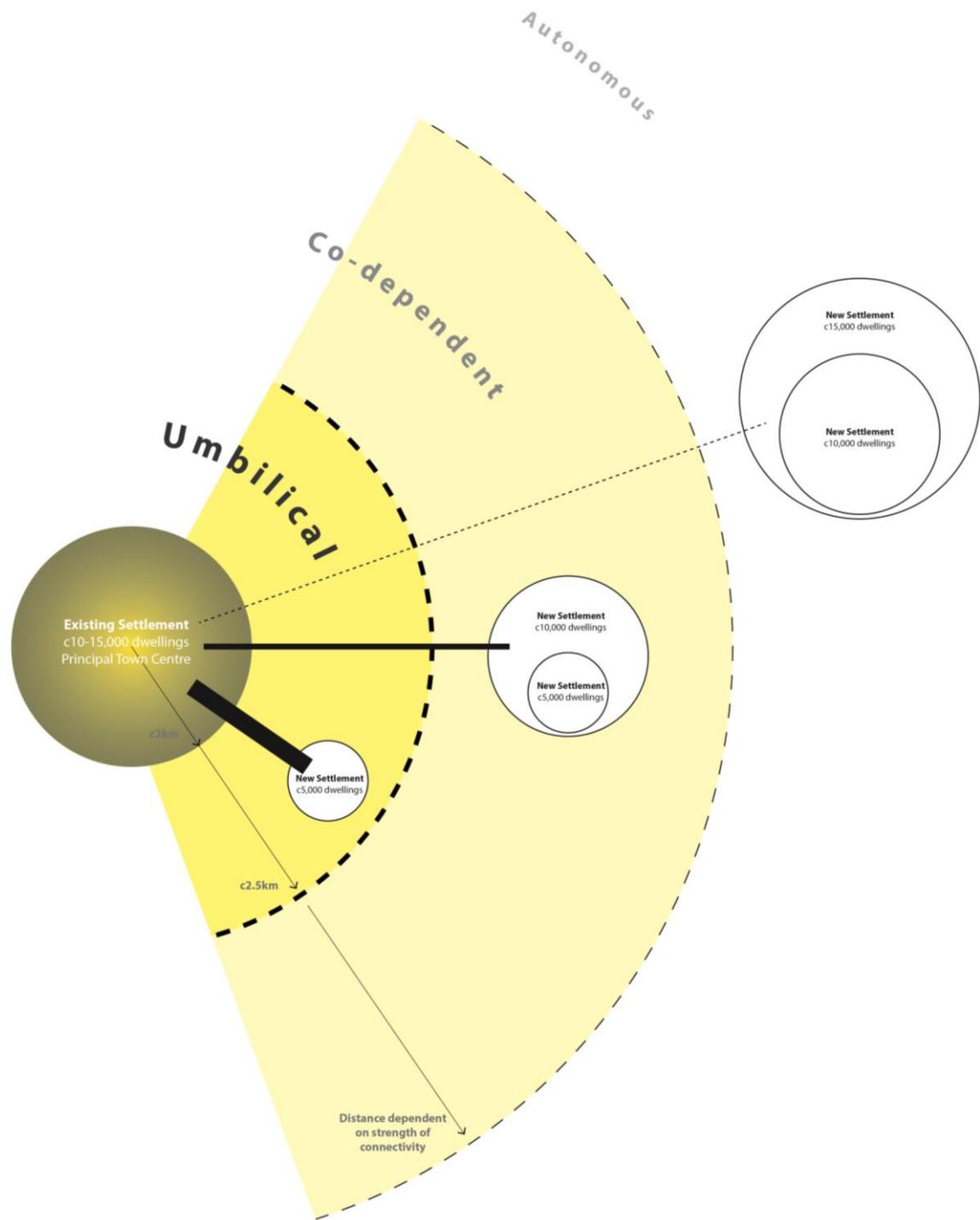


Figure 5.5: Illustrative Accessibility Criteria (Figure 3.6 from Barton et al, 2003)

- 5.22 At the strategic level, and in the context of planning a new settlement, the concept of proximity can be applied to the degree of physical and functional separation from other settlements (local, county, sub-regional or regional).
- 5.23 From this perspective we might consider three potential levels of proximity; 'umbilical', 'co-dependent' and 'autonomous' as illustrated and described below.



1. Umbilical

- New settlement accepted as dependent upon an existing (larger) settlement.
- Existing services and facilities within existing settlement shared by new residents (with some additional local provision catering for growth).
- Clear, direct transport links – legible and rapid, integrated with the established network.
- Parallels with the Social City principle (Ebenezer Howard) and Snowflake model (David Rudlin, Uxcester Garden City).

- Particularly relevant to the smaller scale new settlement (c 5,000 dwellings), in the event this scale of is considered unable, by itself, to sustain core infrastructure elements such as a secondary school.
- Potential for a number of small new settlements with umbilical relationship to the same existing settlement.
- Unlikely to apply to larger scale new settlement.

2. Co-dependent

- New settlement is spatially distinct but directly communicates and connects with existing settlement(s)
- Could deliver and sustain its own generated infrastructure needs.
- Assumes some “2-way traffic” / co-dependency i.e. new services / facilities provided in the new settlement are attractive to and accessible by the existing population of other settlements.
- May be more suited to medium size scale (c. 10,000 dwellings) but could potentially apply to one or more c. 5,000 dwelling new settlement (e.g. two / three 5,000 dwelling new settlements could be co-dependent on a nearby existing settlement, and perhaps could have an umbilical relationship with one another).
- Potentially unsuitable to a 15,000 dwelling new settlement in the context of North Hertfordshire, where a settlement of such size could conceivably become the largest settlement in the district hierarchy.

3. Autonomous

- New settlement positioned intentionally distant, allowing it to foster its own independence and distinctiveness.
- Would likely need to be of a scale and composition that is overtly self-sufficient in terms of key services (e.g. 10,000 – 15,000 dwellings)
- Could possibly result in an insular form clustered around a definitive centre and/or strategic transport node.
- Would still need good linkages for other elements of core infrastructure that are unlikely to be self-sustained, e.g. primary healthcare / Accident + Emergency.
- Would likely be reliant on excellent sub-regional / regional strategic transport links, either existing or newly created.

iii) Self-containment

5.24 These concepts of proximity bring us to reflect on the degree of self-containment that any settlement can reasonably be expected to exhibit. The following commentary by TCPA provides a helpful and potentially influential perspective.

“Government-funded research suggested in 1993¹³ that a ‘new settlement’ could be defined as a place that was either wholly new or a place planned to be expanded to more than twice its existing size. The words ‘new settlement’ were a necessary euphemism for the words ‘new town’ because, in that period, new towns were regarded as government-funded projects under the New Towns Act, with all the iconography (very good, and sometimes very bad) attached to that programme...”

¹³ Alternative Development Patterns: New Settlements. Report for the Department of the Environment. London: HMSO

... One major change is in the approach to be taken to the concept of 'self-containment'. It is axiomatic that sustainable communities will provide for their own education requirements up to a certain level, and that the same approach might be taken to other aspects of living such as some shopping, recreation and employment. In fact in the government new towns programme the goal was usually to ensure that new town residents worked in the new town, and they were often located as far away from pre-existing employment centres as possible...

[But]

... Today it could be said that the attainment of self-containment is almost impossible ... and in any case may be undesirable in locations where building a major town offers a less sustainable answer than might be offered by a cluster of new and existing settlements. It can also be said that in many circumstances it is unnecessary if excellent public transport can join places together"

Best Practice in Urban Extensions and New Settlements: A report on emerging best practice, TCPA 2007

5.25 Against this observation, setting out with an express intent for a new settlement to create a 'self-contained' or 'self-sustaining' community within North Hertfordshire needs careful consideration. This is a perhaps a priority topic for option appraisal going forward:

- How independent and/or self-contained does NHDC anticipate a new settlement being?
- Would 'forcing' a new settlement to be autonomous and detached represent a sustainable and beneficial form of development? How would this be phased? How would this be accessed?
- How influential is the desired size of a new settlement (i.e. 5,000, 10,000 or 15,000 new homes) on its ultimate self-containment?

5.26 We would suggest that these considerations should be considered against tensions illustrated in some of the central arguments expressed in the Wolfson Economic prize winning submission by David Rudlin;

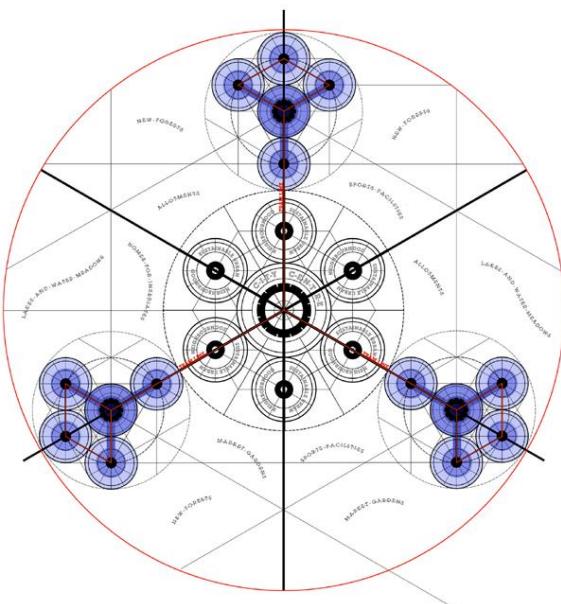
"Rather than grafting development on to every existing suburb and village we will set a 30 year vision that takes the pressure off all of these places and concentrates it on low-impact, undeveloped land between existing settlements"

[But]

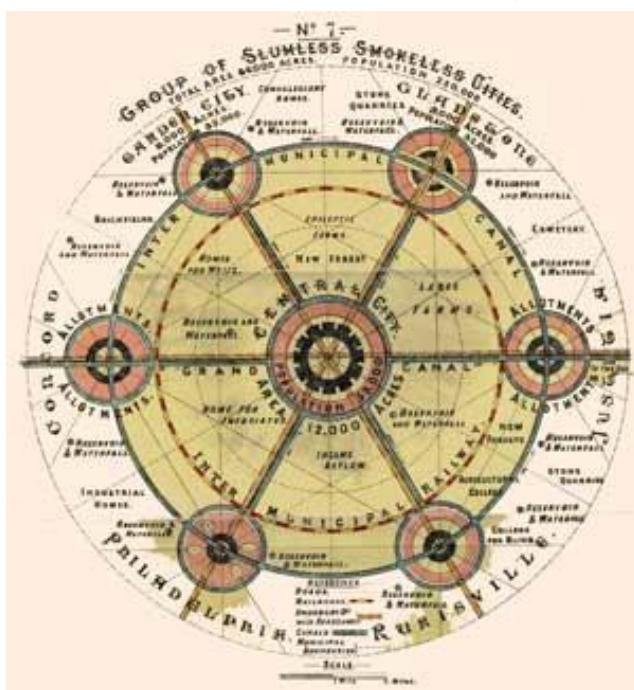
"Rather than a free standing Garden City that will spend decades as a vulnerable sapling we therefore suggest that we need good root stock from which to grow our Garden City, a mature town that can be expanded into a 21st century Garden City. An existing place with a thriving town centre and all of these facilities already in place - something that a freestanding Garden City could never hope to achieve in the lifetime of its first residents. You need an existing city...."

Uxcester Garden City: Wolfson Economics Prize Submission 2014

- 5.27 The Uxcester Garden City proposition goes on to suggest that the answer lies not in creating conventional urban extensions or to build an autonomous new settlement from scratch, but in adopting a ‘snowflake’ model of growth across a semi-urbanised metropolitan area, whereby semi-independent, distinctive neighbourhoods grow in interconnected clusters but are ultimately linked back to a major city core through rapid public transport connection (defined in the Rudlin submission as a 20 minute tram journey).
- 5.28 This has direct parallels with the Social City concept favoured by Ebenezer Howard, who in anticipating the need to cater for future growth around his Garden City model, advocated creating a sequence of physically separate but functionally and socially connected off-shoot settlement that gravitate around the central city beyond a green belt.



The Snowflake model of urban growth – extract from Uxcester Garden City: Wolfson Economics Prize Submission 2014



The Social City network - Garden Cities of To-morrow, 1902

2. Connectivity: Physical infrastructure and movement networks

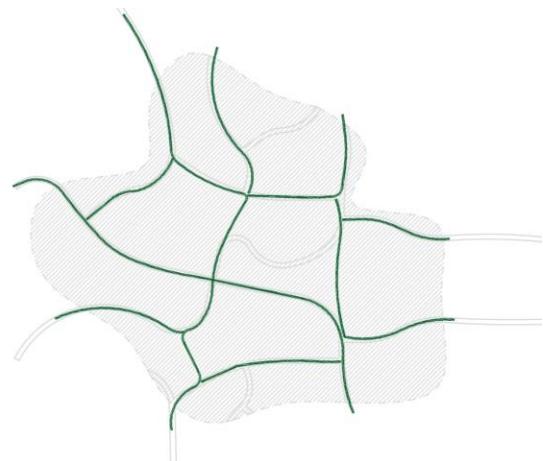
Walking and cycling

- 5.29 The design spectrum for walking and cycling infrastructure can be broken down into three main scenarios;

The Comprehensive Walking & Cycling Network

- 5.30 A comprehensive cycle network is one in which almost all of the settlement are served by high-quality, segregated cycle routes. However, it is not just about infrastructure. Successful comprehensive cycle networks are supported by strong policy frameworks, in which both land-use and transport decisions put private car use at the bottom of the mode hierarchy, especially for local trips.

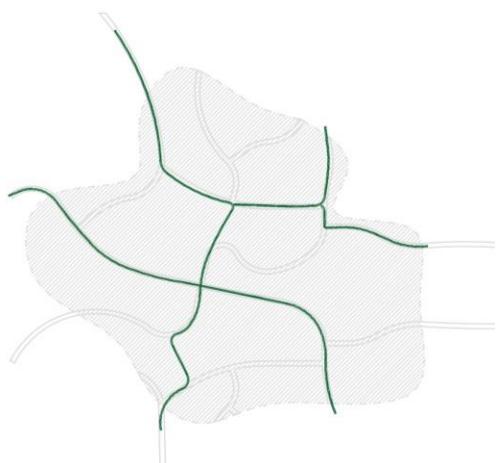
New Town Comparison: Almere (Netherlands), Houten (Netherlands)



The Adequate Walking & Cycling Network

- 5.31 An adequate cycle network can be described as one that has a strong, but not comprehensive, coverage of the settlement. Routes are predominantly segregated, but bicycles are often low in the hierarchy of movement. Whilst examples of good infrastructure are in place, there is little incentive to use it.

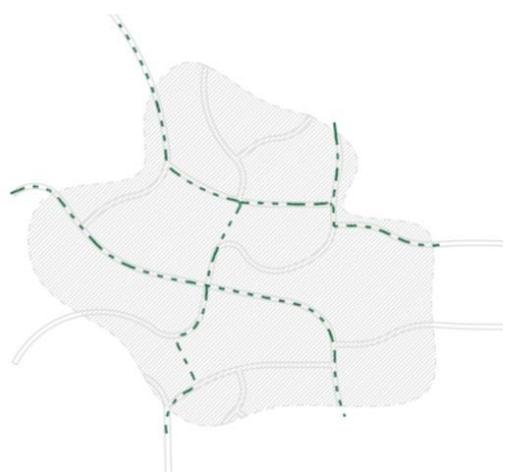
New Town Comparison: Stevenage, Milton Keynes



A Retrofit Walking & Cycling Network

- 5.32 A retrofit cycle network can be described as one in which cycle investment decisions have come last, with limited effort to redress the issue. Routes are predominantly narrow, on-road and poorly used. Examples of good infrastructure are limited, and there is little incentive to use it.

New Town Comparison: Telford, Northampton, Warrington.



Designing in sustainability from the outset....



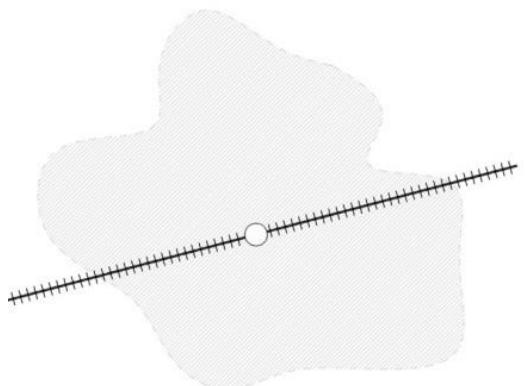
...is easier than promoting it thereafter.

Rail

- 5.33 There are three key models to consider in terms of rail provision;

A Rail-Oriented Settlement: “An integrated railway station and town centre at the heart of the settlement”

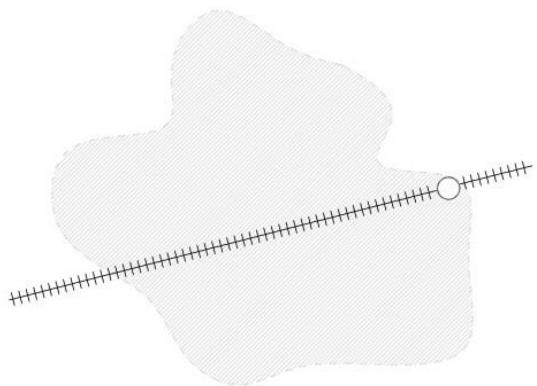
- 5.34 By locating the station at the heart of the settlement, travel distances are generally equal from each edge of the town – supporting access for those who may not have access to a car. This also allows the station to serve the local centre and potentially integrate with a bus station. However, in places where car-use is high, outward commuting can place a high-demand for car parking in central areas.



New Town Comparison: Letchworth, Welwyn, Crawley.

A Rail-Peripheral Settlement: “A railway station within, or close to, the boundary of the settlement, but not at the heart”

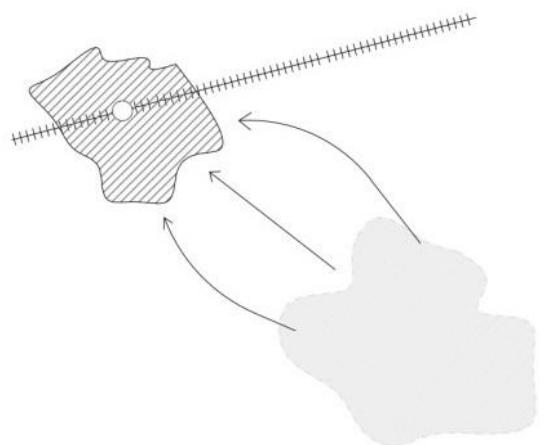
- 5.35 The impact of this is dependent on the settlement scale; in larger places this can isolate some from using the station, yet in smaller towns the walk distance from the furthest fringe is low enough for this model to work.
- 5.36 This generally suits a park & ride model. It could also be that extraneous factors such as topography or environmental issues dictate the use of this model.



New Town Comparison: Hemel Hempstead, Harlow, Buckshaw.

No Railway Station “A settlement without its own dedicated railway station”

- 5.37 The success of this model is generally dependent on two interlinking factors; the quality of links to an existing railway station and the economic independence of the settlement. For instance, Cambourne is a new settlement that is a feeder town for Cambridge. It has no railway station, but highway links to Cambridge are strong (including current aspirations for a segregated busway). However, if non-car links are not strong enough, this model can contribute to deprivation and social isolation, which is notable in new towns such as Skelmersdale or Peterlee.



New Town Comparison: Cambourne, Skelmersdale, Peterlee.

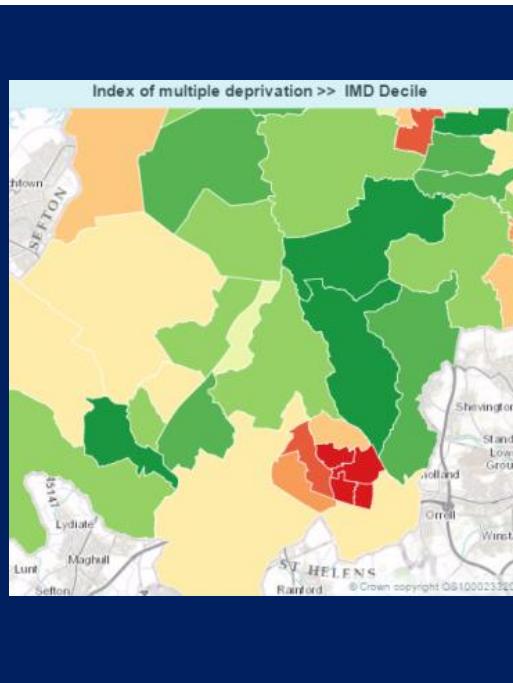
There is a fine line between successful...



Wolfson Economics Prize 2014

In 2014, the Wolfson Economics Prize posed the question: “would you deliver a new garden city which is visionary, economically viable and popular?”

The winning entry proposed a series of new ‘garden cities’ that tagged on to existing larger settlements, linked by high-frequency bus rapid transit or tram.



Skelmersdale

Skelmersdale was designated a New Town in 1961, designed to house overspill population from the north Merseyside conurbation. Today, Skelmersdale has a population of c. 40,000.

The absence of an effective rail link limits access to both Liverpool and Manchester, particularly as bus travel times are slow. Given the low car ownership and high unemployment in Skelmersdale, access to education, employment and training opportunities has resulted in some wards being within the top 10% most deprived in the UK. A new station for Skelmersdale was recognised as a priority within the Liverpool City Region Long Term Rail Strategy (July 2014).

....and flawed feeder housing settlements

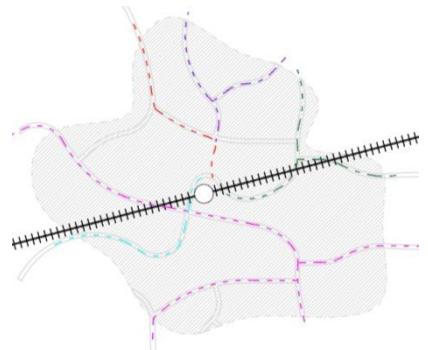
Bus

- 5.38 Reflection upon bus networks and services is split into ‘Internal’ and ‘External’ considerations with two fundamental models explored in-turn within each.

Internal – Hub-Centric Bus Network: “*A bus network which central point is oriented around an integrated bus-rail exchange and Town Centre.”*

- 5.39 Bus-rail transport interchange is made easy and the local centre is served by both modes. This model allows better and more efficient coverage of the settlement, as bus routing is focused on one central point.

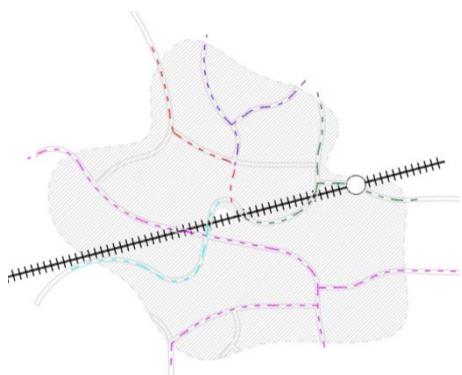
New Town Comparison: Letchworth, Milton Keynes, Warrington.



Internal – Poly-Centric Bus Network: “*A bus network which has to serve a separate bus station, railway station and/or Town Centre.”*

- 5.40 Bus coverage and links to the station are unequal across the settlement. Shuttle services may run between the bus station and train station, but need to interchange makes bus travel particularly unattractive.

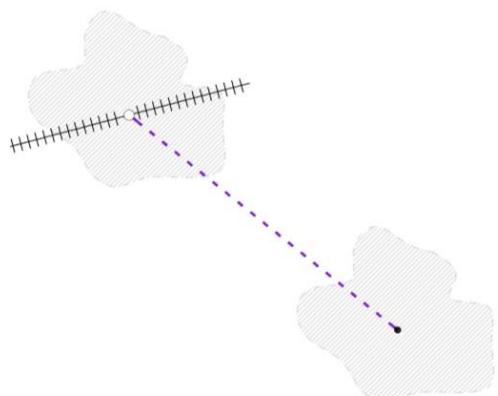
New Town Comparison: Hemel Hempstead, Runcorn, Winsford.



External – Inter-Settlement Bus Routes: “*A traditional bus route that links one settlement to another, using the existing highway network.”*

- 5.41 It is clearly important to provide bus routes that link new settlements to more mature economies. However, traditional routes often run centre-to-centre and there is often little benefit to choosing this mode over private car travel.

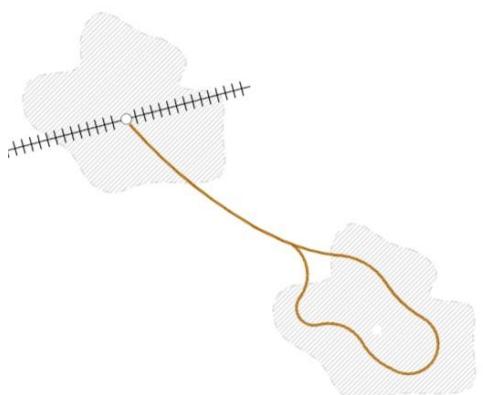
New Town Comparison: Telford (to Shrewsbury), Washington (to Newcastle).



External – Inter-Settlement Bus Rapid Transit/ Tram: “*A Bus Rapid Transit or Tram corridor that links one settlement to another, using a new segregated route.”*

- 5.42 This model suits new settlements that are a housing-feeder for the more mature settlement. BRT is more likely to be feasible than a tram system, even at 15,000 homes.

New Town Comparison: Northstowe (to Cambridge), Crawley (to Gatwick/ Horley).

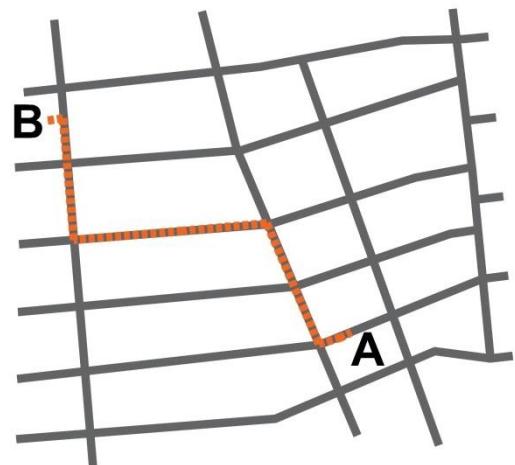


Highways

- 5.43 Reflection upon highways provision and layout is again here split into ‘Internal’ and ‘External’ considerations, with three fundamental models explored in-turn within

Internal - Full Permeability: “*Full permeability for all modes. Most direct trip routes, but trip lengths are the same for vehicles as they are for pedestrians*”

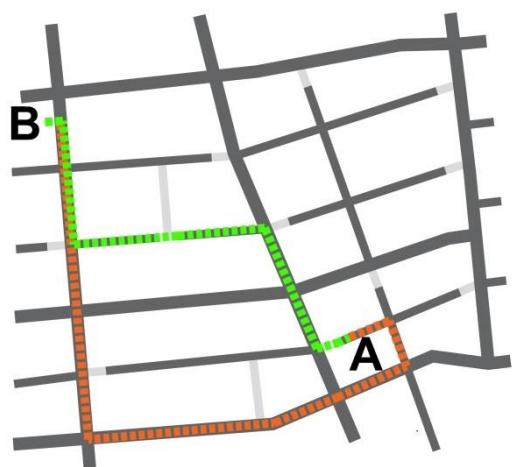
- 5.44 This model is the norm in North America and much of Europe. However, it is perceived by many that this is unfavoured by the UK market. The benefit is that highway capacity is spread across multiple junctions, rather than becoming more constrained towards the core. However, as the level of infrastructure provision is higher up-front capital costs are higher. Whilst low congestion and direct trip routes is fuel efficient, trip lengths are the same for all modes, meaning that car-use is often high.



New Town Comparison: Milton Keynes (Central)

Internal - Filtered Permeability: “*Direct through-access for walking and cycling, but longer local trip routing for motor traffic.*”

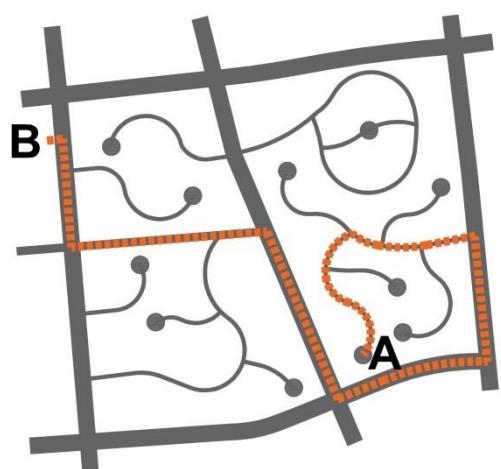
- 5.45 This approach favours walking and cycling for local trips, whilst maintaining car access to the strategic highway network for longer trips. Generally, this model reduces unnecessary car trips, reducing congestion for those that do require car use.



New Town Comparison: Buckshaw Village, Bracknell, Houten (Netherlands)

Internal - Restricted Permeability: “*Restricted permeability for all modes*”

- 5.46 In this model, more pressure is put on fewer ‘major’ junctions, resulting in higher levels of congestion and longer journey times. However, the up-front capital cost is low due to the low number of intersections. Trip lengths are the same for all modes, but are lengthy and indirect, meaning that car-use is often high. This model is most notable in low density areas and generally representative of UK suburban development patterns.



New Town Comparison: Telford, Redditch, Crawley.

External - Trunk Road Oriented: “A town which bisected by, or located on, a major highway or motorway.”

- 5.47 This model provides fast access to the strategic highway network and the wider region it serves. Subsequently, employment land has generally been favourable for the logistics and distribution sector. This is a model which, economically, has been relatively successful. However, it also causes serious issues with internal severance, reducing the mobility of residents and increasing the requirement for car ownership. Additionally, noise, air quality and ‘greying’ of the urban environment are also intrinsic issues.



New Town Comparison: Hatfield, Telford, Winsford.

External - Trunk Road Peripheral: “A town which is located next to a major highway or motorway.”

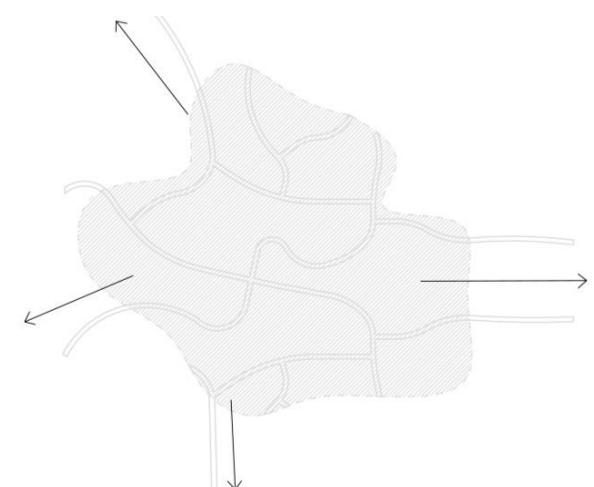
- 5.48 Major roads peripheral to the town don't disrupt the internal balance of the settlement, they are better socially and environmentally and have equally as much benefit economically. Locating a new settlement next to an existing trunk road would make the best use of existing assets, or delivering new links could help to solve existing capacity problems.



New Town Comparison: Letchworth, Stevenage, Crawley.

External - Localised Access Only

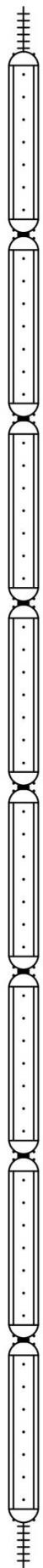
- 5.49 Towns that follow this model can be economically separated, and subsequently can find it more difficult to attract business. However, the impact of this varies by the size of the settlement. This model could result in longer journey times and more costly commutes (economically and environmentally). That said, delivered at the right scale and with other good travel options, this approach can be greener and has many benefits including reduced environmental impacts and low levels of severance.



Designing a settlement solely for cars fails for everyone, including car drivers...

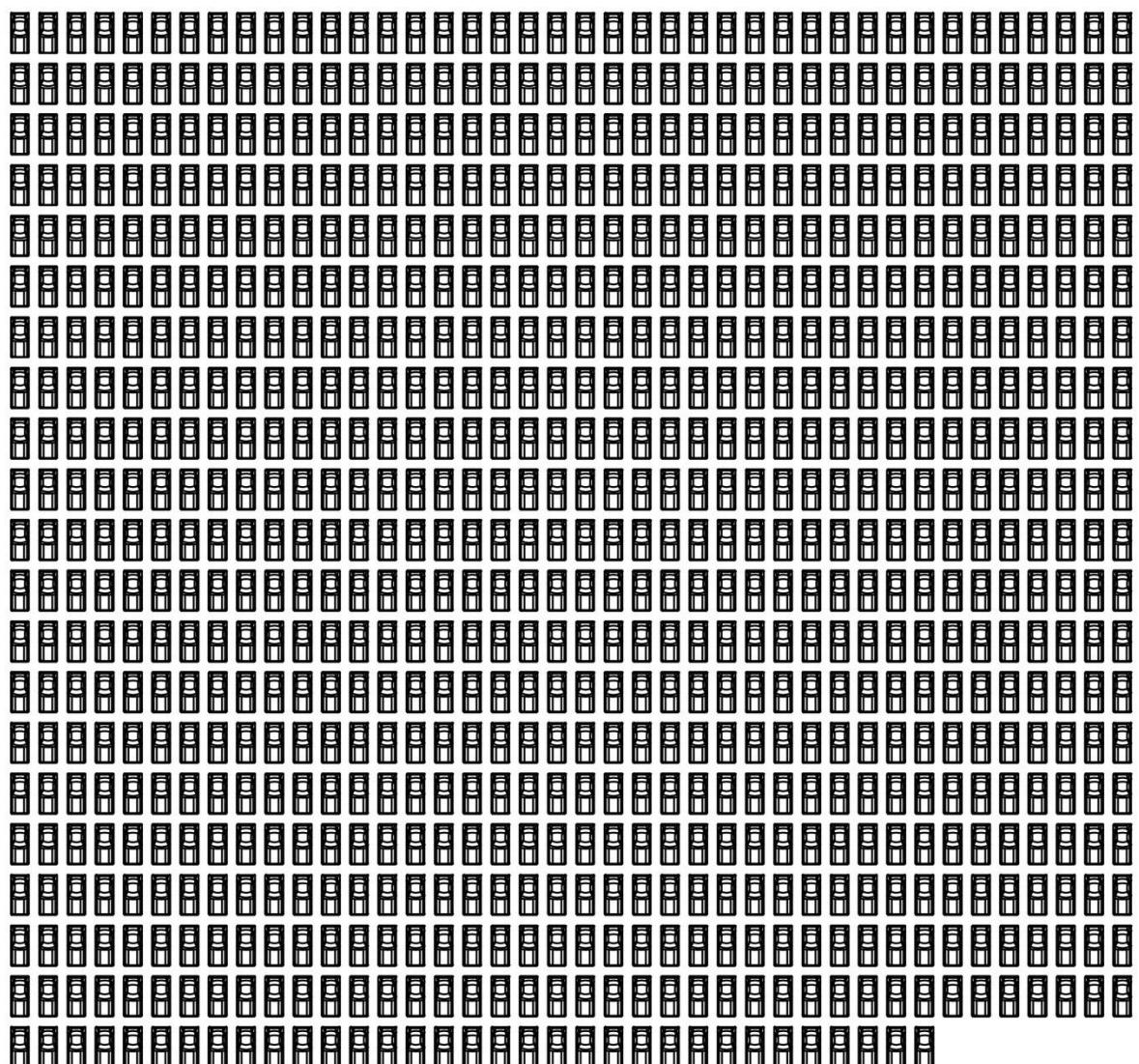
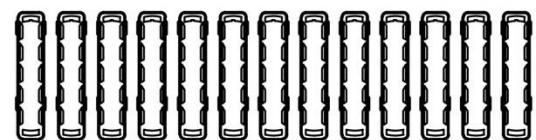
... Designing a settlement for all modes is better for everyone, including car drivers.

How do we effectively move 1000 people?

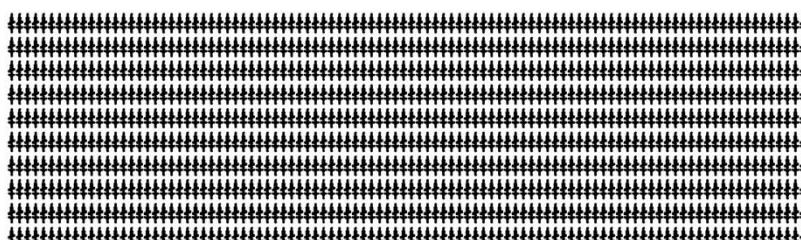


1 x 8-car Thameslink train

13 x Buses



843 x Cars



1,000 x Bicycles

3. Scale, structure and placemaking attributes

5.50 Preceding commentary identifies strategic masterplanning matters for consideration and resolution going forward. To signpost additional considerations for future debate, it is helpful to consider more localised issues around urban structure and composition.

i) Six shortlisted scenarios

5.51 To help articulate these issues we have considered it helpful to narrow the wide range of model settlement permutations identified in section 4 into a more manageable shortlist.

5.52 The 21 model settlement permutations set out in Section 4 effectively establish a ‘minimum’ and ‘maximum’ settlement footprint for each of the 3 base size options set by the project brief (i.e. 5, 10 and 15,000 homes). These in turn become logical points of reference for a ‘shortlist’ of six scenarios, as illustrated in the table below.

	5,000			10,000			15,000		
	Compact	Median	Dispersed	Compact	Median	Dispersed	Compact	Median	Dispersed
Jobs per dwelling	0.5	1	(Range)	2	3	(Range)	4	5	(Range)
	1	2	3	4	5	6			

Source: Turley, 2016

Figure 5.6: North Hertfordshire Settlement Permutations – six shortlisted scenarios

Spatial signature - Base attributes

5.53 Whilst the study brief aims to mainly consider only high-level and theoretical new settlement issues and concepts at this stage (i.e. neither place-specific, nor design-led) it is helpful to relate the model settlements to tangible built environments and places. This builds a picture of potential characteristics and a representative ‘spatial signature’ for the potential types of settlement that could be delivered. This can help internal discussions at this early stage within NHDC, in terms of aspirations for the type and character of settlement that would ‘fit’ North Herts.

5.54 A representative spatial signature for each shortlisted scenario is presented below. These aim to capture potential scale of urban area (incorporating residential areas, employment areas and social infrastructure) relative to the open space ‘required’ for the number of new homes, and the potential spatial distribution of that space relative to the scale and relative ‘compactness’ of each settlement type.

5.55 The model footprint diagrams are not presented to a recognised scale, but have been drawn to scale and are presented in relative scale to one another. The case study references included are not intended to be definitive / exact representations, but are offered to indicate the potential ‘look and feel’ of each settlement, with particular consideration for its relative compactness / density.

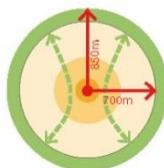
5,000



Sherford, Devon

- 5,500 new homes
- 486 Ha.
- 80,000 sqm of employment and retail floorspace.
- Local centre at the heart of the settlement.
- 3 primary and 1 secondary schools

1 COMPACT & LOWER JOBS



- Highest densities towards core
- Smaller neighbourhood centres
- Each a cluster of higher density development.
- Narrow green links extend through the settlement.

% size of Letchworth



Population = 12,000



Total jobs 2,500

All Open Space (Ha)



Open space 84 Ha

Average Net Residential Density



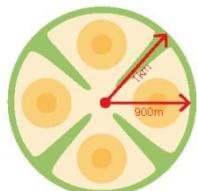
5,000



The Hamptons, Peterborough

- Comprises 4 villages
- 5,200 homes
- 12,000 jobs
- 3 Primary schools
- Average density 35 Dph

2 DISPERSED & HIGHER JOBS



- Highest densities concentrated in each village centre.
- Integrated green network.
- Green corridors structure and separate the centres.

% size of Letchworth



Population = 12,000



Total jobs 5,000

All Open Space (Ha)



Open space 84 Ha

Average Net Residential Density



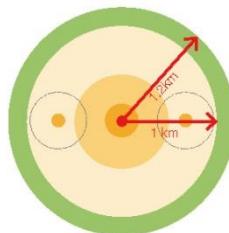
10,000



Northstowe

- 10,000 new homes
- 427 Ha site.
- 3 employment areas,
- 7 Primary schools , 1 secondary school
- Central core, where densities are increased surrounded by neighbourhood centres.

1 COMPACT & LOWER JOBS



% size of Letchworth



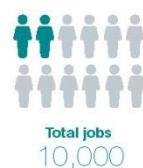
All Open Space (Ha)



Average Net Residential Density



Population = 12,000



Total jobs 10,000

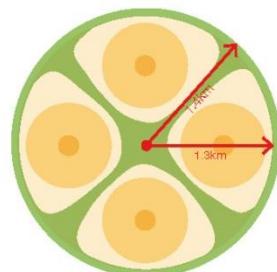
10,000

2 DISPERSED & HIGHER JOBS



Giston Park

- 8600 new homes
- 21,300sqm of retail, leisure and business floorspace.
- 6 dispersed villages
- 4 primary schools, 2 secondary schools



% size of Letchworth



All Open Space (Ha)



Average Net Residential Density



Population = 12,000



Total jobs 15,000

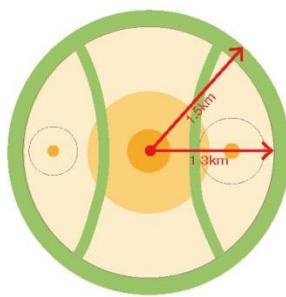
15,000



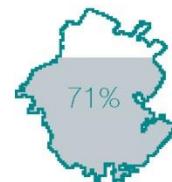
Ebbsfleet

- 15,000 new homes
- 420 Ha in
- 20,000 new jobs
- Structured around one local centre, with supporting neighbourhood centres

1 COMPACT & LOWER JOBS



% size of Letchworth



All Open Space (Ha)



Population = 12,000

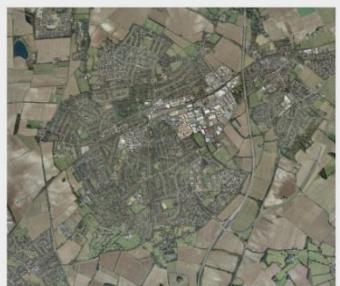


Average Net Residential Density



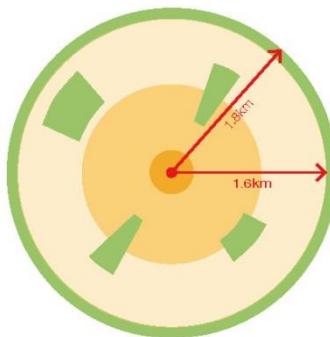
15,000

2 DISPERSED & HIGHER JOBS



Letchworth Garden City

- 978 Ha
- 15,000 dwellings
- 33,000 people
- 8 primary schools, 2 secondary schools
- Structured around one local centre



% size of Letchworth



All Open Space (Ha)



Population = 12,000



Average Net Residential Density



Delivering and sustaining jobs and social infrastructure

- 5.56 The initial sift of variants to establish 21 permutations integrated a high level analysis of the potential relationship between the number of new homes and the number / type of jobs that could be accommodated, and the social infrastructure demands / requirements relative to relevant standards and benchmarks.
- 5.57 Employment and social infrastructure characteristics that are likely to apply to each shortlisted scenario are illustrated here at headline level for comparison.

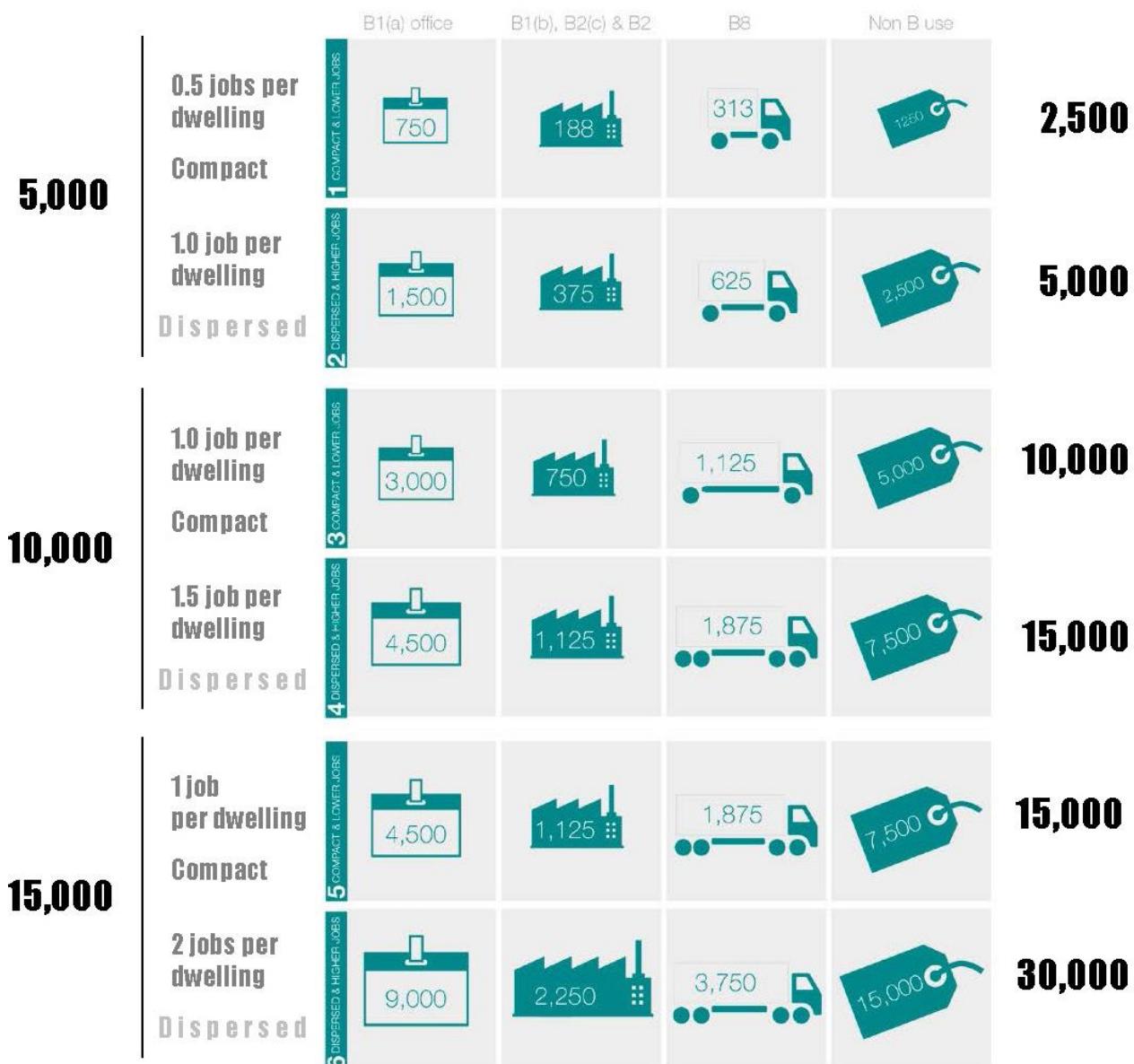


Figure 5.7: Indicative employment provision for each settlement size permutation

Figure 5.8: (over page) Indicative social infrastructure provision for each settlement size permutation

		Community Amenities					
		Leisure Facilities			Retail		
		Education Facilities			Grocery		
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
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0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact						
15,000	Dispersed						
2.0 jobs per dwelling	Compact						
15,000	Dispersed						
0.5 jobs per dwelling	Compact						
5,000	Dispersed						
1.0 job per dwelling	Compact						
10,000	Dispersed						
1.5 job per dwelling	Compact	<img alt="Icon of a person					

Urban Structures

- 5.58 The settlement forms considered above remain a high level point of reference at this stage, allowing certain issues to be considered, however they do open a line of analysis into what the appropriate form of settlement might be for a North Hertfordshire context. Whether a new settlement is ultimately designed to have a compact (higher density) or dispersed (lower density) form will have some fundamental influences on its functional characteristics and the way that development is likely to be phased over time.

Social Infrastructure

- 5.59 As we have seen the ratio of schools per household can range considerably in new settlements. Factors such as the density and disposition of development will affect the number and nature of provision.
- 5.60 Within the compact settlement, increased population densities mean that larger numbers of people can be captured within a reasonable walking distance of the school. This efficiency of catchment enables a relatively small number of schools to serve a large population. Although few in number these facilities would need to offer a large capacity to handle the resulting student numbers.
- 5.61 Conversely if we consider the dispersed settlement model, with lower residential densities, we will see the potential need for a larger number of smaller schools. This would offer the same number of places but need to be more geographically spread to enable sustainable and convenient accessibility.
- 5.62 The same principle can clearly be applied to all other forms of social infrastructure from doctors' surgeries to nurseries and crèches. It is worth noting that thresholds for certain services might mean that the dispersed urban form model struggles to provide adequate geographic coverage across all facilities, leading to larger catchment areas and more potential to generate car travel.



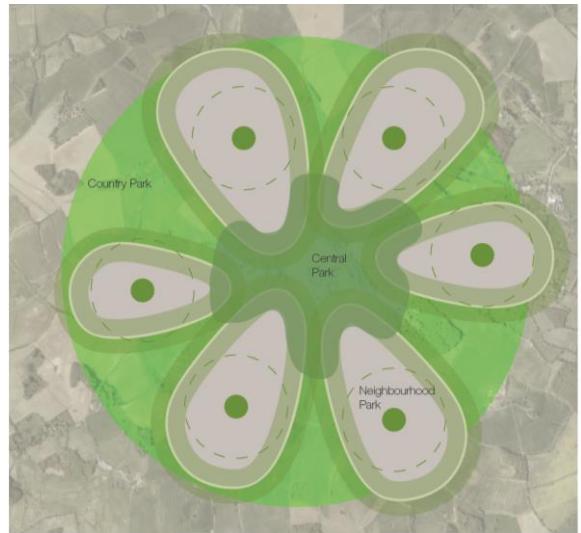
Social infrastructure: compact urban form



Social infrastructure: dispersed urban form

Open Space and Green Infrastructure

- 5.63 With the volume of green space fixed (at least in hypothetical / modelling terms) in relation to population the nature of development will primarily have implications for the form and accessibility of green spaces.
- 5.64 The potential for interaction between built development and green space within the dispersed model allows for a variety of green space types within touch of residential communities; from the green edge of the countryside, through internal country parks and local neighbourhood parks within development areas.
- 5.65 Whilst this pattern appears open and green in nature the lower density of homes can mean that proportion of residents within walking distance of these spaces can be relatively low. This might inhibit the levels of use and activity that these spaces might see.
- 5.66 Within a more compact settlement the same proportion of green space would necessarily be distributed in a different manner. Neighbourhood parks would capture a larger population within walking catchment whilst the compact nature of the settlement would potentially lead to a larger fringe of accessible green space encircling the settlement, similar to the original green belt envisaged by Ebenezer Howard.
- 5.67 The challenge in this arrangement would be to allow equitable access to the range of leisure and recreational activity in this zone with some needing to travel across the entire settlement to reach them.



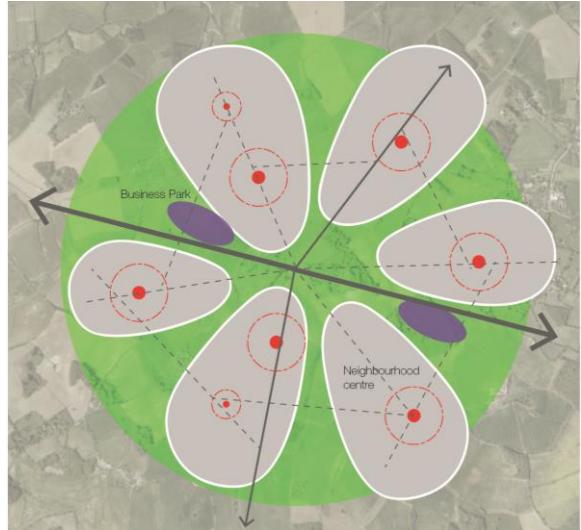
Open space and green infrastructure: dispersed urban form



Open space and green infrastructure: compact urban form

Economic Centres

- 5.68 As previous sections have explored the range of employment opportunities and the scale and quality of local and town centres generated within new settlements can vary considerably depending upon proximity to other settlements and economic centres as well as transport infrastructure.
- 5.69 If we discount these strategic factors and look instead at a direct comparison between the settlement patterns we can explore some variations in the location and type of employment that might be generated and the nature of centres that might be supported.
- 5.70 A lower density (dispersed) settlement relies upon a range of small local centres to provide sufficient geographic coverage. The resulting population catchment means these are likely to be limited in their scope, performing a simple supporting role to the residential function of the place. Employment locations may become orientated towards the periphery of the settlement.
- 5.71 Within a compact settlement form the focus on a shared central resources and a more concentrated travel pattern, with a higher density walking catchment, offer the potential to generate a more extensive town centre that can serve all neighbourhoods. This is likely to support a broader range of retail and leisure uses as a result as well as offering potential for an internal office market as a complementary offer to any out-of-town employment locations. Beyond this a smaller number of local centres could extend services out to the periphery of the settlement.



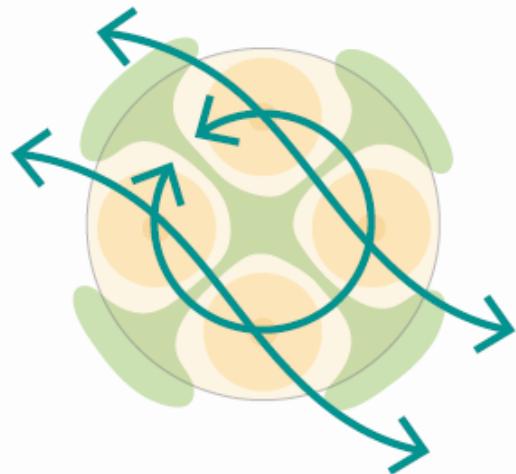
Economic centres: dispersed urban form



Economic centres: compact urban form

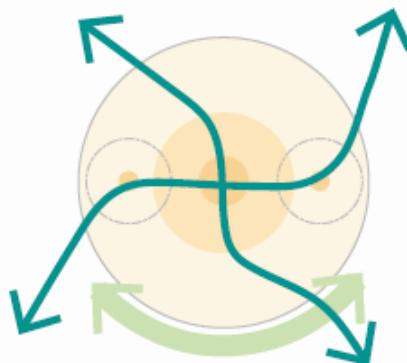
Movement

- 5.72 The impact of the level of dispersion clearly has an impact upon movement. Whilst the previous sections explore this from an 'amenity accessibility' perspective, the below adds to this thinking from an infrastructure perspective.
- 5.73 A lower density (dispersed) settlement requires infrastructure that allows movement between multiple centres, as well as links from each of these centres to other neighbouring areas. This will likely increase the miles of roads required, increase journey lengths and increase the number of bus services required to provide coverage of all residential areas. However, dispersion of movement can reduce the potential for congestion.



Movement: dispersed urban form

- 5.74 A compact urban form will likely follow a more 'central focused' pattern of infrastructure. Monocentric structures reduce the miles of road required, reduce journey lengths and reduce the number of bus services required to provide coverage of all residential areas. Conversely, loading more trips towards a single 'central core' can result in congestion, if the alternative public transport offer is not attractive enough.
- 5.75 Clearly there are a number of trade-offs between the level of dispersion and the ability to cater for all modes of transport. Whilst the dispersed model may be more conducive to car use, congestion and air quality could be better under this scenario. Conversely, compact urban forms are more walkable, better allow people to access jobs and amenities by non-car modes and reduce the level of bus subsidy required.



Movement: compact urban form

6. Delivery Options

- 6.1 Section 3 provides a high level review of previous and currently planned new settlements including, with regards to the latter, an overview of the different approaches applied to their delivery. This provides a useful background and opportunity to learn lessons from past precedents. However, it also remains important to consider, in addition, alternative potential delivery options available for a new settlement now and in the future.
- 6.2 This Section considers the current regulatory planning and legislative framework and how it might be utilised as a potential delivery vehicle or structure for a new settlement in North Hertfordshire. It draws upon available published literature and is not intended to represent an exhaustive consideration of this aspect, but provides an introduction to key areas for consideration. Further work including legal advice and detailed research regarding potential finance models would be required in subsequent stages to refine the selection of an appropriate delivery vehicle.

Current Planning Legislature / Powers

- 6.3 NHDC's preferred means of facilitating and/or delivering a new settlement will depend on various factors, including the scale of the settlement, the desired method of financing, the level of NHDC control which is sought, the nature of the land ownership situation, and the level of NHDC or developer resource to be committed. There are various options which can be considered both within the planning system and the wider legislative framework, as discussed below.

The Planning System

- 6.4 The planning system in England is plan-led. A Local Plan provides the means for a local planning authority to "...set out a vision and framework for the future development..."¹⁴ of their area and is of particular importance for guiding decisions on specific development proposals. The Planning Practice Guidance states that a Local Plan should:

"...make clear what is intended to happen in the area over the life of the plan, where and when this will occur and how it will be delivered..."¹⁵

- 6.5 This can be achieved both by setting out broad locations for growth and/or specific allocations of land for particular purposes, as well as criteria-based policies which are to be taken into account when considering planning applications.
- 6.6 There are no obstacles in principle to the use of the Local Plan to facilitate the delivery of a new settlement via the setting of a supportive policy basis for it. It could:
 - Allocate land for its development, thereby making the land available; and/or

¹⁴ Plain English guide to the Planning System, Department for Communities and Local Government (January 2015)
¹⁵ (Reference ID: 12-002-20140306)

- Include specific policies which establish the key principles and parameters of the new settlement (e.g. the type and scale of proposed uses) and which guide, facilitate and manage its delivery.
- 6.7 Such an approach could enable NHDC to exert some control over the scale, extent and type of development to be provided, including the masterplanning process and detailed design issues. It will also provide a degree of certainty and clarity to the development industry and to the local community about how the District's development needs will be accommodated. However, the Local Plan itself would not actually provide the means to deliver the new settlement on the ground and it would therefore be necessary for it to be coupled with an appropriate delivery vehicle (see below).
- 6.8 Once they have been adopted Local Plan policies cannot be quickly modified, albeit plan-making is typically an ongoing iterative process with policy reviews necessary to deal with issues as they arise. In contrast, development proposals are often subject to change because, among other things, they must remain responsive to evolving market conditions. It would therefore be necessary to ensure that any Local Plan policies regarding the new settlement include a degree of flexibility such that they can accommodate a change in the proposals.
- 6.9 In pursuing such an approach, it will be necessary to demonstrate that the allocation of the new settlement in the Local Plan – as well as any associated policies – is “sound”, in accordance with the tests established by the NPPF (paragraph 182). In particular, it must be:
- Positively prepared, i.e. it must seek to meet development needs and infrastructure requirements, including unmet needs from neighbouring authorities;
 - Justified, i.e. it must be the most appropriate strategy when considered against the reasonable alternatives;
 - Effective, i.e. it must be deliverable; and
 - Consistent with national policy, i.e. it should enable the delivery of sustainable development in accordance with the policies of the NPPF.
- 6.10 To meet these tests, it would be necessary to assemble a comprehensive, robust and compelling evidence base to ensure that these tests are met. In doing so, some of the key issues which would need to be considered are likely to include the following:
- Demonstrating that the construction of a new settlement is the most appropriate and most sustainable option for accommodating the housing needs of the District. In particular, it must be evidenced that a single large-scale new settlement is more appropriate than several smaller-scale developments such as Sustainable Urban Extensions (SUE). This must be demonstrated through the Strategic Environmental Assessment and Sustainability Appraisal process and will require a thorough assessment of all potential development sites and spatial strategy “options” in the District (and potentially beyond) against the policies and objectives of the NPPF, including the purposes of the Green Belt;
 - Demonstrating that the chosen site for the new settlement itself is the most appropriate and most sustainable location, including that there are no alternative

sites which would be less harmful both to the key purposes of the Green Belt and in all other respects (e.g. impact on highways, landscape, ecology, etc). This will require a thorough consideration of all potential sites which could accommodate the new settlement;

- If appropriate, setting out the exceptional circumstances required by the Framework* for altering Green Belt boundaries to accommodate the new settlement.
- Demonstrating that the land for the new settlement is readily available for development. This means that there must be confidence that “...*there are no legal or ownership problems, such as unresolved multiple ownerships, ransom strips tenancies or operational requirements of landowners...*”¹⁶. Alternatively, there must be confidence that any legal or ownership problems which do exist can be overcome within a defined timescale;
- Demonstrating that the proposal for the new settlement is deliverable within a specific timescale, including that it is viable. This will require a thorough assessment of the various proposed components of the new settlement both in terms of the development proposed and detailed infrastructure planning, such that the costs and value of the development can be accurately calculated; and
- Demonstrating that there is a realistic and coherent delivery programme for the new settlement, such that there is confidence in the contribution which it will make to meeting the District’s housing needs during the plan period.

6.11 The allocation of a new settlement in a Local Plan will require a considerable amount of time and resource. Mindful of NHDC’s current timescales for the preparation of its Local Plan, it is unlikely that a new settlement could be included within it without incurring a significant delay to the plan. Indeed, it would likely be necessary to start the plan-making process afresh, particularly given that it would require considerable time and resource to evolve suitable proposals, and potentially result in a fundamental change to the proposed spatial strategy for the District. The implications of such a decision for the District, at least over the short-term, include that it could:

- Undermine the ability to meet the District’s housing needs. It is important to recognise that in addition to the delay to the adoption of a local plan as set out in sections 3 and 4 on the basis of precedent rates of anticipated delivery a new settlement would require a notable lead-in time to start delivering housing and would be likely to build out significantly beyond the plan-period (assumed 15 years);
- Restrict the ability of NHDC to manage development proposals; potentially resulting in planning by appeal; and
- Undermine NHDC’s income from New Homes Bonus, mindful that the Government has proposed that from 2017/18 LPAs who “...*have not submitted a*

¹⁶ Planning Practice Guidance, Reference ID: 3-020-20140306

Local Plan...should not receive New Homes Bonus allocations for the years for which that remains the case...¹⁷.

- 6.12 An alternative approach is to continue progress with the existing Local Plan which provides for the District's development needs over the short/medium-term, whilst committing to undertake an early review which will put in place a strategy for the full plan period.
- 6.13 This approach would be based on the complementing of the adopted Local Plan through the identification of additional housing land via a new settlement, with it therefore representing a 'focussed review' addressing this specific aspect of the Plan. The provision of a new settlement, in the context of the evidenced scale of housing need considered in section 2 and the anticipated likely rate of delivery, would not be anticipated to result in the substantial replacement or deletion of the spatial strategy and distribution of housing provision under an approved strategy. There is a risk that such a proposal could be found unsound; however, a number of local authorities have successfully adopted this approach in recent years and this has been accepted by the EIP Inspector and, in one case, the High Court. For example:
- Dacorum Borough Council adopted a Core Strategy (CS) in September 2013. Prior to its adoption, the examination Inspector concluded that there was insufficient evidence to conclude that the CS housing requirement represented full objectively assessed needs for the plan period, or that the Borough's housing needs could not be met by increased housing provision, including Green Belt review. Rather than finding the CS unsound, the Inspector recommended that the Council commit to an early partial review of the CS, to explore ways of assessing and meeting longer-term housing needs. This approach was found to be appropriate by the High Court following a legal challenge to the adoption of the CS.
 - Sefton Borough Council submitted its Local Plan for examination in August 2015. Accepting that the scale of proposed housing provision is unlikely to be sufficient to meet emerging sub-regional growth opportunities, it includes a policy which would trigger an immediate partial review of the Local Plan in the event that a forthcoming sub-regional assessment identifies a need for more housing or employment development. This approach has been found sound in the examination Inspector's initial findings published in February 2016.
- 6.14 NHDC could explore how such an approach might be progressed for its own Local Plan. This could involve the continued preparation of the draft Local Plan and inclusion of a clear policy requirement to undertake an early partial review as part of the plan making process. Such an approach would enable NHDC to undertake further work in respect of a longer-term strategy for meeting housing needs, including a new settlement.
- 6.15 An alternative approach could involve the preparation of a stand-alone development plan document such as an Area Action Plan, which relates specifically to the new settlement. However, this must be prepared in accordance with the strategy set out in the overarching Local Plan and is likely to involve:

¹⁷ *New Homes Bonus: Sharpening the Incentive*, Department for Communities and Local Government (December 2015)

- The use of an up to date development plan to establish the key principles of the new settlement, including its position in the settlement hierarchy / spatial strategy, its location and extent, and the key development parameters (e.g. scale and type of uses); and
 - Preparation of the subsequent Area Action Plan to establish the key requirements for the new settlement, including an approved masterplan and various specific policies which are intended to guide, facilitate and manage its delivery.
- 6.16 Such an approach would place fewer demands on the Local Plan, but might incur risk of the introduction of further delays and an element of uncertainty regarding the delivery of the new settlement. As a minimum, it would be necessary for the Local Plan to identify land for a new settlement and, given that it would no doubt be a fundamental part of the delivery strategy for the District, establishing a “Plan B” to meet development needs in the event that the new settlement has not commenced delivery within a specific timeframe (e.g. this might involve a triggered Local Plan Review or the release of safeguarded land).
- 6.17 This approach has been successfully progressed by Oxford City Council, albeit in respect of a large-scale SUE rather than a new settlement (see below), and by other LPAs in relation to large-scale growth areas (see Section 3).

Legislative Frameworks

6.18 Various legislative possibilities exist for the establishment of a new settlement outside of the typical Local Plan system. All of these will warrant further consideration by NHDC in considering the preferred approach for the delivery of a new settlement.

The New Towns Act

- 6.19 The New Towns Act 1946 was a key part of the Country’s post-war rebuilding programme. It has been responsible for the delivery of 32 New Towns across the UK and provides homes for around 2.5 million people¹⁸.
- 6.20 The latest iteration of the legislation is the New Towns Act 1981, which updates and consolidates modifications of previous versions of the Act and remains in force. It provides the Secretary of State with the power to designate an area of land to be “...developed as a new town...” and to establish a Development Corporation which is responsible for its delivery. Development Corporations had the ability to deploy a range of powers which were instrumental in delivering the New Towns including the power to¹⁸:
- Compulsory Purchase land;
 - Buy land at current use value, such that the subsequent betterment could be captured for investment in the development;
 - Borrow money for investment in the development;
 - Prepare a masterplan which, following a public inquiry, would form a statutory development plan for the New Town;
 - Grant or refuse planning permission for the development of the New Town;

¹⁸ New Towns Act 2015, Town and Country Planning Association (February 2014)

- Procure housing subsidised by Government grant and to act as a housing association;
 - Do anything necessary for the development of the town, such as delivery of utilities.
- 6.21 The New Towns Act 1981 also includes the power for the Secretary of State to issue a Special Development Order which, in effect, gives deemed consent for development inside the New Town boundary which accords with the approved masterplan.
- New Towns Development Corporations***
- 6.22 A Development Corporation is separate from the LPA and can operate outside of its development management function. This means that the ability of the LPA itself to exert control over the delivery of a New Town is somewhat limited. Nevertheless, these have historically been effective delivery vehicles, not least because they were not subject to relatively short-term political cycles.
- 6.23 Development corporations were able to identify and deliver a specific vision and had control of various financial matters which meant they had direct responsibility for implementation. The Development Corporations had relatively short life spans and once the delivery of a New Town was underway they would typically transfer their assets (e.g. land, finance, property) back to the Secretary of State (and subsequently potentially to the LPA).
- 6.24 Whilst the New Towns Act 1981 remains in force the legislation is over 30 years old and it is generally acknowledged that it is not up-to-date with current legislative or policy requirements. For example, it is not aligned with recent changes to public land disposal rules set out in the Growth and Infrastructure Act 2013 and does not fulfil the requirements of the NPPF with regard to sustainable development and community engagement¹⁸.
- 6.25 Nevertheless, subject to some modernisation, the extent of which should be explored in detail, the legislation could, in principle, still be used to deliver new settlements. In this regard, the Government set out alongside the Budget 2016 that it is “...committing to legislate to update the New Towns Act 1981 to ensure we have a statutory vehicle well-equipped to support the delivery of new garden cities, towns and villages for the 21st century...”²³.
- Urban Development Corporations***
- 6.26 The Government has shown interest in the use of Urban Development Corporations to deliver large-scale development sites in recent years. In particular, the Government used secondary legislation in 2015 to establish an Urban Development Corporation to deliver the new Garden City at Ebbsfleet¹⁹.
- 6.27 Mindful that the delivery of Ebbsfleet up until that point had been slow, the Urban Development Corporation was introduced to “...provide the direction, focus, expertise

¹⁹ The Ebbsfleet Development Corporation (Planning Functions) Order 2015 (Statutory Instrument 2015, no. 748)

and resources to deliver an ambitious new development...²⁰. It has the power to, *inter alia*:

- Acquire, hold, manage, reclaim and dispose of land and property;
 - Carry out building or other operations;
 - Seek to ensure the provision of utilities (water, sewerage, gas, electricity, etc); and
 - Carry on any business or undertaking for the purpose of delivering the development.
- 6.28 Instead of being related to the New Towns legislation, the Ebbsfleet Urban Development Corporation was introduced under S136 of the Local Government, Planning and Land Act 1980. This relates to the specific purpose of “*...regenerating an urban development area...*” and it is therefore unclear whether its provisions could be applied to a new settlement on land which is currently undeveloped.
- 6.29 The TCPA also notes that unlike New Towns, the Urban Development Corporations “*...do not have plan-making powers, have a shorter life, cover a smaller geographical area, cannot develop housing themselves, and are more likely to be micro-managed by their sponsoring department...*²¹”. Nevertheless, the Ebbsfleet example demonstrates the willingness of Government to use legislative powers to deliver new settlements.
- Local Development Orders***
- 6.30 Under the Town and Country Planning Act 1990 and the Town and Country Planning (Development Management Procedure) (England) Order 2015, LPAs have the ability to make a Local Development Order (LDO) to grant planning permission for specific types of development within a defined area.
- 6.31 As set out by the PPG, they “*...streamline the planning process by removing the need for developers to make a planning application to a local planning authority...*²²”. They:
- Can cover a geographic area of any size within the LPA’s boundaries;
 - Can be either permanent or time limited;
 - Can be issued subject to various planning conditions; and
 - Are subject to various restrictions, including in relation to European Sites and EIA Regulations.
- 6.32 LDO’s can therefore be useful to simplify and speed up the local planning process. Such powers could be useful either on their own or alongside Local Plan allocations and policies to facilitate the delivery of large-scale development proposals.

Nationally Significant Infrastructure Projects (NSIP)

- 6.33 The Planning Act 2008 established a streamlined decision making process for nationally significant infrastructure projects which fall under five categories (energy, transport, water, waste water and waste). The Housing and Planning Bill 2015-16 includes a

²⁰ *Ebbsfleet Development Corporation: Consultation*, Department of Communities and Local Government (August 2014)

²¹ *New Towns and Garden Cities: Lessons for Tomorrow – Stage 2: Lessons for Delivering a New Generation of Garden Cities*, The Town and Country Planning Association (September 2015)

²² Planning Practice Guidance: Reference ID: 13-076-20140306

clause to expand the NSIP regime to allow an element of housing to be included when development consent is granted for an NSIP scheme.

- 6.34 However, it is proposed that the amount of housing which can proceed via this route will be capped at 500 dwellings and should be incidental to the NSIP itself. In the circumstances, NSIRs do not currently provide an appropriate delivery vehicle for new settlements. While there is a substantial lobby calling for NSIRs to be extended to include major housing projects (principally new settlements) it would be unwise to rely upon this as a potential route.

Alternative Delivery Vehicles

- 6.35 In addition to identifying and making land available for development, one of the most important issues for establishing a new settlement is to create a viable model for its delivery. In the event that NHDC will not itself shoulder the over-arching responsibility for delivery, it will be necessary to consider an alternative vehicle which secures private sector input. Potential delivery vehicles are discussed below.
- 6.36 We highlight that in all cases, the delivery of a new settlement will require collective “buy-in” from infrastructure providers, including a commitment to the delivery of infrastructure at the same time as (or in advance of) the new homes. This is particularly important in this case because of the two-tiered approach to local governance in which Hertfordshire County Council (HCC) takes responsibility for the provision of highways and educational infrastructure, among other things.
- 6.37 As such, whilst it is within NHDC’s remit to determine that a new settlement is the preferred approach to meeting housing needs, such an approach is unlikely to be practicable if wider infrastructure providers do not support its delivery. The Government’s recent Prospectus²³ for new settlements recognises the importance of demonstrating “...*how the new settlement, including the necessary infrastructure, will be delivered...*”. As such, all potential delivery vehicles are dependent upon the ability to secure the buy-in of all relevant infrastructure partners, including HCC.

Joint Venture

- 6.38 A Joint Venture (JV) is, in simple terms, a business agreement in which two or more parties agree to work together for a specific purpose. All JV partners will exercise some control over the enterprise contributing equity, and, therefore, sharing subsequent revenues and assets. It is a practicable vehicle for the delivery of new developments which has been used on numerous occasions.
- 6.39 Oxford City Council (OCC) established a JV for the development of a strategic residential development on land to the north east of Oxford, which was owned by the Council. The site referred to as Barton Park was allocated for the development of 885 dwellings in the Council’s Core Strategy²⁴. Following its allocation, the Council formed a JV with Grosvenor Developments. The JV, Barton Oxford LLP, combines the Council’s land with Grosvenor’s funding and investment capacity. It is:

²³ Locally-Led Garden Villages, Towns and Cities, Department of Communities and Local Government (March 2016)

²⁴ Oxford Core Strategy 2026, Oxford City Council (March 2011)

“...a true 50/50 vehicle with the City Council and Grosvenor...represented equally at both Board and project group level ensuring that the overarching objectives set by the City Council are delivered. The objectives are enshrined in the partnership documentation and as well as commercial terms include objectives around physical and social regeneration, provision of an exemplar development and maximisation of affordable housing...”²⁵

6.40 The JV partners worked together to:

- Prepare an Area Action Plan for Barton Park²⁶, which was adopted in December 2012. It identifies the key principles and concepts to guide the development and sets out a range of specific policies and infrastructure requirements;
- Secure outline planning permission for the whole development, which was approved in October 2013 (reference: 13/01383/OUT). The Barton Oxford LLP JV was the named applicant for the planning permission, thereby ensuring that OCC and Grosvenor are effectively joint applicants; and
- Secure reserved matters permission for a scheme of enabling infrastructure works at the site, which was approved in February 2015 (reference: 14/03201/RES). The Barton Oxford LLP JV was again the named applicant for the permission; and
- Procure housebuilders to deliver the new homes. In January 2015 Barton Oxford LLP announced that Hill had been selected to deliver the first phase of 237 new homes at Barton Park. Hill submitted a reserved matters application for the new homes in December 2015 (reference: 15/03642/RES).

6.41 The example demonstrates that a JV is a practicable delivery vehicle for large-scale development proposals which enables all partners to retain a control over the development and to share in subsequent assets. It is, however, likely to be somewhat dependent upon all JV partners contributing some form of equity to the partnership, such as land or finance.

6.42 Northstowe is another example of a Joint Venture with the development being led by the Homes and Communities Agency and Gallagher Long Stanton Ltd (Gallagher Estates). Whilst Gallagher Estates submitted the application for Phase 1 subsequent phases are being directly taken forward by the HCA with the land in public sector ownership.

6.43 In the 2015 Budget the Chancellor identified Northstowe as a new delivery model with the public sector once again directly delivering housing in significant quantities with three quarters of the homes started on the site by 2020 being built under direct contract with the public sector. It is intended that this approach will enable the development to build out at twice the rate of a conventional private sector route. Although as set out in section 3 the assumed build-out rate in the latest housing trajectory still assumes that just over a third of the development will be built out over the plan period.

²⁵ *Housing the Nation: Ensuring councils can deliver more and better homes*, Town and Country Planning Association and Association for Public Service Excellence (June 2015)

²⁶ *Barton Area Action Plan*, Oxford City Council (December 2012)

“Straight Sale” / External Partner Delivery

- 6.44 An alternative delivery vehicle could involve:
- (a) The simple “straight sale” of land to an external partner, such as an investment company, developer or housebuilder (where NHDC controls the land); or
 - (b) The identification of an external partner who has an appropriate proposition for a new settlement (where NHDC does not control the land).
- 6.45 Under both options NHDC would retain some control over the development via the use of Local Plan policies and the Development Management process; however, the external partner would otherwise take full responsibility for its delivery. Such an approach would reduce the resources required of NHDC and place the onus on the development industry to deliver the new homes required. Given the current market conditions, it is considered that there is likely to be appetite amongst the development industry for such an opportunity. The capacity to develop larger scale developments using this route is however questionable.
- 6.46 It would remain necessary for NHDC to remain involved during the preliminary phase of work on the new settlement, for example to ensure that the land identified is appropriate (mindful of the key planning issues discussed above) and the increase in land value (e.g. from agricultural value to development value) can be captured to generate investment capital (see below). However, beyond the “start-up” phase, this approach is likely to significantly reduce the extent to which NHDC is able to exert some influence over the new settlement beyond the Local Plan/Development Management process.

Local Delivery Vehicle

- 6.47 An alternative delivery vehicle could involve
- NHDC taking control of the land e.g. via purchase of CPO; and
 - NHDC taking direct responsibility for the construction of the new homes, e.g. via its own local delivery resources or external contractors.
- 6.48 Such an approach would be dependent upon NHDC securing the necessary skills, resources and finances to deliver the new settlement. In the longer-term it might enable NHDC to secure a greater share of the “value” of the project; however, it would also require NHDC to shoulder all potential risks and debts, which will be very significant – if not prohibitive – at least in the short- to medium-term.

Delivering New Transport Infrastructure

- 6.49 This section sets out some of the headline transport infrastructure delivery processes for Rail, Highways and Local Bus Services. There is clearly scope for investment in (and the delivery of) new major strategic transport infrastructure, particularly as settlement size increases. Delivery of such should be considered on a pan-county scale, which could include input from partners such as Hertfordshire LEP (Strategic Infrastructure Board), Network Rail, Highways England and neighbouring LAs.

Rail

- 6.50 All rail investment projects (which here could be redevelopment of a station, a new station or even a new line) have to go through the Guide to Rail Investment Process (GRIP). The system has eight stages which take a scheme through a series of 'stage gates', each requiring particular technical outputs.

Table 6.1: Guide to Rail Investment Process (GRIP)

Guide to Rail Investment Process (GRIP)

Initiate		Choose Option		Design		Build		Close	
1 Output Definition	2 Feasibility	3 Option Selection	4 Single Option Development	5 Detailed Design	6 Construction, Testing & Commission	7 Scheme Handback	8 Project Close Out		

Source: Network Rail, Mott MacDonald

- 6.51 The timescale for delivering a new rail scheme via GRIP is not fixed. It will vary enormously according to the size and complexity of the construction works. Aside from any requirement to obtain statutory consent(s), any alteration to the existing rail signalling system is the scheme element which tends to determine the 'lead time' for opening a new facility. Signalling alterations typically involve at least two to four years of planning time prior to implementation.
- 6.52 Ultimately, if it is considered that a new train station or an additional stopping service (at an existing station) would be required, a rail patronage-related business case will be needed, reviewing likely use and developing a case against scheme costs and increased journey times to current and future through passengers.
- 6.53 The prime negative against a new station or additional stopping service would be increased through delay to passengers and any increased operational costs of trains – as such it is considered less likely that a new station or additional stopping service would be feasible on the East Coast Main Line (ECML) than on the Cambridge Line. While this would add a small amount of inconvenience for some passengers it is imperative that the overall station option is considered as part of the expanding offer of a new settlement.
- 6.54 On this demand basis, a new station or additional stop (or even line) is made more viable the more dwellings that are delivered. Ultimately, a critical mass of development would be needed for the business case to be successful. More detailed calculation could firm-up the quantity of dwellings needed, but it is likely to be 10,000+.

The prime negative against a new station or additional stop would be increased through delay to passengers and any increased operational costs of trains. On this demand basis, a new station or additional stop (or even line) is made more viable the more dwellings that are delivered.

- 6.55 If an existing station is to be improved in order to cope with an increase level of demand, a station assessment will need to be carried out which takes into account; station facilities (such as car parking and ticketing facilities), disabled access provision and platform widths (in accordance with projected passenger demand). If additional stopping services are required at existing stations, ‘rail-operations’ matters such as signalling and timetabling would be explored within the GRIP.

Highways

- 6.56 The location, scale and role of the settlement each have a fundamental influence upon the process and delivery of highways infrastructure. A new settlement will require impact assessment using a strategic highway model, which should be used as a base to inform the impact upon/of existing/new highways.
- 6.57 Given the political geography of North Hertfordshire, the delivery of new or upgraded strategic highways (those that feed the settlement and link to existing areas) is likely to require cross-border communication and collaboration.
- 6.58 Again, ‘who with’ is influenced by the location and scale of the new settlement. Additionally, responsibility for highways maintenance and transport strategy is varied between administrative county councils and borough or district council. The list of local infrastructure delivery partners could include:
- (a) Cambridgeshire County Council
 - (b) Essex County Council
 - (c) Hertfordshire County Council
 - (d) Luton Borough Council
 - (e) Central Bedfordshire Council

- 6.59 Highways England (HE) has responsibility for Motorway and Trunk Roads; nearby routes in this case are the A1(M), M1, M11 and A120. Any major impact upon, or proposed upgrades to, will need to be understood and delivered within HE.
- 6.60 Local parking matters are usually dealt with by district or borough councils. The projected increase of demand for parking at different amenities in neighbouring areas depends on the proximity of, and provision within, the new settlement. For instance, projected increases in parking demand at railway stations in neighbouring authorities will likely require discussion with the local district/borough, the station operator and Network Rail.

Walking & Cycling Infrastructure

- 6.61 Local street design and delivery is usually through a combination of planning authority, highway authority and developer interaction.
- 6.62 Sustrans, the national walking and cycling charity, should be consulted and involved in the delivery of local walking and cycling infrastructure. They can advise on designing and developing high quality on and off-road walking and cycling routes – and identify potential links to the existing National Cycling Network and funding streams.

Bus, Tram & Community Transport

- 6.63 Clearly, communication with bus and community transport operators from an early outset will be key. The location of the settlement will dictate existing coverage, and the scale of the settlement will dictate the quantity of internal coverage required. At the larger scales of settlement, operators are likely to require investment in additional fleet in order to provide internal bus coverage.
- 6.64 Locally, Cambridge busway has been a highly controversial scheme, marred by legal battles and going significantly over budget. As such, the receipt of significant political and local media focus, could affect the delivery of a similar infrastructure intervention in North Hertfordshire.
- 6.65 That said, interventions should be considered on individual merit. The case for a similar scheme could be strong if the new settlement does not have a train station.

Funding and Finance

- 6.66 The ability to finance a development is of critical importance and requires both careful consideration and detailed planning. This is particularly the case for a new settlement, given that the upfront infrastructure requirements are both significant and costly, and need to be delivered in advance of any revenue-generating uses.
- 6.67 The NPPF highlights that larger-scale developments such as new settlements might “...provide the best way of achieving sustainable development...” (paragraph 52). This is because such developments can provide an effective means of capturing the increase in land value which results from the grant of planning permission. This decreases the extent to which a new development is dependent upon the public purse to fund the infrastructure required.
- 6.68 An effective way of generating capital for investment in the delivery of a new settlement on the ground is to secure the land at current use (e.g. agricultural value) and dispose of it to a delivery partner at a higher value following its identification for development, either via a Local Plan allocation or the grant of planning permission. Such an approach can generate the up-front revenue to trigger enabling infrastructure works which are required to facilitate the delivery of the wider development.
- 6.69 Control over the land is therefore likely to be crucial. Indeed, if the public sector does not have any significant land holdings under their control, there is a risk that an external party, whose objectives are not aligned with the vision for the new settlement, secures the land at a much higher value (i.e. significantly above agricultural value). This would undermine the ability to generate up-front capital which can be invested in the delivery of the development. It is therefore important that the public sector plays a role in securing the land, either by:
- Leading the approach to land assembly (see above); or
 - Ensuring that any external party who plays a role in securing control over the land has an understanding of the expectations for value and infrastructure delivery.

- 6.70 Beyond raising capital from the land, other funding and finance options are available. If it is willing to do so, NHDC could allocate resources from its various funding streams and should carefully consider the ability to do so. There may also be merit in considering options including:
- Prudential borrowing from Government or other sources. This would involve securing a long-term and (preferably) low-cost loan, secured against the estimated increase in land value or against future New Homes Bonus income. In respect of the latter, it would be necessary to have clarity from the Government about the longevity of the New Homes Bonus policy, to have certainty that it will be able to underpin a loan over the long-term; or
 - Tax Increment Financing (TIF), a financing method which involves borrowing against future tax income from development (e.g. Council Tax or Business Rates). TIF is used widely in many countries, particularly in the United States; however, it is not currently widely used in the UK. The Government has previously sought to provide greater flexibility at the local level for TIF to be implemented. Opportunities to explore TIF may therefore warrant further consideration, should it be an option which NHDC wishes to pursue further.
- 6.71 In the event that NHDC's preference is to protect public sector revenue streams, it could instead seek to secure finance from the private sector. Options for doing so, for example through a JV partnership, are discussed above. There may also be merit in considering the use of Community Infrastructure Levy (CIL), which could collect funds from new development at the new settlement to re-invest into later stages of development or the delivery of ancillary infrastructure. However, CIL would be unlikely to procure sufficient upfront finance to kick-start the early phases of development or initial infrastructure provision, unless it is applied to other development sites across the District for an initial period before the delivery of the new settlement commences.
- 6.72 Various public sector funding streams are also in operation, as summarised in the following table.

Table 6.2: Public Sector Funding Streams

Fund Title	Details
Large Sites Infrastructure Fund ²⁷	The LSIF was launched in 2014 and is operated by the Homes and Communities Agency. This is a £1bn capital investment fund which will provide finance for schemes of over 1,500 dwellings up until March 2020 in order to facilitate the up-front delivery of infrastructure for complex development sites. There is no upper limit on the amount of finance which can be sought for a specific project. However, funds are provided on the basis that they are "recoverable" and will therefore usually be in the form of a loan with an appropriate interest rate. Applications can only be made by a private sector partner and there is likely to be

²⁷ Large Sites Infrastructure Programme: Prospectus, Department for Communities and Local Government (October 2015)

Fund Title	Details
	significant competition for the funds.
Growing Places Fund (GPF)	The GPF is a £20m commercial investment initiative aimed at removing barriers to site development by addressing immediate infrastructure and site constraints to promote the delivery of jobs and housing. The LEP is one of only a few Local Enterprise Partnerships in England to have fully committed its GPF allocation of £20m, as a revolving commercial fund. Growing Places invests in house-building, commercial developments and infrastructure schemes needing short term loans on commercial terms. As such it may not be suitable for this project.

Source: Mott MacDonald, 2016

Transport Funding

- 6.73 Funding for strategic transport infrastructure usually comes from a variety of contributors; DfT, LEP (inc. EU Funds), Local Authority (or consortium of) and private contributions.
- 6.74 As an overview, the Department for Transport take an evidenced-based approach to allocating major investment in transport; whether this is rail, highways, or bus. Ministers take decisions on investment in support of their objectives for transport and are informed by evidence set out in a business case. Business cases are developed in line with Treasury's advice on evidence-based decision making set out in the Green Book and use its best practice five case model approach.
- 6.75 This five business case approach shows whether schemes are supported by a robust case for change that fits with wider public policy objectives:
- (a) the 'strategic case';
 - (b) demonstrate value for money – the 'economic case';
 - (c) are commercially viable – the 'commercial case';
 - (d) are financially affordable – the 'financial case'; and
 - (e) are achievable – the 'management case'.
- 6.76 Ministers take into account the evidence in all five cases when making a decision. The degree of detail contained within the business case may vary depending on the level of investment or risk proposed to ensure that the appraisal process is proportionate.
- 6.77 There are a number of funds currently, or recently, available aimed at unlocking strategic sites or realising network capacity for growth. These funds often have a short-term application window of 1 – 2-years and have recently included funds such as; Local Infrastructure Fund, Large Sites Infrastructure Fund and Local Pinch Point Funding.

Such is the short-termism of infrastructure funding, it is actually more important that the long-term aspirations for the wider supporting infrastructure of the settlement become central to local and sub-regional growth plans.

- 6.78 Currently, Hertfordshire LEP has two funds for delivering infrastructure; Growing Places Fund (GPF) and Evergreen Infrastructure Fund (EIF). Again, both operate on a relatively short-term commercial basis, running up to the end of the current City Deal in 2021.

Rail

- 6.79 The below table provides an indication of specific funding pots that are available for station development. However, as Network Rail operate on five-year ‘Control Periods’, these funds often change or evolve, though some will continue through to subsequent periods. The evolution of these funds should be monitored going forward.

Table 6.3: Rail Infrastructure Funding

Fund Title	Funding Body & Current Programme	Details & Suitability
New Stations Fund	Network Rail Ended 2013.	Whilst this fund has currently desisted, it provides a good example of the type of fund that may arise over the coming years. This fund was aimed specifically at ‘shovel-ready’ new station projects.
National Station Improvements Programme (NSIP)	Network Rail & Virgin Trains CP5 (2014 – 2019)	Aimed at providing passenger experience improvements within the station. If a settlement were to be built around an existing station, this fund would be suitable in funding required upgrades such as platform capacity or waiting rooms.
Station Commercial Property Facility (SCPF)	Network Rail CP5 (2014 – 2019)	Competitively bid fund that is aimed at projects that provide a fiscal return to DfT and achieve a Business Case Ratio (BCR) of 2.0 and above. Increased commercial property space (such as retail units) within a new station concourse will likely lend itself to this funding.
Access for All (AFA)	Department for Transport CP6 (2019 – 2024)	Aimed at improving accessibility to all platforms, particularly for the mobility impaired. Again, a fund that would improve an existing station that doesn’t currently provide accessible and step-free access.
Cycle-Rail Fund (CRF)	Department for Transport Continuous	Aimed at projects that provide or improve railway station cycle facilities. Train operating company of the station (currently Great Northern) must apply for these funds. Likely to be small scale funding, but could pay for the installation of high-quality cycle storage cages.

Source: Mott MacDonald, 2016

- 6.80 During the period 2022 – 2033, major works planned elsewhere in the country (owing to HS2) will likely result in a ‘resource crunch’; different parts of the country will be competing for resources in engineering, design, contractors, specialist equipment and access to track itself.

6.81 This will likely result in a heating of the market and subsequently the inflation of market rates for rail works. Additionally, competition for track access (and the impact of delays on the West Coast Main Line) could be restrictive of works within this period.

Bus & Community Transport

6.82 It is likely that local bus and community transport initiatives will require heavy subsidy in line with housing delivery and up until a point at which service routes are commercially viable and self-supporting.

Approaches to Land Assembly

Compulsory Purchase and Land Assembly

6.83 It is unlikely that all of the land necessary to create a new settlement will be within, or capable of being easily assembled into single ownership. While it may be possible to acquire land by negotiation, it is likely that some form of compulsory purchase action will be necessary whether the new settlement is promoted by the public or private sector, or a combination of the two.

6.84 The most likely option, particularly for a larger settlement scheme, would be to use legislation under the New Towns Act 1981 (see paragraphs 6.17 – 6.20 above). However, NHDC also has the power to act as an ‘Acquiring Authority’ to assemble land if, for example, the council and/or developer partners could assemble the majority of a site but needed to use CPO powers to ‘complete the jigsaw’.

6.85 S226(1) of the Town and Country Planning Act 1990 identifies two purposes by which a local authority can purchase land under the Planning Act; where:

- S226(1)(a) - The authority thinks that the acquisition will facilitate the carrying out of development, redevelopment or improvement of the land; or
- S226(1)(b) - The land is required for a purpose which it is necessary to achieve in the interests of the proper planning of an area in which the land is situated.

General Scope of the Powers

6.86 The powers can be used by NHDC to progress its own scheme or in support of developer led proposals. In circumstances where NHDC is using the powers in support of a developer led scheme there is a need for particular attention to be paid in relation to two key issues:

- If the development project involves land in the council’s ownership care is needed to ensure that the council discharges its responsibility under the Local Government Act to secure best value.
- If any resolution from the Council is sought as to the willingness to use CPO to help deliver a scheme, in advance of planning permission having been secured, careful wording of that resolution is essential to protect against a subsequent challenge that, in passing that resolution, it had fettered its discretion when it came to determining the subsequent planning application.

6.87 If the council were to use its CPO powers to support a privately led development proposal then it will almost certainly be necessary to enter into a formal agreement

which sets out the terms on which land will be transferred on completion of the CPO and the performance milestones expected of the developer. Such an agreement will almost always need to include an indemnity agreement that requires the developer to reimburse the Council for all of the costs of the CPO(s) and the compensation due to displaced owners and occupiers such that there is no risk to the public purse.

- 6.88 There is a need for a clear justification as to why each parcel of land or each right over or in the land need to be acquired before a CPO is made and submitted and, hence, careful assessment is required of what land is needed for development of the new settlement. This is because it is a legitimate ground of objection to a CPO if the Order is seeking to dispossess an owner of more of his land than can be shown to be needed to deliver the project.

Justification for Making a CPO

- 6.89 The proposals for compulsory acquisition of land must be justified as it should always be assumed that the CPO will have to be defended at a Public Inquiry.
- 6.90 The fundamental test for the use of any CPO is that powers should only be used where there is a compelling case in the public interest and any Order that is not supported by clear evidence that this is the case is unlikely to be confirmed. It is for NHDC to determine how this can be demonstrated but it is important to be sure that the purposes for which a compulsory purchase is being made is sufficient to justify interfering with the human rights of those with an interest in the land affected. Essentially land should only be taken compulsorily where there is clear evidence that the public benefit will outweigh the private loss.
- 6.91 Section 226 (1A) of the Town & Country Planning Act 1990 stipulates that a local authority seeking to use the powers under S226 (1)(a) must not exercise the power under that section unless it thinks that the development, re-development or improvement is likely to contribute to the achievement of any one or more of the following objectives:
- (a) the promotion or improvement of the economic well-being of their area;
 - (b) the promotion or improvement of the social well-being of their area;
 - (c) the promotion or improvement of the environmental well-being of their area.
- 6.92 It will therefore be necessary to demonstrate how the development of a new settlement will achieve one or more of these objectives.
- 6.93 Finally, in justifying the compulsory purchase of private property for planning purposes there needs to be a degree of certainty that the scheme which underpins the CPO will actually go ahead. In demonstrating this, NHDC will need to be able to show that the project is unlikely to be blocked by any impediments to implementation, such as financial, physical and legal factors; including the programming of any infrastructure accommodation works or remedial work which may be required, and any need for planning permission or other consent or licence.
- 6.94 There is no requirement for planning permission to have been secured for the proposed scheme before making a CPO and submitting the Order for confirmation, although most Orders are made after the grant of permission. If no permission exists the Statement of

Reasons prepared for the CPO will need to demonstrate that there is unlikely to be any obstacle to obtaining planning permission and the proposals are consistent with and positively supported by relevant planning policy.

- 6.95 A minimum period of c.18 months is likely to be required taking a CPO through from the initial preparation stages to confirmation and implementation assuming a need for a Public Inquiry. The formal confirmation of the CPO would be made by the Minister following a receipt of the Inspector's report and recommendation.

Looking to the Future

Delivery Route

- 6.96 As identified above, the Government has set out its intention to update the New Towns legislation such that it is up-to-date and capable of facilitating the delivery of new settlements. The precise scope of the update remains unclear, but the timescales are likely to be somewhat lengthy. Nevertheless, in due course there may be merit in NHDC engaging with the Government in respect of the updated legislation to ensure that it is capable of facilitating NHDC's preferred approach to the delivery of the new settlement.
- 6.97 We are not aware of any other emerging proposals or legislation from the Government which would seek to facilitate the delivery of a new settlement. However, subject to identifying a preferred means of delivery, there may also be opportunities which NHDC could lobby for additional powers, including:
- The expansion of the NSIP regime to enable residential development proposals to be submitted in their own right. The recent introduction of incidental residential uses to the NSIP regime suggests that the Government might be willing to consider such an approach, particularly if an LPA is to express support for such an approach. However, an amendment to the NSIP regime would have relatively wide-reaching consequences for the development industry and it might be difficult to secure the Government's support for this proposal in the short-term;
 - The creation of bespoke legislation for the new settlement. For example, the London Olympic Games and Paralympic Games Act 2006 established the Olympic Delivery Authority, which was established to deliver the buildings and development platform for the games²⁸. This demonstrates the ability of new bespoke legislation to create specific mechanisms for growth. However, it would likely take some time for such legislation to be prepared and enacted.
- 6.98 The above – and other opportunities via secondary legislation could be considered further by NHDC once it has identified its preferred approach to the creation of a new settlement. Notwithstanding, and while not without flaws, the examples referred to in this document and analysis contained within this section demonstrate that the existing planning and legislative framework does provide the means to deliver a new settlement, without seeking additional or “new” powers.

²⁸ *Creating Garden Cities and Suburbs Today: Policies, Practices and Model Approaches – A Report of the Garden Cities and Suburbs Expert Group*, Town and Country Planning Association (May 2012)

Funding Flexibilities

6.99 In addition to new delivery routes there are a number of areas where additional 'flexibilities' would be beneficial with regards to the existing legislation around funding. These include, for example:

- The potential to retain stamp duty on the sale of properties within the new settlement as a means of cross-subsidising infrastructure funding requirements and or off-setting initial investment costs. The scale of development would result in a relatively substantial return being re-cooped complementing existing revenues including the New Homes Bonus; and
- Enabling tax efficiencies to be negotiated / agreed with institutional investors committing funding to the settlement to cover initial infrastructure / upfront costs. The savings associated with these efficiencies would require a long-standing commitment to funding and finance for the settlement.

Economic Sustainability

6.100 Whilst it is understood that the central rationale for the settlement is to provide for high levels of long-term housing need in the area as explored in section 5 there are significant benefits in ensuring the economic sustainability of the settlement. The attraction and retention of employers within the settlement will be integral to its future legacy and a number of flexibilities could be explored with Government, including:

- The potential to 'pre-let' space through Government relocations to new settlements. Connectivity to central London is strong in the area with cost-savings to be generated through the potential retention of free-holdings and or negotiation of strong lease terms;
- Flexibilities around the extension of Enterprise Zone (EZ) regulations to designated employment areas in new settlements in order to incentivise the location of new investment and the re-location of companies. Whilst the scale of employment facilities may not warrant EZ status flexibilities to secure comparable incentives as the settlement is developed would form a powerful tool in attracting in significant employers; and
- The co-ordination of capital programmes of public services (e.g. the NHS) to provide significant investment in infrastructure within the new settlement. This could stretch beyond meeting local needs to ensure that it forms an employment generator for the settlement. An example could be the re-location / development of a new hospital in recognition of the creation of greater needs as a result of the new settlement in the context of existing capacity in the authority.

7. Action Plan

- 7.1 The preceding sections have sought to develop an understanding of the scale, form and potential delivery implications for a new settlement within North Hertfordshire. The report has intentionally not sought to apply judgements on the different settlement typologies or present recommendations as to their appropriateness for North Hertfordshire.
- 7.2 For NHDC to move to the next stage of considering the potential for advancing the concept of a new settlement it is important to understand future subsequent steps that are required. This section presents a concise Action Plan for NHDC to progress beyond the information presented within this report. The Action Plan considers processes as well as direct actions and outputs required such as, for example, additional Local Plan evidence base documents.
- 7.3 It is understood that a Project Board is being set up by NHDC tasked with taking forward the Local Plan. This Project Board will also need to consider this Action Plan and its implications for the development of additional governance and decision-making structures required in the short-term if NHDC were to proceed with investigating a potential new settlement.

Figure 7.1 Areas of Work



Early Scoping Works

- 7.4 There are various issues related to the location, scale, form and delivery of a potential new settlement which NHDC will now need to consider. There might therefore be merit in establishing a bespoke internal “Board” or “Committee” which can lead the consideration of these issues in a formal setting. Mindful that the delivery of a new settlement is complex and challenging, such an arrangement will provide some initial internal guidance and leadership which will be of critical importance moving forward. In

due course, it would provide NHDC with a vehicle for the formal management and governance of the project.

- 7.5 Transparency in the decision-making process is an important issue for LPAs. As noted in the previous section, the delivery of a new settlement is a highly complex process and the control of land is particularly important in establishing the conditions which will facilitate the delivery of a new settlement. As such, until such a time as NHDC has considered its preferred approach, particularly in relation to site identification and land assembly, the early scoping work should, where possible, be dealt with sensitively.
- 7.6 A range of initial scoping issues should be considered to build upon the various matters discussed in this report, including the following:
- The “case” and justification for a new settlement relative to and mindful of other potential forms of development which could accommodate the District’s needs (such as SUEs);
 - The form of the new settlement, including its potential scale, development uses and general extent. This will inform future stages of work, such as the identification of an appropriate site, and decisions regarding a preferred approach to its delivery;
 - The extent to which NHDC wishes to retain ‘hands-on’ control of the new settlement or alternatively to step-back into a managerial role (e.g. via the Development Management process). This should be considered in respect of both the preliminary stage of works (e.g. to identify and assemble the land, establish a policy framework and masterplan, and/or navigate the planning approval process) and over the longer-term as it is delivered on the ground. This will inform decisions about how best to progress within initial phases of work and lay the groundwork for establishing a delivery vehicle;
 - The extent to which NHDC wants to commit resources to the delivery of the new settlement, in terms of both time and financial investment and is willing to bring-in private sector input, including from an early stage. This will be necessary to facilitate further consideration of potential delivery vehicles and funding streams over both the short- and longer-term;
 - The preferred means of delivering the new settlement, mindful of the opportunities offered by the planning system, legislative framework and potential delivery vehicles. This issue is closely linked to those identified above, but is critical to the success of the new settlement and must therefore be considered in its own right to ensure that the project is able to build-in any necessary policy or other requirements from the outset.
- 7.7 Whilst no formal decisions need to be taken at this initial stage, the early consideration of the above issues will help NHDC to scope out the potential for a new settlement in the District and the preferred means for undertaking that endeavour.

Forward Strategy

- 7.8 An overarching planning strategy for the delivery of a new settlement will be capable of being worked up once NHDC has considered the early scoping works discussed above.

However, it is possible at this early stage to give some initial consideration to the preliminary stages of work which might be required should NHDC's preferred approach be to allocate land for a new settlement in a Local Plan.

- 7.9 In this regard, we highlight that it is unlikely that the existing draft Local Plan could include such an allocation or reference to a new settlement, given that this would result in a fundamental change to the spatial strategy if a new settlement option were to be included in the currently emerging plan it would, therefore, likely be necessary to start the plan-making process afresh. An alternative option would be to continue with the current plan and commit to an early partial review as part of the plan-making process.
- 7.10 Fundamental issues for progressing a new settlement which must be considered through the Local Plan process will include:
- Demonstrating that a new settlement is the most appropriate approach for accommodating the District's housing needs;
 - Preparing an initial "brief" regarding the preferred scale and form of the new settlement; and
 - The identification of an appropriate "area of search" for a site.
- 7.11 These issues will be of fundamental importance to underpin the preparation of a Local Plan. They could be undertaken at the same time as, but entirely separate from, the ongoing preparation of the existing Local Plan process. Each should be the subject of a specific evidence base document.
- 7.12 Consideration of the above issues would require the preparation of specific evidence base documents, which must be undertaken with transparency. In particular:
- The methodologies via which they are prepared should be subject to public consultation; and
 - The work should be progressed with input from key stakeholders, including statutory consultees (e.g. infrastructure providers) and the development industry.
- 7.13 In this regard, the publication of preliminary considerations regarding a new settlement as part of the formal Local Plan process introduces the prospect of an external party securing control of land in such a way that undermines the ability to generate up-front capital for investment in delivery. Before commencing a formal Local Plan process, NHDC might therefore seek to explore whether it is possible and appropriate to provide some initial, informal and non-prejudicial evidence-based consideration to the above issues. In doing so, NHDC would need to ensure that appropriate and robust management, governance and decision-making arrangements can be put in place during this early stage of work.
- 7.14 In due course when NHDC is in a position to do so, it would commence the formal preparation of a Local Plan via the normal sequential process. In doing so, it would be necessary to prepare a comprehensive suite of evidence base documents regarding the new settlement. This would need to cover a wide-range of issues including, among others:

- Demonstrating that a new settlement is the most appropriate approach for accommodating the housing needs of the District, mindful of the alternatives;
 - The identification of an appropriate “area of search” for a site, having regard to key constraints and opportunities across the District, including areas of Green Belt, landscape or other environmental sensitivity and land ownership. It would most likely need to be prepared on a strategic or “larger than local” approach;
 - A detailed assessment of the suitability and sustainability of potential sites for the new settlement and potential environmental impacts, mindful of the potential alternatives for meeting housing needs. This would most likely need to be prepared on a strategic or “larger than local” approach;
 - Detailed infrastructure planning for the new settlement. This would need to be undertaken based on engagement with infrastructure providers in the context of potential delivery and finance options;
 - Detailed appraisal and selection of an appropriate delivery vehicle, based on thorough engagement with key stakeholders, potential delivery partners and funding/investment opportunities;
 - Detailed consideration of development viability. This will need to be prepared mindful of the proposed delivery vehicle and potential funding and investment opportunities; and
 - Arrangements for long-term asset management, including site maintenance, transfer of assets to LPA control (if appropriate) and ongoing infrastructure management.
- 7.15 All of the above must be subject to appropriate consultation and engagement with key stakeholders on an informal (i.e. ongoing) and formal basis. All will be of crucial importance to inform a robust SEA and SA process as part of the development plan.
- 7.16 **Undertaking the above would be a complex and lengthy process which is likely to take several years.** A detailed programme of key stages of work will be capable of being prepared once NHDC has given initial consideration to the early scoping of these streams of work discussed above.
- ### **Immediate next Steps**
- 7.17 There are a series of actions which NHDC might now undertake. These actions will assist NHDC in its consideration of the early scoping works referred to above and lay some initial groundwork for a future planning process (for example, to underpin a Local Plan Review):
- Securing strategic advice / a legal opinion from a suitably qualified solicitor or barrister. This could provide useful advice about:
 - The general approach to establishing a new settlement, including the implications for the Local Plan process and wider planning strategy; and
 - The potential delivery vehicles for the settlement, in the context of the current and/or future planning and legislative frameworks;

- An assessment of long-term housing needs, beyond the plan period. This will enable NHDC to consider the period over which the new settlement is planned for and the potential scale of development which might be required. This, in turn, will inform future work regarding the potential scale and form of the new settlement;
- Initial non-binding and exploratory scoping assessments in respect of a) the physical capacity of the District to accommodate a new settlement and b) a potential “area of search” for a new settlement. This would comprise a high level review of key constraints and opportunities (including infrastructure), including areas of Green Belt sensitivity and land ownership. It would most likely need to be prepared on a strategic or “larger than local” approach.
- Investigating particular issues such as delivery mechanisms, stakeholder roles & responsibilities.
- Preparing a more detailed Action Plan to set out tasks to a defined programme going forward.

Appendix 1: Auditing the New Towns

A profile of a range of Garden Cities and New Towns has been assembled, drawing upon available secondary datasets. Settlements have been defined according to the subdivided built-up areas defined by ONS²⁹.

Table 1.1 Profile of Existing Garden Cities, New Towns and New Settlements

Town	Year designate d/ started	Size (ha)	Demographics						Economy		Housing Stock				Social infrastructure						
			Total Pop.	Total Hsholds.	% age 0-15	% age 16- 64	% age 65+	% single hsholds	% family hsholds	Jobs (workplace emp.)	% residents commuting less than 5km to work	Total dwellings	Density (dph)	% flats	% detached	% social rented	Primary schools	Secondary schools	Gross retail area in town centre (sqm)	Doctors	Leisure & sports centres
Garden Cities																					
Letchworth	1903	978	33,249	13,990	20%	62%	19%	30%	65%	15,825	47%	14,271	15	20%	20%	31%	10	2	36,589	4	3
Garden City																					
Welwyn	1920	1,390	48,380	20,191	21%	63%	16%	30%	65%	32,353	47%	20,943	15	22%	14%	32%	18	4	77,575	12	0
Garden City																					
First Generation New Town																					
Stevenage	1946	2,152	89,663	37,038	21%	66%	13%	29%	65%	45,680	48%	37,741	18	20%	12%	27%	31	7	78,968	11	4
Crawley	1947	2,437	106,943	42,925	21%	67%	13%	28%	62%	78,265	51%	43,671	18	24%	14%	24%	28	7	139,380	15	2
Hemel Hempstead	1947	2,347	94,932	39,427	20%	65%	15%	29%	64%	47,266	45%	40,734	17	27%	16%	26%	34	7	97,955	14	3
Harlow	1947	1,860	82,059	34,668	21%	64%	15%	31%	63%	39,865	50%	35,770	19	25%	9%	31%	32	5	107,701	10	8
Peterlee	1948	941	27,871	11,958	19%	64%	17%	30%	65%	8,097	53%	12,211	13	5%	15%	25%	14	4	35,231	9	4
Hatfield	1948	767	37,577	13,374	15%	74%	11%	29%	52%	26,093	46%	13,987	18	29%	10%	32%	12	4	25,273	7	4
Basildon	1949	2,551	107,123	44,691	21%	65%	14%	31%	62%	61,040	45%	45,392	18	21%	14%	31%	35	4	128,998	23	3
Bracknell	1949	2,058	77,256	32,181	21%	67%	12%	28%	65%	42,678	43%	32,833	16	20%	22%	21%	20	4	46,583	14	5
Cwmbran	1949	1,417	46,915	19,828	19%	63%	18%	29%	65%	24,348	51%	20,536	14	13%	18%	25%	18	2	62,471	8	4
Corby	1950	1,951	54,927	22,555	21%	66%	13%	27%	65%	27,663	62%	23,356	12	12%	18%	22%	20	3	56,751	9	1
Newton Aycliffe	1947	890	25,964	11,171	19%	63%	17%	29%	67%	13,090	44%	11,445	13	5%	23%	27%	12	2	27,210	3	2
Second Generation New Town																					
Skelmersdale	1961	945	34,455	14,142	22%	64%	13%	29%	65%	17,716	53%	14,789	16	15%	15%	29%	21	4	24,030	6	1
Telford	1963	4,618	142,723	57,222	21%	65%	14%	25%	67%	73,286	52%	59,033	13	11%	28%	21%	20	6	96,279	9	7
Redditch	1964	2,183	81,919	33,801	20%	66%	14%	27%	67%	34,325	54%	34,421	16	16%	26%	22%	27	4	88,044	10	3

²⁹ No built up area defined for New Ash Green, and therefore a statistical geography has been constructed on a 'best fit' basis using output areas

Runcorn	1964	1,977	61,789	26,347	21%	66%	14%	30%	65%	28,494	51%	26,889	14	11%	18%	30%	29	4	18,258	4	1
Washington	1964	1,829	67,085	28,490	18%	67%	15%	28%	68%	38,381	45%	29,232	16	12%	19%	27%	17	4	56,893	4	2
Third Generation New Town																					
Milton Keynes	1967	4,567	171,750	66,979	23%	68%	9%	26%	65%	108,952	51%	69,272	15	18%	29%	19%	51	8	208,764	21	6
Peterborough	1967	4,377	161,707	65,247	22%	65%	13%	29%	60%	93,507	57%	67,467	15	18%	24%	21%	26	7	196,830	35	7
Newtown	1967	465	11,357	5,015	21%	62%	17%	35%	60%	8,015	70%	5,207	11	15%	24%	31%	9	1	24,098	3	1
Northampton	1968	5,671	215,173	89,984	20%	66%	13%	30%	61%	118,244	55%	92,786	16	18%	22%	17%	40	8	178,921	34	3
Warrington	1968	4,488	165,456	70,510	19%	65%	15%	29%	66%	97,339	51%	72,733	16	12%	21%	17%	43	4	135,703	34	10
Average	n/a	2,404	88,793	36,550	20%	66%	14%	29%	64%	49,159	51%	37,595	15	17%	19%	25%	26	5	87,350	13	4

Source: Census 2011, Pitney Bowes, 2016

In addition to the detailed data presented in Table 1.1 it is also important to consider the rationale for the development of the settlement and its location in the context of the transport infrastructure which serves the settlement.

Table 1.2 Rationale for the development of the New Settlements and the transport infrastructure

Town	Rationale for Construction	Locational Factors	Road Infrastructure	Rail Infrastructure
Garden Cities				
Letchworth	A demonstration of the principles established by Ebenezer Howard.	Available land outside of Hitchin; approximately 30 miles north of Central London	Located adjacent to A1 (M) providing direct access north towards Peterborough and south towards London	Letchworth Garden City station (Cambridge Line) - services towards London and Cambridge
Welwyn Garden City	Overspill for London	20 miles north of Central London, in rural belt outside of M25	A414 runs east towards Hertford; A1 (M) runs north towards Stevenage and south towards the M25 and London	Welwyn Garden City station (East Coast Main Line) - services towards London and Cambridge/Peterborough
First Generation New Town				
Stevenage	Overspill for London	27 miles north of Central London, as part of post war ring of new towns around London	A602 runs south-east towards Ware; direct access to A1(M) J7 providing connectivity north towards Letchworth and south toward London	Stevenage station (East Coast Main Line) - services north towards Peterborough, Leeds/Newark/York, Newcastle and Edinburgh; services south to London
Crawley	Overspill for London	27 miles south of Central London; historically located on the main route between London and Brighton;	M23 provides connectivity north towards the M25 and London; A23 links to the south towards Brighton	Crawley (Arun Valley Line), Three Bridges (Brighton Main Line) and Ifield (Arun Valley Line) stations all located in

		Gatwick airport to the north of the town		the Crawley urban area; connections towards London, Brighton, Southampton and Portsmouth from Three Bridges; connections to Horsham and London Bridge from Crawley/Ifield
Hemel Hempstead	Overspill for London	20 miles north of Central London; developed post war in available land outside of London	M1 and M25 intersect to the south of the town, providing strong orbital connectivity of London as well as links to the north	Hemel Hempstead station (West Coast Main Line) located to the west of the town in Boxmoor - Services towards London, Croydon and the Midlands
Harlow	Overspill for London	20 miles north east of Central London; developed post war in available land outside of London	To the south east of the town, the M11 at Junction 7 provides connectivity south towards the M25/London and north towards Bishop's Stortford and Cambridge	Harlow Mill and Harlow Town stations (West Anglia Main Line) provide connections north towards Cambridge and Stansted Airport, and south towards London
Peterlee	Housing to accommodating mining industries	13 miles north of Middlesbrough, 10 miles south of Sunderland; just over one mile from the Durham coast	A19 running west of the town offers direct connectivity to the north towards Sunderland and Newcastle, and south towards Middlesbrough	Formerly served by Horden Railway Station to the east of the town on the Durham Coast Line until the station was closed in 1964
Hatfield	Overspill for London	18 miles north of Central London; developed post war in available land outside of London	Junction 3 of the A1(M) offers connectivity north towards Welwyn Garden City and Peterborough, and south	Hatfield station (East Coast Main Line) to the east of the town centre offers connectivity to Kings Cross

			towards London	and Peterborough
Basildon	Overspill for London	27 miles east of Central London; developed from the conglomeration of four small villages (including Basildon Village)	Well connected by a number of 'A' roads including the A13, A130 and A127; these offer connectivity towards Southend, Chelmsford and London	Basildon and Pitsea Stations (London, Tilbury and Southend Line) run between Southend and Fenchurch Street
Bracknell	Overspill for London	28 miles west of Central London; selected over White Waltham as the area had better agricultural land and is on a railway line	A322 connects Bracknell south towards the M3 and the A329 (M) connects the town to the M4 to the north; both motorways within 5 miles of the town	Bracknell and Martins Heron (Waterloo-Reading Line) connect the town to the east towards London and west towards Reading
Cwmbran	Provide new employment opportunities in the south eastern part of the South Wales Coalfield	4 miles north of Newport; Church Village (another nominated New Town site) unsuitable as new housing there would have interfered with coalmining expansion	A4042 to the east of the town connects south towards Newport and north towards Abergavenny	Cwmbran station (Welsh Marshes Line) connects the town with Newport as well as Cardiff and Manchester
Corby	Better quality housing to support existing employment	Located approximately 20 miles from both Leicester (to the west) and Peterborough (to the east)	Number of 'A' roads connect Corby to local destinations including Market Harborough (A427) and Kettering (A43); Corby around 20 miles east of the M1/M6 junction	Opened in 2009, Corby station (Oakham to Kettering line) offers connectivity to St Pancras via Kettering; occasional services north to Derby via Oakham
Newton Aycliffe	Supporting employment growth facilitated through the	6 miles north of Darlington and 13 miles west of	A1 (M) to the east of the town connects north towards	Newton Aycliffe station (Tees Valley Line) connects the

	creation of a new industrial estate (former Royal Ordnance factory).	Middlesbrough; ample poor farmland available for the settlement	Durham and Newcastle, as well as south towards Leeds	town to Middlesbrough and Darlington to the south as well as Bishop Auckland to the north
Second Generation New Town				
Skelmersdale	Overspill for Liverpool and wider Merseyside	13 miles north east of Liverpool City Centre and 6 miles west of Wigan	M58 to the south of the town connects with Liverpool and the A577 connects east to Wigan; A570 to the west of the town connects to Southport and St. Helens	Skelmersdale station closed in 1956; Upholland and Orrell stations (Kirkby Branch Line) to the south of the town connect to Wigan and Kirkby
Telford	Overspill from congested urban areas in the midlands and to regenerate the East Shropshire coalfield area.	13 miles east of Shrewsbury, 26 miles north west of Birmingham; covers the Dawley, Wenlock, Oakengates, Wellington and Shifnal areas	M54 connects the town to the east towards the M6 north of Birmingham; A5 connects west towards Shrewsbury	Telford Central, Wellington and Oakengates (Shrewsbury to Wolverhampton Line) connect the town to Shrewsbury and Wolverhampton
Redditch	Overspill primarily from Birmingham	12 miles south of Birmingham, serving as a flagship for town planning	Number of 'A' roads connect to the M5, M42 and M40 motorways; A435 connects north towards Birmingham	Redditch station the terminus of the Cross City Line, connecting north towards Birmingham and Lichfield
Runcorn	Location on strong transport infrastructure connections to provide housing and employment opportunities for people from Liverpool and	7 miles south-west of Warrington, located on the River Mersey adjacent to existing warehousing and industry	A533 links towards the Liverpool City Region across the Silver Jubilee Bridge; A56 to the south of the town links to the Wirral and Manchester	Runcorn station (West Coast Main Line) offering services towards Liverpool, Birmingham and London Euston

	North Merseyside.			
Washington	Reverse economic decline of the area and encourage social renewal.	6 miles south of Newcastle and 6 miles east of Sunderland; creation of a number of new villages alongside the existing Washington Village	A1231 links the town to Sunderland as well as the A1(M); A1 (M) provides onward connections to Newcastle and Yorkshire	Town is located on the mothballed Leamside Line; Washington one of the largest towns in Britain without a railway line
Third Generation New Town				
Milton Keynes	Overspill from London	45 miles north west of Central London; located to be equidistant from London, Birmingham, Leicester, Oxford and Cambridge in the hope that it would become self-sustaining	To the east of the town, the M1 connects Milton Keynes south towards Luton and the M1, and north towards Northampton and Leicester	Milton Keynes Central, Wolverton and Bletchley (East Coast Mainline) offer connectivity towards London, Birmingham, Manchester and Scotland; Fenny Stratford and Bow Brickhill (Marston Vale Line) connects east towards Bedford
Peterborough	Large scale expansion to accommodate overspill from London.	75 miles north of Central London	34 miles of parkways serve as high-speed thoroughfares in the town; A1 and A15 link connect the town north towards Lincolnshire and Yorkshire; A1 (M) connects south towards London	Peterborough station (East Coast Main Line) offers connectivity north towards Yorkshire and Scotland, and south towards London
Newtown	Turn around picture of declining population in Mid-Wales and promote	Located 8 miles east of the Wales-England border in the River Severn Valley	A483 connects north towards Welshpool, Shrewsbury and Oswestry, and south towards	Newtown station (Cambrian Line) connects to Aberystwyth and Shrewsbury

	economic growth.	Llandrindod Wells		
Northampton	Overspill from London	60 miles north west of Central London; rapid growth after the construction of the M1 motorway to the south west of the town	M1 connects the town north towards the East Midlands and south towards London; number of 'A' roads including the A43 and A428 connect to local destinations including Bedford and Kettering	Northampton station (Northampton Loop of West Coast Main Line) connects the town north towards Birmingham and south towards London
Warrington	Overspill from Manchester and the revitalisation of industrial areas.	Located approximately 16 miles from both Manchester (to the east) and Liverpool (to the west); growth of light industry post war	M6, M56 and M62 encompass the town on three sides, linking to destinations including Liverpool, Manchester, Preston and Birmingham	Warrington Bank Quay (West Coast Main Line) links to London Euston and Glasgow; Warrington Central (Liverpool to Manchester Line) links to both Liverpool Lime Street and Manchester Piccadilly

Source: Turley, Mott MacDonald, 2016

Appendix 2: Settlement Modelling Assumptions

In order to build the hypothetical settlements a number of assumptions have been applied to generate the mix of development uses and their respective land areas. The following table sets out the key assumptions for those aspects which are not one of the variables in the modelling considered in section 4. These assumptions have been drawn from a review of available literature and best practice. They are considered reasonable for the purposes of the exercise. In moving to the full design of a new settlement it would be anticipated that these assumptions would be evidenced in greater detail and considered independently in the context of North Hertfordshire and the settlement being planned.

Table 2.1 Settlement Modelling Additional Assumptions

Variable	Assumption	Source	Notes
Employment mix	<ul style="list-style-type: none">- Non-B use employment. Assumption that 50% of jobs are in non-B use classes.- The residual 50% of jobs are assumed to be in B-uses. The split by B use class is assumed to be B1a 60% / B1b/c and B2 15% / B8 25%	Analysis of UK and North Hertfordshire split of jobs in 2015 and attribution to B-classes using Turley Employment Land calculator.	It is recognised that an individual new settlement may have a bespoke employment mix. In the absence of more detailed data the split is considered reasonable and broadly reflects the estimated split of non B and B use jobs in North Hertfordshire in 2015 (46% B-use and 54% non B-use). Non-B use jobs reflect increasing proportions of self-employment and jobs in sectors such as construction, education, retail, health, utilities, telecoms, public admin, civil engineering.
Employment densities	- B1a office 12 sqm per employee (professional services)	HCA Employment Density Guide 2015	B1a density proxy used for professional services

	<ul style="list-style-type: none"> - B1c/b and B2 41.5 sqm per employee - B8 75 sqm per employee 		<p>B1c/b and B2 - average industrial & manufacturing and light industrial – in R&D Space range</p> <p>B8 – Selected between Regional Distribution Centre and ‘Final Mile’ Distribution Centre</p>
Education	<ul style="list-style-type: none"> - Nursery school 1 facility per 4,821 homes (site area 0.36 ha per facility) - Primary school 1 per 1,350 homes (site area 2.4 ha per facility) - Secondary school 1 per 4,725 homes (site area 11 ha per facility) 	<p>NHDC ‘Infrastructure Delivery Plan for North Hertfordshire 2011 to 2031’ (Jan 2013)</p> <p>Land budgets – ‘Area guidelines for mainstream schools - Building Bulletin 103’ HCA (June 2014)</p>	<p>Assumed 300 place nursery</p> <p>Primary school - Applied maximum site area for 420 pupil school</p> <p>It is noted that the modelling assumes that schools are all separate buildings in their own grounds. Land savings may occur if, for example, nursery facilities are on the same site as the primary school.</p>
Healthcare	<ul style="list-style-type: none"> - GP Practice assumes 1 GP practice per 5,400 people (site area per facility 0.1 ha) - Dental practice assumes 1 per 1,400 people (site area per facility 0.02 ha) 	<p>NHDC ‘Infrastructure Delivery Plan for North Hertfordshire 2011 to 2031’ (Jan 2013)</p> <p>Royal College of General Practitioners</p>	<p>Large settlements may require a primary healthcare facility and potentially wider facilities such as acute care facilities. This would need to be considered in the context of the availability of facilities in adjacent settlements / across the authority.</p>
Sport and Leisure	<ul style="list-style-type: none"> - Swimming assumed 1 pool per 20,000 people (site area per facility 1.25 ha) - Sports Hall 1 facility per 12,500 people (site 	<p>Sports England Facilities Calculator</p>	<p>Possible land savings could be achieved where facilities are combined on a single site.</p> <p>Indoor bowls facility unlikely to be</p>

	<p>area per facility 1.25 ha)</p> <ul style="list-style-type: none"> - Artificial pitch 1 facility per 33,333 people (site area per facility 0.8 ha) - Indoor bowls 1 centre per 100,000 (site area per facility 0.2 ha) 	required with the exception of the larger settlement with this dependent upon the availability of facilities elsewhere in proximate settlements / authority.
Community / local facilities	<ul style="list-style-type: none"> - Community space / hall 1 facility per 12,000 people (site area per facility 1.25 ha) - Library 1 facility per 20,000 people (site area per facility 0.06 ha) - Post office 1 per 5,500 population (site area per facility 0.03 ha) - Public house 1 per 6,000 population (site area 0.12 ha per facility) 	<p>Community Space - North Hertfordshire District Council Community Halls Strategy (2011) Libraries - NHDC 'Infrastructure Delivery Plan for North Hertfordshire 2011 to 2031' (Jan 2013) Post offices – House of Commons Library Briefing Paper (9th October 2015) 'Post Office Numbers' Public House – 'Cambridge Public House Study' GVA Humberts Leisure (September 2012)</p>
Retail	<ul style="list-style-type: none"> - Convenience / small shops – 1 per 1,500 people (individual shop floorspace of 75 sqm gross external area plus additional parking area and servicing allowance) - Superstore – 1 per 24,000 people (Floorspace of 2,750 sqm gross external area plus additional parking area and servicing allowance) 	Whilst a floorspace is assumed for a single supermarket the model adjusts to reflect the size of population and therefore assumes smaller formats where the threshold of 24,000 people is not reached.
Open Space	<ul style="list-style-type: none"> - Parks and gardens 0.0008 ha per person 	<p>Land budgets taken from Fields in Playing pitches includes – football /</p>

<ul style="list-style-type: none"> - Amenity green space 0.0006 ha per person - Natural / semi natural space 0.0018 ha per person - Playing pitches 0.0012 ha per person - All outdoor sports (non-pitch) 0.0016 ha per person - Children's play 0.00025 ha per person - Other outdoor e.g. MUGA 0.00003 ha per person - Allotments 0.00023 ha per person - Churchyard / cemetery 0.00050 ha per person 	<p>Trust (2015) document ' Guidance for Outdoor Sport and Play Beyond the Six Acre Standard – England'</p> <p>Land budget for allotments taken from the NHDC 'Infrastructure Delivery Plan for North Hertfordshire 2011 to 2031' (Jan 2013)</p> <p>Land budget for churchyards and settlements taken from a publication by Newark and Sherwood planning policy</p>	<p>rugby union / hockey / lacrosse / cricket</p> <p>Other outdoor (non-pitch) sports includes – athletics / tennis courts / bowling greens</p>
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North Hertfordshire New Settlement Study

Final Report

April 2016