



Sustainability Appraisal of North Hertfordshire Local Plan

FINAL REPORT 2022

North Hertfordshire District Council
Sustainability Appraisal of North Hertfordshire Local Plan

Final Report

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Non-Technical Summary

1. Background and approach

Purpose and contents of this report

This report is a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the North Hertfordshire Local Plan. It is the final report of this process and has been prepared to accompany the publication of the adopted Local Plan. In simple terms it aims to provide information on the social, economic and environmental effects of the Adopted Local Plan.

About the Local Plan

Overview

The new Local Plan will replace the 1996 Local Plan. It will cover the period 2011-2031 and will set targets for new homes, employment and retail development, and identify areas of land where these developments should be built. It will also consider what infrastructure is needed to support development.

The development of the Local Plan was restarted following changes to the planning system in March 2012.¹ Work on a replacement Local Plan captured by SA requirements had begun in 2005 under the preceding regional planning system, with the publication of an Issues and Options Paper² for the Core Strategy and a Sustainability Appraisal Scoping Report³. That development work is referred to in this Sustainability Appraisal report.

The Plan was formally published in October 2016 and submitted for examination in June 2017. It was the subject of examination hearings from November 2017 to March 2018 and from November 2020 to February 2021.

The Inspector's report was received in September 2022 and presented for adoption in November 2022. This is more than half-way through the twenty-year period covered by the Plan with just nine years remaining to the end of the plan period of 2031⁴. This is unusual and variously reflects the age of the existing (1996) saved plan, the 'stop-start' nature of attempts to prepare a replacement and the extended examination which took more than five years to conclude. However, the Plan has been found 'sound' on this basis and includes a commitment to undertake a review by the end of 2023 which will roll the plan forward to a new time horizon into the 2040s.

¹ With the introduction of the National Planning Policy Framework

² September 2005

³ September 2005

⁴ Compared to the advice in the NPPF that Plans should set policies for a period of 15 years from the point of adoption.

Local Plan objectives

The Plan objectives are informed by the National Planning Policy Framework (NPPF), which at paragraph 156 sets the strategic priorities that all local plans need to consider. The Plan objectives are shown in the table below.

Table 1 Local Plan objectives

Environmental	
ENV1	Direct development towards the most sustainable locations which seek to maintain the existing settlement pattern.
ENV2	Protect and enhance the historic character of North Hertfordshire's towns, villages, hamlets and landscape by promoting good design that creates a distinctive sense of place.
ENV3	Protect, maintain and enhance the District's historic and natural environment, its cultural assets and network of open spaces, urban and rural landscapes.
ENV4	Mitigate the effects of climate change by encouraging the use of sustainable construction techniques, the appropriate use of renewable energy technologies and reducing the risk of flooding.
ENV5	Reduce water consumption, increase biodiversity and protect and enhance the quality of existing environmental assets by enhancing new green spaces and networks of green space for both recreation and wildlife.
Economic	
ECON1	Support a vibrant, diverse and competitive local economy that provides a range of job opportunities enabling new and existing businesses to grow and thrive.
ECON2	Ensure an adequate supply of employment land, office accommodation and support facilities to meet the needs of new and existing businesses within our urban and rural areas.
ECON3	Provide for a greater mix of skilled jobs as well as providing opportunities for further education and skills training to promote investor confidence in locating to, or remaining in, the District.
ECON4	Maintain and enhance the vitality and viability of our town, neighbourhood and village centres, as well as strengthening the retail roles of our town centres ensuring that they remain competitive and attractive for modern-day use.
ECON5	Support and enhance local businesses, services and facilities in urban and rural areas through tourism.
ECON6	Sustain the vitality of our villages and the rural economy in supporting rural diversification whilst ensuring development is of an appropriate scale and character.
ECON7	Improve access opportunities, minimise the need to travel, and encourage journeys to be made by sustainable means of transport to ease congestion, reduce carbon emissions and the impacts on air quality management areas.
ECON8	Ensure all development is supported by the necessary provision of, or improvements to, infrastructure, services and facilities in an effective and timely manner to make development sustainable and minimise its effect upon existing communities
Social	

SCO1	Identify locations for a range of types and tenures of homes, including affordable homes, to meet identified needs and provide adequate housing for an increasing and ageing population.
SCO2	Encourage safe and vibrant mixed communities that provide for the needs of all North Hertfordshire's residents.
SCO3	Improve access to, maintain and make provision for new facilities including community, sports, leisure, health and cultural facilities, that meet the needs of all North Hertfordshire's communities
SCO4	Enable rural communities to plan to meet their own local needs, especially through neighbourhood planning

Approach used

The appraisal process is shown in the table below. It also shows how the different tasks relate to the preparation stages for a Local Plan. This report is the Final SA report which is being published alongside the post-adoption statement as part of Stage E.

Table 2: Sustainability appraisal stages and tasks

Local Plan Stage 1: Pre-production – Evidence gathering	
Appraisal stage A: Setting the context and objectives, establishing the baseline and deciding on the scope of the Sustainability Appraisal	
A1	Identifying other relevant policies, plans, programmes and sustainability objectives
A2	Collecting baseline information
A3	Identifying sustainability issues and problems
A4	Developing the Sustainability Appraisal framework
A5	Consulting on the scope of the sustainability appraisal
Local Plan Stage 2: Production	
Appraisal stage B: Developing and refining options and assessing effects	
B1	Testing the plan objectives against the Sustainability Appraisal framework
B2	Appraising the plan options
B3	Predicting the effects of the plan
B4	Evaluating the effects of the plan
B5	Considering ways of mitigating adverse effects and maximising beneficial effects
B6	Proposing measures to monitor the significant effects of implementing the plan
Appraisal stage C: Preparing the Sustainability Appraisal (SA) Report	
C1	Preparing the SA Report
Appraisal stage D: Consulting on the preferred options of the Local Plan SA report	
D1	Public participation on the preferred options of the Local Plan and the SA report

D2 (i) Appraising significant changes
Local Plan Stage 3: Examination
D2 (ii) Appraising significant changes resulting from representations
Local Plan Stage 4: Adoption and monitoring
D3 Making decisions and providing information
Appraisal stage E: Monitoring the significant effects of implementing the Local Plan
E1 Finalising aims and methods for monitoring
E2 Responding to adverse effects

Comments on the process including difficulties experienced

The table below show comments on difficulties and issues which were experienced in different stages of the appraisal process, and also where information is provided on each stage of the process.

Table 3: Comments on the process and links to information

Appraisal stage	Comments and difficulties and where information can be found
A1 Identifying other relevant policies plans and programmes and sustainability objectives	Many policies could potentially be relevant to the plan. Those ones reviewed were judged to be the key strategic documents relevant to the plan and the appraisal. The results of this stage of the process are summarised in section 2. and the detail is provided in Appendix 1 of the full SA report.
A2 Collecting baseline information	Some difficulties were experienced in updating the original data. Most information remains available, although a number of data production agencies have changed or disbanded. Information on North Hertfordshire is included in section 2 below, and the detailed baseline data is provided in Appendix 2 of the full SA report.
A3 Identifying sustainability issues and problems	Quantitative data was not always available to inform the identification of key issues. In addition, some strategy documents which originally informed the review of issues were not updated. However, enough information was available to produce the 2016 SA. The issues are summarised in section 0 below.
A4 Developing the SA framework	The framework was reviewed as part of the 2016 SA. This resulted in a clearer statement of the assumptions behind site appraisal judgements. The framework is shown in section 3 below.
A5 Consulting on the scope of the SA	The comments from consultees and how they were taken account of are noted in Appendix 12 of the full SA report
B1 Testing the Local Plan Objectives against the SA Framework	The ongoing assessment of the local plan objectives was one way the SA influenced the Plan development. Results of the testing process, and changes made, are shown in Appendix 4 of the full SA report.

Appraisal stage	Comments and difficulties and where information can be found
B2 Developing the options	The policy context has changed significantly during the plan development process, particularly the requirement to develop a target for housing numbers, and this has required several reviews of options for housing provision. Options are discussed in section 4 below.
B3 Predicting the effects of the Local Plan B4 Evaluating the effects of the Local Plan B5 Considering ways of mitigating adverse effects and maximising beneficial effects	There were some issues in gathering data to test the effect of the Plan. These are discussed in Appendix 5 of the full SA report. Detailed information on testing the Plan policies and sites is included in sections 5 and 6 of the full SA report. Details of the testing process can be found in Appendices 6, 7, 10 and 11 of the full report. It will not be possible to mitigate all adverse effects of the Plan. This is discussed in section 6 below and detailed information is provided in Appendices 8 and 9 of the full report.
B6 Proposing measures to monitor the significant effects of the Local Plan	Monitoring is resource intensive and therefore needs to be realistic and measurable. Information on monitoring is included in section 7 below.

2. About North Hertfordshire

The following gives a brief profile of the District and provides information on the policy context, key sustainability issues and what would happen without a Plan.

More detailed information on the current state of the District has been collected to support the SA and is contained in Appendix 2 of the full SA report.

Environment

North Hertfordshire comprises a broad band of 375km² of attractive undulating countryside following the chalk escarpment of the Chiltern Hills and East Anglian Heights, which are separated by the 'Hitchin Gap' through which the East Coast Main Line railway passes. Most of the rural area is farmland, although there is some woodland, especially in the west of the District. Part of the District around Lilley and Hexton is within the Chilterns Area of Outstanding Natural Beauty. The District contains a variety of habitats for wildlife and plants, including areas of high biodiversity - notably the chalk grasslands and chalky boulder clay woodlands and meadows in the east of the District, the oak and hornbeam woodlands of the west of the District and the wet meadows and fens along the River Hiz and its tributaries. This includes six Sites of Special Scientific Interest. Three European wildlife sites are within 15km of the District's boundaries⁵.

The District has four main settlements: the historic market towns of Hitchin, Baldock and Royston and the world's first Garden City, Letchworth. It also includes most of the Great Ashby estate, which

⁵ Habitat Regulation Assessment Screening Report, NHDC, Feb 2013.

is part of the urban area of Stevenage, and numerous villages and hamlets. The District has 35 civil parishes and three unparished areas (Hitchin, Letchworth and Baldock). All the towns and many of the villages have historic areas and buildings; there are 40 conservation areas and approximately 2750 listed buildings. The District has a long history of human habitation and is crossed by the prehistoric Icknield Way. It also contains many ancient monuments, including the Iron Age Ravensburgh Castle at Hexton, the largest fort in south-east England.

In common with the rest of the world, the District needs to look at how to minimise the impacts of climate change, both by minimising the contribution human life makes to climate change and by adapting to new climate patterns. Whilst the District is highly unlikely to be directly affected by rising sea levels (although if all the world's ice sheets melted, Hitchin and Royston would likely be submerged⁶), the changing climate will have a profound effect on our water and food supplies and way of life in general.

Society

The District has a population of about 127,100⁷ people. Just over 75% of the population live in the four towns or Great Ashby. A combination of factors, including people living longer, fewer people living in each home, proximity to London and relatively low interest rates, have been causing housing costs to rise. The cost of housing relative to local incomes in the District is high and is beyond the reach of many, especially young adults. This is reflected in a skewed age profile - the District has significantly fewer people aged 18 - 30 than it does under 18s and over 30s.

All the towns have a range of sport, recreation and community facilities, schools and libraries. Knebworth, the largest village, also has a library. There are three public indoor swimming pools, two public outdoor swimming pools and three major leisure centres. There are several museums and a three-screen cinema at Letchworth Garden City. There are several community and village halls across the District.

Economy

The District has good rail and road links. There is a range of local bus services, although services can be infrequent, particularly in the rural area. Car usage and ownership is high in the District, and traffic congestion is seen as one of the areas where residents would most like to see improvements.⁸

The District is also near to two international airports, London Luton Airport immediately adjoining the District boundary to the west and London Stansted Airport further away to the east. They are a source of employment and bring economic benefits, but they also bring environmental impacts from noise, air pollution and vibrations, both from the air traffic itself and from land traffic to and from the airports.

There is no one dominant centre serving the District. Hitchin town centre is the largest retail destination, followed by Letchworth, and there are large employment areas in Letchworth, Hitchin and Royston. There are traditional markets in Hitchin, Baldock and Royston and Business Improvement Districts are currently operating in Hitchin, Letchworth Garden City and Royston. The

⁶ National Geographic Climate Change Map

⁷ From 2011 Census

⁸ Census 2011 / NHDC Local Plan Preferred Options consultation responses

District's settlements have a complex system of interdependencies with each other and with surrounding larger towns, notably Stevenage, Luton, Cambridge, Welwyn Garden City, Milton Keynes and London. A substantial proportion of the District's population commutes to these larger centres for work and for shopping. There is noteworthy leakage of retail expenditure from the District's population using retail centres elsewhere⁹. In the rural areas, there are a number of village shops and services, although these have declined in recent years.

What would happen without the Plan?

Government guidance requires the SA report to consider the likely evolution of the environment without implementation of the plan.

By not preparing a Local Plan the Council would lose control of where development occurs. This would mean that any potential development could be considered favourably depending on the merits of the application. Whilst NPPF policies and other national guidance would apply, locally set policies that could deliver local benefits and take account of local circumstances would not be implemented. It would also not be possible to plan strategically for development.

The table below outlines what could happen against each of the sustainable development objectives used in this appraisal.

Table 4: What would happen without the Plan?

SA objective	What could happen in the absence of a plan
1 Achieve sustainable levels of prosperity and economic growth	Economic development and redevelopment would continue within the existing designated areas and in accordance with the NPPF. However, additional land for economic development, as detailed in evidence to the Local Plan, would not come forward as some of it is proposed in areas that are currently designated Green Belt.
2(a) Minimise the development of greenfield land and other land with high environmental and amenity value	Whilst national policy encourages use of brownfield land, the potential for development to occur anywhere means that development would not prioritise the use of brownfield sites and land of low environmental and amenity value.
2(b) Provide access to green spaces	Whilst national policy would apply, locally defined policies providing guidance on improving access for all residents of the District to green spaces would not necessarily occur.
2(c) Deliver more sustainable location patterns and reduce the use of motor vehicles	Unplanned development would not necessarily locate development in a way that would reduce the need to travel or reduce car reliance, or encourage walking, cycle, bus and train use. As development would not be coordinated, there's no guarantee that it would provide affordable and accessible public transport in towns and in rural areas.

⁹ NHDC Town Centre and Retail Study (2016)

3(a) Protect and enhance biodiversity	Whilst national policies and guidance to protect biodiversity will still apply, protection of locally identified habitats and creation of links between habitats may not be taken into account.
3(b) Protect and enhance landscapes	Whilst national policies and guidance to protect and enhance landscapes, especially those of historic, recreational or amenity value as well as those within the Chilterns AONB, will apply, the unplanned development may have a cumulative impact.
3(c) Conserve and where appropriate, enhance the historic environment	Whilst national policies and guidance to conserve and enhance the historic built character of the District's towns and villages may apply locally, designated assets may not be adequately protected.
3(d) Reduce pollution from any source	National legislation would apply and so legally protected issues would be mitigated, but cumulative impacts and local issues may not be considered adequately.
4(a) Reduce greenhouse gas emissions	Locations of developments would not be planned and so opportunities for minimising energy consumption by transport and in buildings would not be realised.
4(b) Improve the District's ability to adapt to climate change	National guidance on flood risk would still apply, but sequential testing of sites would not occur in advance of application process and so areas at risk of flooding may not be considered.
5(a) Share benefits of prosperity fairly	Without a plan, development would still occur within settlement boundaries, which may contribute to deprived areas. However, pressure for residential development may impact on employment areas and the opportunities they bring.
5(b) Provide access to services and facilities for all	Without a plan, development would still occur within settlement boundaries, which may contribute to local infrastructure. However there would be no large-scale residential allocations which will include opportunities for improved infrastructure on a larger scale.
5(c) Promote community cohesion	Without a plan, development would still occur within settlement boundaries, which may contribute to local community infrastructure. However there would be no large-scale residential allocations which will include opportunities for improved community infrastructure on a larger scale.
5(d) Increase access to decent and affordable housing	Without a plan, development would still occur within settlement boundaries. However the levels of affordable housing would not reflect the levels required by the new plan and larger sites are traditionally more viable, meaning the overall quantum would be significantly reduced.
5(e) Reduce crime rates and fear of crime	Without a plan, development would still occur which may or may not impact on crime and fear of crime. Large-scale development may present greater opportunities to reduce crime through design as opposed to unplanned ad-hoc locations.

5(f) Improve conditions and services that engender good health and reduce health inequalities	Unplanned development may not help promote healthy lifestyles as it would not necessarily be located to deliver solutions in the right location. The ad hoc nature of development means that private cars would be the main mode of transport. That said, without a plan the level of housing would not be as high and so there would not be as many additional cars and noise pollution.
5(g) Increase participation in education and life-long learning	Without a plan, development could still contribute to education facilities. However large-scale development provides the opportunity for large-scale, new facilities as well as an increase in employment land.
5(h) Maintain and improve culture, leisure and recreational activities that are available to all	New large-scale development provides potential for additional greenspaces and facilities. Without a plan, spaces within urban areas will come under increasing pressure for development. The existing facilities may also be overcrowded.
6(a) Use natural resources efficiently; reuse, use recycled where possible	National standards would ensure water consumption to levels supportable by natural process and storage systems. However, uncoordinated development would not minimise the demand for raw materials or minimise wastage caused by construction methods.
6(b) Reduce waste	Whilst national policies would apply, there is no guarantee that development would reduce, reuse or recycle waste generated.
7 Promote sustainable urban living	Without a plan, redevelopment of town centre sites for mixed use could still occur depending on market share and increased population. However, it may not provide facilities in the locations that people want them and may mean an increase in out-of-town retail applications if sites in the town centre aren't deliverable.

Links to other policies, plans and programmes

As part of the Sustainability Appraisal process, research was undertaken into other relevant policies, plans and programmes (PPP) which might have an influence on the Local Plan. Relevant documents at international, national, regional and local level have been reviewed and the results are included as Appendix 1 to the full SA report. This information was used in later stages of the appraisal process. Key messages from this review are shown in the table below.

Table 5: Key messages from review of other policies, plans and programmes

SA Theme	Key messages from PPP Review
Economic activity	<ul style="list-style-type: none"> • Promote green growth • Use infrastructure levy to help fund infrastructure projects that support growth • Investment in infrastructure, including public transport infrastructure • Recognise the economic value of ecosystem services • Encourage and enable housing growth • Create local employment opportunities • Enhance skills to reduce unemployment and deprivation

	<ul style="list-style-type: none"> • Ensure that there is an adequate supply of employment land to meet local needs and to attract inward investment • Encourage growth in science and technology and creative industries • Support small businesses
Land-use and development patterns	<ul style="list-style-type: none"> • Encourage the use of previously developed (brownfield) land • Promote the re-use of derelict land and buildings • Reduce amount of contaminated land • Avoid using best and most versatile agricultural land for development • Encourage land management that will protect water quality • Improve public transport • Improve cycling and walking infrastructure • Deliver networks of green infrastructure and open space • Encourage sustainable transport and reduce the need to travel • Promote access to the countryside and green space • Reduce traffic and congestion
Environmental protection	<ul style="list-style-type: none"> • Halt biodiversity loss, support well-functioning ecosystems, and establish coherent ecological networks • Protect and enhance designated sites, priority species and habitats and ecological networks • Combat alien species • Reduce / minimise water pollution • Protect surface and groundwater quality • Prevent further deterioration of aquatic ecosystems in accordance with the Water Framework Directive • Protect and enhance natural landscapes and townscapes • Promote high quality design that protects the natural and historic environment • Respect cultural heritage assets and their settings • Improve the quality of the built environment
Climate change	<ul style="list-style-type: none"> • Reduce greenhouse gas emissions • Move towards a low carbon economy • Build resilience to climate change, and in particular flood risk • Support renewable energy • Avoid development in areas of flood risk • Reduce the risk of flooding arising from new development • Promote the use of Sustainable Drainage Systems (SuDS)
A just society	<ul style="list-style-type: none"> • Reduce fuel poverty • Promote improvements in health and wellbeing • Connect people with nature to deliver health and well-being improvements • Ensure social equality and prosperity for all • Promote integrated communities and foster social capital • Make appropriate provision for travellers • Encourage and enable housing growth and deliver an appropriate mix of housing to meet local needs, built to high design quality and environmental standards • Improve road safety • Promote walking and cycling as a healthy lifestyle choice • Ensure that air quality is maintained or improved and that air pollutants are minimised

Resource use and waste	<ul style="list-style-type: none"> • Improve water efficiency • Ensure sustainable water catchment management • Ensure appropriate investment in water and waste management infrastructure to accommodate new development • Work towards a more sustainable and efficient approach to resource use and waste management • Drive waste management up the waste hierarchy
Town centres	<ul style="list-style-type: none"> • Reinvigorate Hertfordshire's places • Address localised disadvantage in the New Towns • Improve vitality of town centres

Key sustainability issues

A review of key problems facing the District was undertaken. This drew on the collection of data about the District and the review of plans, programmes and policies, both described above. The issues identified are summarised in the table below.

Table 6: Key sustainability issues

Economic activity
Need to provide more highly-skilled employment opportunities in the District. There is a significant net daily outflow of commuters, with the average out-commuter being more highly skilled than the average in-commuter.
Difficulties in competing with large urban centres for the provision of employment and facilities.
Promotion of rural tourism. Visitors can be important to rural areas, but the District is not seen as a prime tourist location.
Land use and development patterns
Significant and increasing pressure on greenfield sites in order to meet the needs for housing and economic growth.
The development of greenfield sites on the edges of existing settlements may reduce access to open countryside for existing residents.
Population and mobility factors have changed the function of villages from employment service centres to dormitory/residential functions reducing their social and physical diversity.
The density of traffic on the principal road network is high and increasing but the rural nature of the District makes the provision of sustainable travel modes more challenging.
Environmental protection
Pressures on locally significant habitats and species in the District. These include fragmentation of habitats, loss of corridors and the direct impacts of agriculture and new development, including wastewater treatment, water extraction, and recreational disturbance.
Landscape and townscape character likely to be impacted by the significant level of new development needed in the District.
The District's rich heritage of market towns and the Garden City suggest that there are localised heritage issues which will arise over more detailed site selection.

Quality of surface and ground water could be threatened by the water supply needs and drainage from future developments. North Hertfordshire is in an area of groundwater sensitivity and there are constraints on sewage infrastructure around Royston and Stevenage.
Air quality issues could become more significant with continued growth in development and traffic.
Climate change
Emissions of greenhouse gases in the District could rise with further development in the District and associated growth in transport.
A significant number of existing homes and potential new development sites face surface water flood risks.
A just society
Whilst the District is relatively prosperous there are pockets of income and/or multiple deprivation in relation to national standards. In the towns these occur in parts of Hitchin and Letchworth. In the rural areas specific issues are isolation and lack of access to services.
There has been a reduction in village services and employment over the last 20 years. This particularly affects the elderly and young people.
Although lower than the County average, high and increasing property prices mean home ownership is out of the reach of many households.
Noise from air and road transport has a significant effect on quality of life in the District. Proposed developments will have significant additional impacts.
Resource use and waste
Although not yet a barrier to new development, water supply in the District could become constrained in future decades.
The costs of and constraints on landfilling waste and the need to reduce emissions mean there is a need for ongoing improvements to waste reduction, reuse and recycling.

3. Appraisal objectives

In the Sustainability Appraisal process, the potential effects of a plan are tested against a series of objectives for sustainable development. For example, for an objective *to use resources efficiently*, the appraisal asks whether the plan will have a positive or negative effect on this objective.

The objectives are combined into an appraisal framework. The framework used for testing the Plan is shown in the table below, along with the questions used in the testing process. It was used for testing **objectives, strategic alternatives and policies**. A slightly modified version was used **for testing proposed sites**. The objectives which address the issues which are required to be covered by the SEA Regulations¹⁰ are shown underlined. The SA objectives were drawn up using the themes from the review of other Policies, Plans and Programmes, and drawing on the baseline review, and specifically the key sustainability issues listed above.

¹⁰ Listed in Schedule 2

Table 7: Appraisal framework

SA Objective ¹¹	SA Sub Objective: <i>will the policy or proposal help to...</i>
ECONOMIC ACTIVITY	
1 Achieve sustainable levels of prosperity and economic growth	<ul style="list-style-type: none"> • maintain a diversified economy, with increased resilience to external shocks? • encourage new business to start-up and thrive in the District? • support and encourage the rural economy and diversification? • support and promote sustainable tourism in towns and rural areas? • improve the quality of local jobs available to people in the District? • increase the skills base? • make the cost of housing more affordable to those employed in the District?
LAND USE AND DEVELOPMENT PATTERNS	
<u>2(a) Minimise the development of greenfield land and other land with high environmental and amenity value?</u>	<ul style="list-style-type: none"> • promote the use of brownfield sites and if brownfield sites are not available, land of low environmental and amenity value? • maximise reuse of vacant buildings and derelict land? • minimise the loss of the best and most versatile agricultural land? • reduce quantity of unremediated contaminated land?
<u>2(b) Provide access to green spaces</u>	<ul style="list-style-type: none"> • provide/improve access for all residents of the District to green spaces? • provide opportunities for people to come into contact with and appreciate wildlife and wild places? • maintain/improve the public right of way network?
<u>2 (c) Deliver more sustainable location patterns and reduce the use of motor vehicles</u>	<ul style="list-style-type: none"> • locate development so as to reduce the need to travel? • reduce car reliance, encourage walking, cycling, bus and train use? • reduce road freight movements? • avoid exacerbating local traffic congestion? • provide affordable, accessible public transport in towns and in rural areas?
ENVIRONMENTAL PROTECTION	
<u>3(a) Protect and enhance biodiversity</u>	<ul style="list-style-type: none"> • protect habitats and species, especially those designated as being of importance, and provide opportunities for creation of new habitats? • support and maintain extent of wetland habitat and river habitats?
<u>3(b) Protect and enhance landscapes</u>	<ul style="list-style-type: none"> • protect and enhance landscapes, especially those of historic, recreational or amenity value, and within the Chilterns AONB?
<u>3(c) Conserve and where appropriate, enhance the historic environment</u>	<ul style="list-style-type: none"> • conserve and enhance the historic built character of the District's towns and villages?

¹¹ Those relevant to the SEA Regulations are shown underlined

SA Objective ¹¹	SA Sub Objective: <i>will the policy or proposal help to...</i>
	<ul style="list-style-type: none"> • protect sites of archaeological and historic importance, whether designated or not?
<u>3(d) Reduce pollution from any source</u>	<ul style="list-style-type: none"> • improve the water quality of rivers and groundwater supplies? • achieve good air quality? • reduce ambient noise, especially from traffic? • reduce light pollution in the District? • protect soil quality?
CLIMATE CHANGE	
<u>4(a) Reduce greenhouse gas emissions</u>	<ul style="list-style-type: none"> • minimise energy consumption by transport and in buildings? • increase proportion of energy generated by renewable sources? • encourage use of local suppliers and the consumption of local produce?
<u>4(b) Improve the District's ability to adapt to climate change</u>	<ul style="list-style-type: none"> • reduce vulnerability to climate change, exploit any benefits? • avoid development in areas at risk from flooding?
A JUST SOCIETY	
5(a) Share benefits of prosperity fairly	<ul style="list-style-type: none"> • reduce disparities in income levels? • contribute to regeneration of deprived areas (estates in Letchworth and Hitchin)? • provide employment and other opportunities for unemployed, especially long-term unemployed and the disabled? • encourage entrepreneurial activity in deprived areas?
5(b) Provide access to services and facilities for all	<ul style="list-style-type: none"> • provide access to services and facilities without need to use a car? • retain rural services, especially shops, post offices, schools, health centres and bus services? • recognise the needs of specific groups such as minority ethnic groups, the young, the elderly and the disabled?
5(c) Promote community cohesion	<ul style="list-style-type: none"> • support development of the voluntary sector? • encourage development of community-run business? • encourage people's feelings of belonging, for example by providing community meeting places? • recognise and value cultural and ethnic diversity?
5(d) Increase access to decent and affordable housing	<ul style="list-style-type: none"> • help improve the quality of the housing stock and reduce the number of unfit homes? • increase access to affordable housing, particularly for the young, the disabled and key workers?
5(e) Reduce crime rates and fear of crime	<ul style="list-style-type: none"> • encourage crime reduction, particularly through the appropriate design of new development? • help reduce the fear of crime?

SA Objective¹¹	SA Sub Objective: <i>will the policy or proposal help to...</i>
<u>5(f) Improve conditions and services that engender good health and reduce health inequalities</u>	<ul style="list-style-type: none"> • help promote healthy lifestyles? • improve access to health services by means other than private cars? • reduce ambient noise near residential and amenity areas? • reduce road accidents? • reduce accidents and damage from fires?
5(g) Increase participation in education and life-long learning	<ul style="list-style-type: none"> • improve access to skills learning by young people? • improve access to skills learning by adults?
5(h) Maintain and improve culture, leisure and recreational activities that are available to all	<ul style="list-style-type: none"> • increase access to culture, leisure and recreational activities?
RESOURCE USE AND WASTE	
<u>6(a) Use natural resources efficiently: reuse, use recycled where possible</u>	<ul style="list-style-type: none"> • minimise the demand for raw materials? • encourage sustainable design, use of sustainable building materials and minimise wastage caused by construction methods? • limit water consumption to levels supportable by natural process and storage systems? • protect groundwater resources? • promote sustainable drainage systems? • reduce minerals extracted and imported?
<u>6(b) Reduce waste</u>	<ul style="list-style-type: none"> • reduce, reuse or recycle waste generated?
TOWN CENTRES	
7 Promote sustainable urban living	<ul style="list-style-type: none"> • encourage a wider range of shops and services in town centres? • encourage more people to live in town centres? • encourage mixed use developments in town centres? • improve transport connections in, and to, town centres? • encourage synergy in land uses, which supports the continued and enhanced viability of a wide range of shops and services? • protect or improve the quality of the public realm in towns?

4. Options development and testing

Overview

A key part of the process of producing the Local Plan has been to identify different approaches to how the District should develop and in particular where development should happen, and how much development there should be. These different approaches are called options. The following sections describe the most important options which were considered by the Council, and the reasons for choosing them. Other more detailed options about the types of policies to include in the Plan were

also considered. These are described in Appendix 3 of the full SA report, along with the reasons for choosing the options preferred by the Council.

Housing numbers

Options for the amount of housing have been considered throughout the Local Plan development process. A new appraisal of housing options was undertaken in 2016 to assess the likely significant effect of the amount of housing proposed. Three options have been considered for provision of additional housing over the Local Plan period:

- a) 17,000 houses (the total provision included for consideration in the Draft Local Plan)
- b) 11,000 houses (an intermediate figure between 17,000 and 6,500)
- c) 6,500 houses (this is the 'business as usual' option, which assumes there is no Local Plan produced and excludes the use of Green Belt sites).

The numbers for each option include 2,500 new houses which have already been completed or have planning permission. The Council chose option a), as this was the only option which meets the objectively assessed need for North Hertfordshire and contributes to the unmet need for Luton. It should be noted that although not all this housing will be delivered in the Plan period, it identifies Strategic Housing Sites that will continue delivery beyond the end of the Plan period in 2031.

Full details of how each option was tested against the sustainability objectives can be found in Appendix 4 of the full SA report.

Other options for housing and employment sites

Other issues considered by the Council about the location of housing and employment sites are discussed below. Full details of how each option was tested against the sustainability objectives can be found in Appendix 3 of the full SA report.

Housing location

The following options for housing delivery were identified:

- a) Continue the current policy of focusing development on the four towns and fourteen villages, which may include limited development of greenfield sites;
- b) Focus development on previously developed land (PDL) within existing urban areas;
- c) Urban extensions on greenfield land adjoining existing towns;
- d) Build a new settlement; and
- e) Use smaller greenfield sites in the villages.

In summary, the Council has chosen a combination of options a), b) and c) and e) as part of the solution to providing additional housing to meet the District's need. The development is spread across the District combining a number of the spatial options. Sites have been assessed against

planning issues and those performing well in terms of constraints as well as being located closer to services and facilities have been chosen.

The option to build a new settlement has not been pursued. This is because no options for new settlements have been put to the Council and, with the amount of deliverable land submitted as part of the Local Plan process by developers and landowners, compulsory purchase would not be considered in the public interest.

The Council has also chosen the option of contributing to the unmet need of Luton by developing sites to the east of Luton. This was based on a study commissioned for the Luton Housing Market Area¹².

How to identify which villages within the rural area might be able to accommodate development

The Council has chosen to identify villages which may take further development based on the level of facilities in the village and the availability of appropriate sites. Policy SP2 defines a list of villages based on those which have schools and appropriate services, and the level of development that will take place. New development is fairly substantial in certain locations. Villages will have a boundary drawn around their existing built-up areas within which additional infill development is acceptable.

The reasons for choosing this option are that the North Hertfordshire villages tend to be more expensive than the towns and are therefore finding it harder to retain young families, which is leading to a skewed age population. Allowing additional development in these villages will help safeguard existing facilities in the villages. Using village schools as an example; they act as a focus point for the villages and ensure that villages continue to attract and retain young families, which prevents them stagnating as dormitories for older families and retirees. Schools also provide local employment.

Location of additional employment land

The Council has chosen these options for employment land:

- Completely new Employment Areas should be designated within or adjoining existing settlements; and
- There should be extensions to existing Employment Areas, but only within existing settlements.

For Baldock, the reason is to allow the provision of a significant new employment site to be developed at the east of Baldock, supporting the proposed increase in residential development in the town. The allocation benefits from proximity to existing employment uses as well as existing and planned residential development. It has access to the strategic road network via the A505 Baldock Bypass, which is important as economic activity is not contained by the District boundary.

¹² *Luton HMA Growth Options Study*, LUC in association with BBP Regeneration, November 2016

Within Hitchin and Letchworth Garden City, employment area designations from the previous Local Plan will be broadly retained, as this relates to some modest releases of sustainable, brownfield sites for residential development.

For Royston, the economy is influenced by both Hertfordshire and Cambridgeshire economies. Consequently, the employment area has a low vacancy rate. The allocation of further land here as a planned extension to the York Way employment area is a sustainable approach that will enable flexibility in the long term, especially in conjunction with the additional residential growth allocated to this area.

5. Site appraisals

Overview

All of the sites included in the adopted Local Plan have been tested against the sustainability objectives listed above in Section 3¹³. This includes some sites which were appraised in earlier versions of the Sustainability Appraisal. Full details of how each site was tested against the sustainability objectives can be found in Appendices 6 and 7 of the full SA report.

Reasons for selecting sites

Housing sites

The Strategic Housing Land Availability Assessment (SHLAA) process helped identify sites which were deliverable. It considered sites which may be available for residential development over the period between 1 April 2011 and 31 March 2031. It assessed sites against three questions:

- Is the site suitable for development? This question is about the physical ability of the site to accommodate development and identification of (potential) policy constraints which might influence how desirable it is to develop it.
- Is the site available for development? This is about landowner intentions.
- Would development here be achievable? This question is about whether development would be financially viable or whether there might be any other reasons why it may not be delivered.

Sites which met all three tests in the SHLAA were then reviewed by the Council and a final decision was made on which sites to include based on the results of the Sustainability Appraisal and a number of key planning considerations. This information is reported in the evidence base and included in the Housing and Green Belt Background Paper. A summary showing the reasons for selecting each preferred site is included in Appendix 13 to the full SA report.

Other sites

The process for selecting employment sites and retail sites largely took into account the same considerations as those for residential, including the results of the Sustainability Appraisal. Again, the information is reported in evidence-base documents and concluded in the Employment and Retail

¹³ Slightly modified to reflect issues relating to land use. The full framework used can be seen in Appendix 5 of the full SA report.

Background Papers. A summary showing the reasons for selecting each preferred site is included in Appendix 13 to the full SA report.

6. Reducing the negative effects of the Plan

Many of the significant negative effects and uncertainties identified in the appraisal of the Plan can be reduced or avoided altogether. This is called mitigation. When the appraisal tested the effects of the plan policies and provisions of sites, it identified ways in which the negative effects could be mitigated. Much of this mitigation is delivered by policies in the Plan itself. The table below gives an overview of mitigation measures identified for specific negative effects and uncertainties of the Plan. More detail on mitigation measures is included in the full SA report for sites in Appendices 8 and 9 and for policies in Appendices 10 and 11. Note that the SA objectives referenced here are the slightly condensed version used for site assessment, as outlined in the full SA report in Appendix 5.

Table 8: Mitigation measures identified for significant negative effects and uncertainties

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
1 - Site poorly located with respect to services, facilities and accessibility of labour or customers	Policy SP6 requires a range of alternative transport options to be made available to occupants or users, which may include new or improved pedestrian, cycle and passenger transport links and routes. Policy T1 requires satisfactory Transport Statements, Transport Assessments and / or Travel Plans to be provided.	None necessary
1 - Loss of employment land in active use	Policy SP3 supports the development of new employment space and the protection of existing employment space but does not require replacement provision in the case of the loss of existing employment space. The employment background paper sets out the amount of employment land lost and how it is being replaced.	None necessary
2(a) - Greenfield site which impacts on AONB	Policy SP12 requires development to consider landscape character and respect locally sensitive features. Policy NE3 requires developments in the AONB to conserve and enhance the AONB's qualities and character.	Where relevant, require a site-specific landscape assessment to ensure compliance with policy NE3

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
2(a) - Greenfield site which impacts on SSSI or Wildlife Sites	Policy SP12 seeks to protect, enhance and manage biodiversity networks and seek opportunities for net gains for biodiversity. Policy NE4 requires developments affecting designated sites to be accompanied by an ecological survey and sets out a hierarchy of mitigation responses.	None necessary
2(b) - Increases distance or reduces accessibility to green space from existing residential properties	Policy SP9 expects masterplans and planning applications for significant development to create a green infrastructure network. Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development. Provision of open space in new developments in accordance with the Council's open space standards is set out in Policy NE6.	None necessary
2(b) - Housing further than 800 metres from green space	The policies listed in the previous item will also mitigate this effect. Nevertheless, the distance from these sites to designated open space may mean that local provision is somewhat limited.	None necessary
2(c) - In a village without a regular bus service	Policy SP6 requires a range of alternative transport options to be made available to occupants or users, which may include new or improved pedestrian, cycle and passenger transport links and routes.	None necessary
2(c) - Further than 800m from a station and more than 400m from a bus stop with a regular bus service	Policy SP9 expects masterplans and planning applications for significant development to create accessible, and sustainable transport systems and plan for walkable locally accessible facilities. Policy SP6 requires a range of alternative transport options to be made available to occupants or users, which may include new or improved pedestrian, cycle and passenger transport links and routes.	None necessary
3(a) Potential impact on sites designated for their ecological value or features of ecological interest	Policy SP9 expects masterplans and planning applications for significant development to create a green infrastructure network supporting biodiversity net gain. Policy SP12 seeks to protect, enhance and manage biodiversity networks and seek opportunities for net gains for biodiversity.	None necessary

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
	Policy NE4 requires developments affecting designated sites to be accompanied by an ecological survey and sets out a hierarchy of mitigation responses. It also requires development proposals on non-designated sites that include important habitats and species. To submit an ecological survey and demonstrate that adverse effects can be satisfactorily minimised and to produce a long-term management plan.	
3(b) – Location in an area of low or moderate landscape capacity or moderate or high sensitivity	Policy SP9 expects masterplans and planning applications for significant development to respond to landscape and townscape Policy SP12 requires development to consider landscape character and respect locally sensitive features. Policy NE2 includes a range of landscape criteria that proposals must meet.	For sites of <100 homes – require a site-specific landscape assessment. For sites >100 homes – ensure landscape issues are addressed in the Design & Access Statement.
3-(c)- Potential direct or indirect impact on heritage assets	Policy SP9 expects masterplans and planning applications for significant development to respond to historic character. Policy SP13 seeks to protect the historic environment. Policy HE1 requires proposals to conserve and enhance designated heritage assets, and includes a number of related requirements, including production of a heritage assessment.	None necessary.
3(d) – Pollution risk – site located in source protection zone 1	Policy SP11 includes general support for the principles of the Water Framework Directive and seeks improvements to the water environment. Site-specific measures are likely to be necessary in this instance. Policy NE10 stipulates that new development should not result in the deterioration of any watercourse in accordance with the Water Framework Directive.	Where relevant, require site specific assessment to ensure compliance with policy NE10.

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
3(d) – Pollution risk – site located in source protection zone 2 or bordering a watercourse	<p>Policy SP11 includes general support for the principles of the Water Framework Directive and seeks improvements to the water environment.</p> <p>Policy NE9 requires a buffer zone along all watercourses.</p> <p>Policy NE10 stipulates that new development should not result in the deterioration of any watercourse in accordance with the Water Framework Directive.</p>	Where relevant require site-specific assessment.
3(d) - Pollution risk - site with known or potential land contamination issues	<p>Policy SP11 includes a requirement to give consideration to land contamination issues. Policy NE11 provides specific guidance and includes a requirement for a contaminated land study.</p>	Where relevant require site-specific assessment.
4(b) - Site in flood zone 2 or 3	<p>Policy SP9 requires masterplans and planning applications for significant development to create a green infrastructure network that supports climate change mitigation and adaptation and to ensure effective use of SuDS and sustainable water management.</p> <p>Policy SP11 requires the use of SuDS and other appropriate measures where necessary.</p> <p>Policy NE7 stipulates that all types of development within flood zone 2 & 3 will need to submit a Flood Risk Assessment and that a reduction in flood risk must be managed through flood resistant design and construction.</p>	None
4(b) - Surface water flood risk	<p>Policy SP9 requires masterplans and planning applications for significant development to create a green infrastructure network that supports climate change mitigation and adaptation and to ensure effective use of SuDS and sustainable water management.</p> <p>Policy SP11 requires the use of SuDS and other appropriate measures where necessary.</p> <p>Policy NE8 stipulates that the most sustainable drainage solutions will be sought for each development to reduce the risk of surface water flooding and that sites should aim to mimic the drainage of an undeveloped greenfield site.</p>	None
5(f) - Housing site within or impacting on an AQMA	<p>Policy D4 requires appropriate levels of mitigation to negate emissions to the atmosphere and their potential effects upon health and the local environment.</p>	None necessary

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
5(f) - Housing or mixed-use site within 100m of a nuisance use (major roads, railway lines, waste uses, employment areas and airport noise contours) or within 400m of Sewage Treatment Works (STW)	Policy D3 states that where the living conditions of proposed developments would be affected by an existing use, the council will consider whether there are mitigation measures that can be taken to mitigate the harm to an acceptable level. If the mitigation proposals would not address the identified harm the development will not be permitted.	To be identified on a site basis.
5(f) - Major development located near existing residential area - noise/amenity impacts	Policy D3 provides specific guidance on what may cause unacceptable harm. However, there could still be noise/amenity impacts on existing residents.	Require construction management plan. Consideration of development layout and landscaping to minimise impact on neighbouring residents.
6 - In an area with significant constraints on water resources	Policy SP9 includes requiring the Government's technical standards for water efficiency. Policy NE10 states that new development around Stevenage within the Rye Meads Sewage Treatment Works Catchment will need to demonstrate that additional potable water supply and wastewater treatment capacity can be achieved and implemented ahead of development without significant environmental impact, including adverse effects on designated sites. It is understood that a technically feasible solution to accommodate growth around Royston has been identified but there remains some uncertainty about the solution for sites around Stevenage beyond 2026.	The council is not permitted to require higher standards of water efficiency beyond the Government's technical standards.

Significant negative effects and uncertainties (by SA Objective)	Policies which mitigate these effects and any remaining significant effects	Additional mitigation measures
6 - In an area with significant constraints on water treatment infrastructure (all sites in Royston and Stevenage)	Policy NE10 states that new development around Stevenage within the Rye Meads Sewage Treatment Works Catchment will need to demonstrate that additional potable water supply and wastewater treatment capacity can be achieved and implemented ahead of development without significant environmental impact, including adverse effects on designated sites. It is understood that a technically feasible solution to accommodate growth around Royston has been identified but there remains some uncertainty about the solution for sites around Stevenage beyond 2026.	None necessary
7 - Out of town development of shops or services which is likely to compete with shops and services in town centres	Policy ETC4 requires the application of the sequential test and for proposals to demonstrate that there is no unacceptable harm to the vitality or viability of a designated centre. This means that locations in a town centre should be considered for development first before looking at edge of centre locations and then out of centre locations.	None necessary

7. Effects of the Plan and monitoring

Identifying the effects of the Plan after mitigation

As the Plan objectives make clear, the role of the Local Plan is to provide for homes and jobs and associated services, development and infrastructure, while minimising environmental impacts and identifying opportunities for environmental improvement.

When testing the effects of site allocations, and of the policies, we have identified ways of mitigating any potential significant negative effects identified within the SA. We have also noted any remaining effects which cannot be mitigated.

The appraisal also identified potential cumulative effects. This is where several individual insignificant effects have a combined significant effect, or where individual effects interact to produce a total effect greater than the sum of the individual effects. Mitigation measures were identified for these cumulative effects, and any remaining effects of the Plan were noted.

The table below summarises the combined remaining effects of the sites and policies and cumulative effects, called residual effects, after all the identified mitigation measures have been applied.

Table 9: Residual significant negative sustainability effects of the Plan

Residual effect	Cause	Nature of the effect
Significant loss of agricultural land and land of high environmental and amenity value	Large developments on the edge of towns	The loss of agricultural land is cumulative across the Plan area. It is of high probability, permanent and irreversible. Individual sites affected are listed in the full SA report in Appendices 8 and 9.
Reduced access to open countryside	New development on greenfield land on the edge of existing settlements, particularly Royston, Baldock, Great Ashby and Knebworth	The reduction in access is cumulative across the Plan area, and in the clusters of Royston, Baldock, Great Ashby and Knebworth. It is of high probability, permanent and irreversible. Individual sites affected are listed in Appendices 8 and 9.
Provision of new housing without access to greenspace	Housing further than 800 metres from green space in Hitchin and Knebworth (HT10, KB1)	The effect is of medium probability (depending on the development of the specific sites) and could be reversed or reduced if new local greenspace was provided.
Traffic congestion and	Combined effects of planned development in Central Bedfordshire, St	The effect is trans-boundary, (which means it impacts on neighbouring areas as well) and is a cumulative effect of Plans in Central Bedfordshire, St Albans and

Residual effect	Cause	Nature of the effect
associated pollution	Albans and North Hertfordshire	North Hertfordshire. It is of medium probability as it depends on a number of factors including the actual amount of development and the effectiveness of mitigation, e.g. improvements in public transport.
Potential impacts on Therfield Heath SSSI	Recreational use from new development in Royston	The effect is uncertain because it is not clear whether the proposed mitigation will fully mitigate the potentially significant effect.
Reduction in quality of landscape and townscape character	Development of greenfield sites for housing at edge of towns and villages, and particularly on the edges of Royston, Baldock, north Stevenage, Knebworth and Codicote	The reduction in access is cumulative across the Plan area, and in the clusters of Royston, Baldock, north Stevenage, Knebworth and Codicote. It is of high probability, permanent and irreversible. Individual sites affected are listed in Appendices 8 and 9.
Impact on setting of heritage assets	Development affecting the setting of conservation areas, listed buildings and Scheduled Ancient Monuments	The effect is of medium probability (depending on the design and layout of the development) and some of the effects are cumulative within a local area, as detailed in section 7.2. Mitigation is provided for in Local Plan policy but some effects cannot be fully mitigated.
Surface water flooding	Development across the District and particularly in the north and east of Baldock (BA1, BA10, BA4, BA3) – all sites lie within a linked area of high surface water flood risk	The effect is of medium probability (depending on the development of the specific sites) and could be reduced depending on the effectiveness of mitigation. Individual sites affected are listed in Appendices 8 and 9.
Climate change	Greenhouse gas emissions from increases in traffic from current and new housing and from energy use in new housing	The effect is the cumulative effect of the Plan, of high probability and is worldwide in its impact.
Reduction in water quality	Development within Groundwater Source Protection Zones Expansion of sewerage capacity at Rye Meads STW due to growth in this part of the region Increased water abstraction due to increased growth	This is an uncertain cumulative effect across the Plan area, which could impact on: Groundwater Source Protection Zones; rivers included in Rye Meads Study catchment and their habitats - the Lee, Mimram, Beane, Rib, Ash; and Stort; and Whaddon Brook (in the case of Royston STW). The likelihood and magnitude of the effect depends on the extent to which the necessary mitigation measures are enforced.

Residual effect	Cause	Nature of the effect
	Possible pressures on sewerage infrastructure at Royston STW	
Increased pressure on water resources	Large quantity of new housing in an area with significant constraints on water, particularly around Stevenage and Royston	The effect is of high probability and irreversible once new housing has been built. It is also trans-boundary as it will affect neighbouring authorities.
Noise pollution	Development north of Letchworth Garden City (LG1, LG3, LG4, LG10) – all lie close together and adjacent to residential properties in the northern part of the town. Development of other individual sites particularly in Hitchin, Knebworth and Royston	There is a cumulative effect to the north of Letchworth, as well as effects on individual sites, particularly in Hitchin, Knebworth and Royston. The magnitude of the effect is likely to be greater in the short term, during the construction phase. Individual sites affected are listed in Appendices 8 and 9.
Impacts on amenity and reduction in tranquility for existing residents	Development of large strategic housing sites, specifically BA1, LG1, GA2 and EL1,2,3	The impacts on amenity and tranquility are permanent and irreversible. As noted above the magnitude of the noise pollution element is likely to be greater in the short term, during the construction phase. Effects on individual sites are described in Appendix 8.
Potential impacts on air quality in Hitchin	Development of large strategic housing sites, potentially impacting on AQMAs in Hitchin. This applies specifically to EL1, EL2, EL3, NS1, GA1, GA2, and WY1.	The impact is uncertain, as it depends on the amount of traffic passing through Hitchin as a result of the developments.
Potential negative effects on Letchworth town centre	Development of strategic site LG1	The effect is uncertain; it depends on whether access is through the Grange which would ensure that the development relates to Letchworth. An additional access (onto Stotfold Road) would reduce traffic congestion in the Grange, but would mean the development faces away from the existing town, and could result in negative effects on this objective.

The table below summarises the combined significant positive effects of the sites and policies.

Table 10: Likely significant positive sustainability effects of the Plan

Effect	Causes	Relevant SA objective	Nature of the effect
Increased use of rural shops, services and other businesses	Increased population and local employment in the larger villages	1 Achieve sustainable levels of prosperity and economic growth	The effect is a positive cumulative effect of the new development, of medium probability, and likely in the short and medium term. Long term effects are uncertain.
Improved provision of community facilities, including open space and recreational facilities	Through developer contributions from new developments	2(b) Provide access to green spaces	The effect is a positive cumulative effect of the new development, of high probability, and likely to be long term.
Provision of affordable housing	Requirement to provide affordable housing in major developments	5(d) Increase access to decent and affordable housing	The effect is a positive cumulative effect of the new development, of high probability, and likely to be long term.

Monitoring the effects of the Plan

It is important to check whether these predicted negative effects actually happen. To do this we have identified indicators (information to be collected) for each negative effect. The Council will include these indicators in future Annual Monitoring Reports. The indicators are shown in the table below.

Table 11: Indicators of residual significant effects

Residual significant effect	Monitoring indicator
Loss of land with high agricultural value	High grade (1-3) agricultural land lost to new development.
Loss of greenfield land and reduction in access to open countryside	Greenfield land (ha.) lost to new development.
Provision of new housing without access to greenspace	Number of dwellings granted permission on sites without access to greenspace within 800m.
Traffic congestion and associated pollution	Average annual vehicle speeds (flow-weighted) during the weekday morning peak on locally managed 'A' roads.
	Local air quality monitoring data.

Residual significant effect	Monitoring indicator
Potential impacts on Therfield Heath SSSI	To be determined by Mitigation Strategy.
Landscape and townscape impacts	Number of planning applications granted on sites of moderate or high landscape sensitivity. Number of planning applications refused on sites of moderate or high landscape sensitivity.
Impacts on heritage assets	Number of planning applications granted contrary to the advice of Historic England. Number of planning applications refused in line with the advice of Historic England.
Reduction in water quality	The number of applications granted contrary to the advice of the EA on water quality grounds.
Development in flood risk areas	Number of planning applications granted contrary to the advice of the Environment Agency on flood defence grounds.
Surface water flooding	Percentage of new developments with adopted SuDS schemes.
Climate change	Local authority carbon dioxide emissions estimates for domestic and transport.
Amenity impacts on existing residents	Number of noise complaints divided by type.
Water usage	Percentage of new dwellings achieving the optional Building Regulations requirement of 110 litres per person per day.
Potential negative effects on Letchworth town centre	Vacancy rates in Letchworth.

Next steps

The Council has committed to an early, whole plan review to start by the end of 2023. This review will determine whether the Plan needs to be updated in whole or in part. Any updated or new plan would be subject to a new SA process.

1 Background and methodology

1.1 Purpose and contents of this report

This report is a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the North Hertfordshire Local Plan. It is the final report of this process and has been prepared to accompany the publication of the adopted Local Plan. In simple terms it aims to provide information on the social, economic and environmental effects of the Adopted Local Plan.

This report draws together and updates the previous appraisals undertaken in the Local Plan development process. This includes the SA Report Addenda published in 2018 and 2021 to accompany consultation on the modifications following the public examination process.

It describes how the appraisal has been undertaken throughout the different stages of the Local Plan development, starting with the original work on developing the Core Strategy in 2005. It describes how it meets legal and regulatory requirements, gives information on the results of each stage of the appraisal process, and outlines the likely effects of the Plan.

1.2 Strategic Environmental Assessment and Sustainability Appraisal

As noted in Planning Practice Guidance,¹⁴ “sustainability appraisal is a systematic process that must be carried out during the preparation of a Local Plan. Its role is to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic and social objectives.”

An SA of a Local Plan must also meet the requirements of Statutory Instrument 2004 No. 1633 the Environmental Assessment of Plans and Programmes Regulations 2004 (known as “the SEA Regulations”), which implemented the European Directive on Strategic Environmental Assessment (European Union Directive 2001/42/EC), into English law.¹⁵ SEA is similar to SA; the most substantial difference is that it focuses on environmental objectives.

The SEA Regulations require the preparation of an Environmental Report, which: “shall identify, describe and evaluate the likely significant effects on the environment of (a) implementing the Plan or programme; and (b) reasonable alternatives taking into account the objectives and the geographical scope of the Plan or programme¹⁶.”

The United Kingdom Government has included guidance on SA and SEA in the National Planning Policy Guidance quoted above¹⁷ (referred to as ‘The Guidance in this report’). This appraisal, which

¹⁴ Paragraph: 001 Reference ID: 11-001-20140306

¹⁵ As outlined in the National Planning Policy Framework 2021 Para 32

¹⁶ Para 12(2)

¹⁷ See <http://planningguidance.communities.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/>; last accessed 23/09/2021. ID 11

incorporates a full SA and SEA, has been carried out in accordance with that guidance. Throughout the document, reference to sustainability appraisal also incorporates an SEA meeting the requirements of the SEA Regulations. Where necessary, the appraisal draws on the additional guidance outlined in *A Practical Guide on the Strategic Environmental Assessment Directive*¹⁸, published in 2005 (referred to as “the Practical Guide” in this report).

The table below sets out the information required to be given in an Environmental Report¹⁹ and where it can be found in this report.

Table 12: Information required in the Environmental Report

The information required to be in the Environmental Report	Where covered in this SA report
a) An outline of the contents, main objectives of the Plan or programme, and relationship with other relevant plans and programmes;	1.4, 2.2 and Appendix 1
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the Plan or programme;	2.1,2.3, 2.5 and Appendix 2
c) The environmental characteristics of areas likely to be significantly affected;	Appendix 2
d) Any existing environmental problems which are relevant to the Plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	2.4 and Appendix 2
e) The environmental protection objectives, established at international, community or national level, which are relevant to the Plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	2.2 and Appendix 1
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (these effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Sections 3-8 and Appendices 3-11
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the Plan or programme;	5.4 and Appendices 3-11
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Section 4 and 5.2 and Appendix 13 and 1.6
i) A description of measures envisaged concerning monitoring in accordance with Article 10;	Section 9

¹⁸ See <https://www.gov.uk/government/publications/strategic-environmental-assessment-directive-guidance>; last accessed 23/09/2021. ISBN 1851127887.

¹⁹ As set out in Schedule 2 of the SEA Regulations

The information required to be in the Environmental Report	Where covered in this SA report
j) A non-technical summary of the information provided under the above headings.	Front of document and also published separately

1.3 Habitats Regulation Assessment

The Council is also required to undertake a screening determination on the need for Appropriate Assessment of the Local Plan under the Conservation of Habitats and Species Regulations 2010. The Habitats Regulation Assessment (HRA) work commenced in early 2013 and screening identified the need for Appropriate Assessment. Work on the Appropriate Assessment continued throughout the Plan preparation with policies being re-screened in August 2016 and September 2018²⁰ and the HRA was updated at each stage. For the Further Proposed Modifications in March 2021, an additional note was prepared which considers whether any of the key factors leading to the HRA's conclusion have materially altered such that it would be necessary to revise or replace the HRA or any part of it.

In combination with the HRA, the Addendum represents an HRA of the Local Plan, updating the findings presented in the HRA. The addendum should therefore be read alongside the HRA.²¹ The conclusions of the HRA for the North Hertfordshire Local Plan remains that (taking into account the Further Proposed Modifications) it is not likely to have adverse effects on the integrity of European sites, either alone or in-combination with other plans or projects, providing that the mitigation set out in the Local Plan and assessed by the HRA is implemented.

1.1 Development of the Local Plan

1.3.1 Overview

The new Local Plan will replace the 1996 Local Plan. It will cover the period 2011-2031 and will set targets for new homes, employment and retail development, and identify areas of land where these developments should be built. It will also consider what infrastructure is needed to support development.

The development of the Local Plan was restarted following changes to the planning system in March 2012.²² Work on a replacement Local Plan captured by SA requirements had begun in 2005 under the preceding regional planning system, with the publication of an Issues and Options Paper²³ for

²⁰ See <https://www.north-herts.gov.uk/sites/default/files/ED164A%20HRA%20North%20Hertfordshire%20District%20Council%20-%20Proposed%20Submission%20Plan%202011-2031%20with%20Main%20Modifications%20%28Final%20v2.0%29%20SM%20-%20no%20watermark.pdf> last accessed 3/10/22

²¹ <https://www.north-herts.gov.uk/sites/default/files/Habitats%20Regulations%20Assessment%20-%20Addendum%20Note.pdf> last accessed 3/10/22

²² With the introduction of the National Planning Policy Framework

²³ September 2005

the Core Strategy and a Sustainability Appraisal Scoping Report²⁴. That development work is referred to in this Sustainability Appraisal report.

The Plan was formally published in October 2016 and submitted for examination in June 2017. It was the subject of initial examination hearings from November 2017 to March 2018. Following the hearings, consultation was carried out on proposed Main Modifications between January and April 2019. Subsequent to that consultation, the Inspector identified a number of areas where further hearing sessions would be required. These were held between November 2020 and February 2021. Following these hearings, the Council drafted and submitted proposed further modifications to ensure the Plan's soundness to the Inspector, for his consideration. Further consultation took place in 2021, with all responses forwarded for the Inspector's consideration in preparing his final report.

The Inspector's report was received in September 2022 and presented for adoption in November 2022. This is more than half-way through the twenty-year period covered by the Plan with just nine years remaining to the end of the Plan period of 2031²⁵. This is unusual and variously reflects the age of the existing (1996) saved Plan, the 'stop-start' nature of attempts to prepare a replacement and the extended examination which took more than five years to conclude. However, the Plan has been found 'sound' on this basis and includes a commitment to undertake a review by the end of 2023 which will roll the Plan forward to a new time horizon into the 2040s.

The Local Plan contains five main sections, not including the appendices. A separate Local Plan Policies Map is published alongside the Local Plan to show the spatial implications of policies.

Section One: Introduction and Context – This section explains the planning system and provides an overview of North Hertfordshire and the wider area.

Section Two: Spatial Strategy and Strategic Policies – This section sets out the spatial strategy and vision for the future of the District and links this to the strategic policies which provide the guidance on the main issues that the Plan seeks to address. It sets out the overall approach to topics such as housing, employment, green belt and countryside. It also contains a separate policy for each of the Strategic Housing Sites (defined as sites of 500 or more homes) which will make a substantial contribution towards housing requirements over the Plan period.

Section Three: Detailed Development Management Policies – This section sets out the detailed requirements that new development must meet to be granted planning permission. It addresses issues such as open space, design and car parking.

Section Four: Communities – This section sets out the site allocations for each community on a parish or settlement basis. It identifies the detailed site-specific criteria for each local housing allocation. Retail and employment allocations are also identified.

Section Five: Implementation, Monitoring and Review – This section sets out how the proposals in the Plan will be delivered. It identifies key supporting infrastructure and the partners that will help

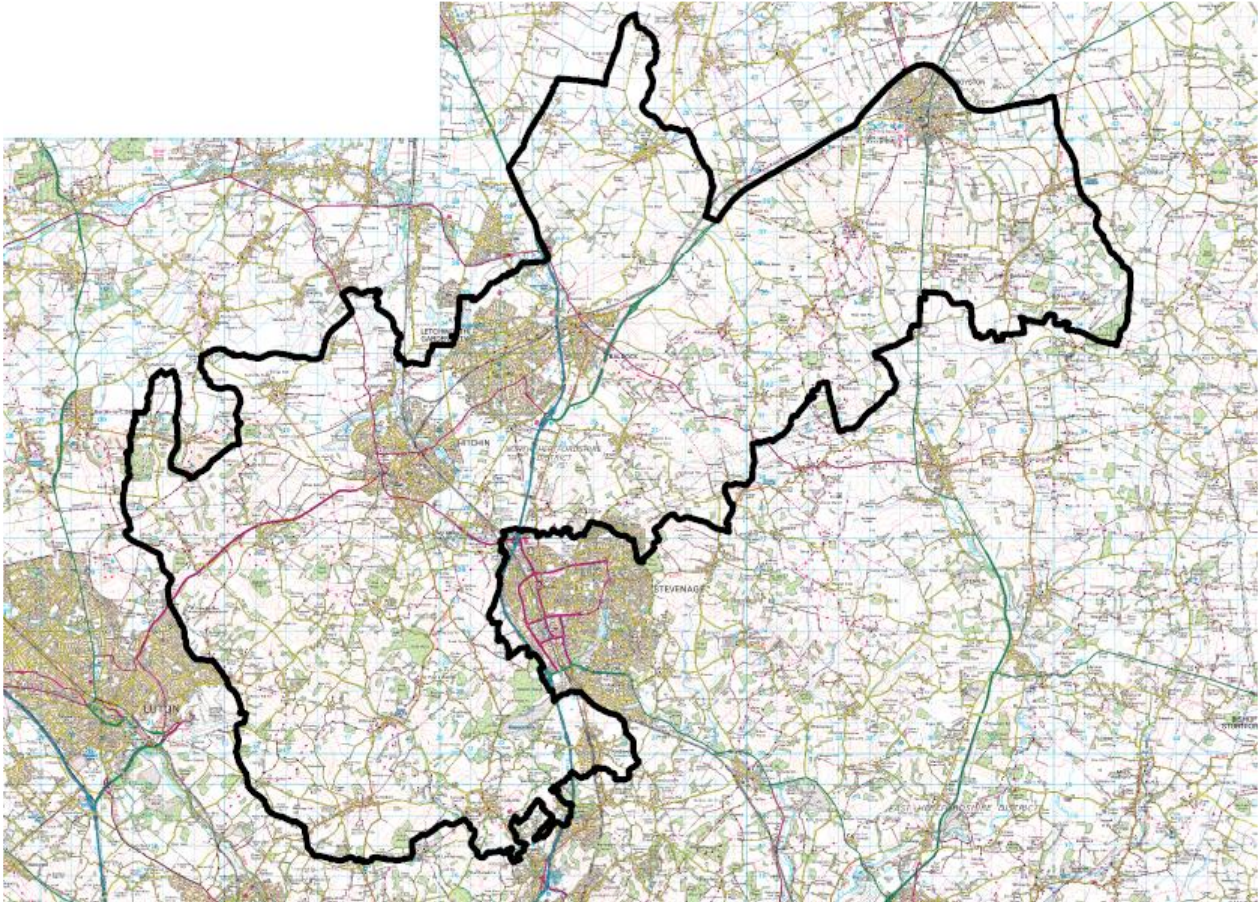
²⁴ September 2005

²⁵ Compared to the advice in the NPPF that Plans should set policies for a period of 15 years from the point of adoption.

to deliver this. It sets out a monitoring framework that will be used to ensure that the vision and strategic policies are being met and sets out an approach to a future review of the Plan.

The area covered by the Local Plan is shown in the map below.

Figure 1.1: North Hertfordshire District Council area



Source: NHDC 2016

1.3.2 Objectives of the Local Plan

The Plan objectives are informed by the National Planning Policy Framework (NPPF), which at paragraph 156 sets the strategic priorities that all local plans need to consider. The Plan objectives are shown in the table below.

Table 13 Local Plan objectives

Environmental	
ENV1	Direct development towards the most sustainable locations which seek to maintain the existing settlement pattern.
ENV2	Protect and enhance the historic character of North Hertfordshire's towns, villages, hamlets and landscape by promoting good design that creates a distinctive sense of place.
ENV3	Protect, maintain and enhance the District's historic and natural environment, its cultural assets and network of open spaces, urban and rural landscapes.

ENV4	Mitigate the effects of climate change by encouraging the use of sustainable construction techniques, the appropriate use of renewable energy technologies and reducing the risk of flooding.
ENV5	Reduce water consumption, increase biodiversity and protect and enhance the quality of existing environmental assets by enhancing new green spaces and networks of green space for both recreation and wildlife.
Economic	
ECON1	Support a vibrant, diverse and competitive local economy that provides a range of job opportunities enabling new and existing businesses to grow and thrive.
ECON2	Ensure an adequate supply of employment land, office accommodation and support facilities to meet the needs of new and existing businesses within our urban and rural areas.
ECON3	Provide for a greater mix of skilled jobs as well as providing opportunities for further education and skills training to promote investor confidence in locating to, or remaining in, the District.
ECON4	Maintain and enhance the vitality and viability of our town, neighbourhood and village centres, as well as strengthening the retail roles of our town centres ensuring that they remain competitive and attractive for modern-day use.
ECON5	Support and enhance local businesses, services and facilities in urban and rural areas through tourism.
ECON6	Sustain the vitality of our villages and the rural economy in supporting rural diversification whilst ensuring development is of an appropriate scale and character.
ECON7	Improve access opportunities, minimise the need to travel, and encourage journeys to be made by sustainable means of transport to ease congestion, reduce carbon emissions and the impacts on air quality management areas.
ECON8	Ensure all development is supported by the necessary provision of, or improvements to, infrastructure, services and facilities in an effective and timely manner to make development sustainable and minimise its effect upon existing communities.
Social	
SCO1	Identify locations for a range of types and tenures of homes, including affordable homes, to meet identified needs and provide adequate housing for an increasing and ageing population.
SCO2	Encourage safe and vibrant mixed communities that provide for the needs of all North Hertfordshire's residents.
SCO3	Improve access to, maintain and make provision for new facilities including community, sports, leisure, health and cultural facilities, that meet the needs of all North Hertfordshire's communities.
SCO4	Enable rural communities to plan to meet their own local needs, especially through neighbourhood planning.

1.4 The five stages of Sustainability Appraisal

There are five stages (A to E) to the Appraisal which are outlined in the Practical Guide.

The table below shows the stages, the tasks included within each and how they relate to the preparation stages for a Local Plan. This report is the Final SA report which is being published alongside the post-adoption statement as part of Stage E.

Table 14: Sustainability appraisal stages and tasks

Local Plan Stage 1: Pre-production – Evidence gathering
Appraisal stage A: Setting the context and objectives, establishing the baseline and deciding on the scope of the Sustainability Appraisal
A1 Identifying other relevant policies, plans, programmes and sustainability objectives
A2 Collecting baseline information
A3 Identifying sustainability issues and problems
A4 Developing the Sustainability Appraisal framework
A5 Consulting on the scope of the sustainability appraisal
Local Plan Stage 2: Production
Appraisal stage B: Developing and refining options and assessing effects
B1 Testing the Plan objectives against the Sustainability Appraisal framework
B2 Appraising the Plan options
B3 Predicting the effects of the Plan
B4 Evaluating the effects of the Plan
B5 Considering ways of mitigating adverse effects and maximising beneficial effects
B6 Proposing measures to monitor the significant effects of implementing the Plan
Appraisal stage C: Preparing the Sustainability Appraisal Report
C1 Preparing the SA Report
Appraisal stage D: Consulting on the preferred options of the Local Plan Sustainability Appraisal report
D1 Public participation on the preferred options of the Local Plan and the Sustainability Appraisal report
D2 (i) Appraising significant changes
Local Plan Stage 3: Examination
D2 (ii) Appraising significant changes resulting from representations
Local Plan Stage 4: Adoption and monitoring
D3 Making decisions and providing information
Appraisal stage E: Monitoring the significant effects of implementing the Local Plan
E1 Finalising aims and methods for monitoring

1.5 How the appraisal was carried out

1.5.1 Overview

As noted above, the development of a replacement Local Plan started in 2005. The Council commissioned CAG Consultants to undertake the Sustainability Appraisal of the Local Plan and the earlier Core Strategy. Development of policy options was undertaken by the Council at all stages.

The long timescale over which the Plan has been developed, the number of different iterations, and the changes in planning policy over that time has been a key procedural challenge in undertaking this SA. However, with the Proposed Submission Local Plan in 2016, all previous SA stages and outputs were thoroughly reviewed to ensure they were relevant, up-to-date and addressed current planning policy and SA practice. This review was undertaken by a consultancy independent of CAG Consultants.

The table below summarises the stages of the appraisal of the Local Plan. It shows the tasks that have been carried out to date, when they were carried out, any difficulties encountered, assumptions and uncertainties. It does not record SA work on earlier stages of the Local Plan which have since been discarded.

Table 15: How the appraisal was carried out

Appraisal stage	When	Comments or Difficulties
A1 Identifying other relevant policies plans and programmes and sustainability objectives	This stage has taken place during all stages of the documents' production. Most recently it was completely reviewed and updated in July 2016. It was first undertaken as part of the Core Strategy Scoping Report in 2005. It was then completely reviewed and updated in June 2012 to reflect changes in national planning policy and the introduction of the NPPF.	Many policies could potentially be relevant to the Plan. Those ones reviewed were judged to be the key strategic documents relevant to the Plan and the appraisal.
A2 Collecting baseline information	This stage has also taken place during all stages of the documents' production. Most recently it was fully reviewed and updated in July 2016, with some minor updates in 2021 as a result of the examination process. It was first undertaken as part of the production of the Scoping Report in 2005. The information was also subsequently updated in November/ December 2012.	Some difficulties were experienced in updating the original data. Most information remains available, although a number of data production agencies have changed or disbanded. At a regional level, with the demise of the East of England Development Agency and East of England Regional Assembly and the revocation of East of England Plan the regional data is

Appraisal stage	When	Comments or Difficulties
		<p>becoming much more difficult to find and update.</p> <p>The regional assessment has been updated as far as possible and the lack of data is not considered to influence the outcome of the assessment.</p>
A3 Identifying sustainability issues and problems	<p>This stage has also taken place during all stages of the documents' production. Most recently it was fully reviewed and updated in July 2016 with some minor updates in 2021 as a result of the examination process. This stage was also first completed with the production of the Scoping Report in 2005. It was then updated by the Council as part of the SA/SEA of the Housing Targets Consultation in March 2012. This was then further updated in June 2012 and again in August 2014.</p>	<p>Quantitative data was not always available to inform the identification of key issues. In addition, some strategy documents which originally informed the review of issues were not updated. However, the review of the baseline data in 2016 provided sufficient information to inform the 2016 update of issues.</p>
A4 Developing the SA framework	<p>The initial framework was included in the 2005 Scoping Report for the Core Strategy and Development Policies and updated October 2006 and October 2007 in response to consultation comments.</p> <p>A revised version of the framework (to reflect how the objectives relate to site provision) was included in the 2007 Land Allocations Scoping Report, and updated in response to consultation comments.</p> <p>Both frameworks were reviewed in June 2012 to check whether any changes were needed as a result of the review of policy, plans and programmes and sustainability issues. They were reviewed again in August 2014 and July 2016, and have been used to undertake the assessments in the current report.</p>	<p>June 2012 and August 2014 reviews concluded no changes were needed to the framework.</p> <p>The July 2016 review included a detailed review and update of the significance criteria for site appraisals, which resulted in a clearer statement of the assumptions behind site appraisal judgements.</p>
A5 Consulting on the scope of the SA	<p>June – July 2005 Core Strategy/ Development Control Policies</p> <p>Oct – Nov 2007 Land Allocations Development Plan Document (DPD)</p>	<p>The comments from statutory consultees and how they were taken account of are noted in Appendix 12. No topics were eliminated from the</p>

Appraisal stage	When	Comments or Difficulties
		<p>assessment as a result of the scoping process.</p> <p>As noted above, the frameworks included in these Scoping Reports have been used to undertake the assessments in the current report. There have been no changes to the appraisal framework,</p> <p>There have been a number of SA Reports produced since the scoping report accompanying consultations on the emerging Local Plan, which have been sent to the three statutory consultees and been made available for public comment. No comments have been raised in relation to the scope of the SA that would necessitate any revisions to the scope.</p>
B1 Testing the Local Plan Objectives against the SA Framework	The new Local Plan objectives were appraised in September 2014, August 2016 and then in September 2021 as outlined in this report. This stage was first undertaken in August 2005 as part of the appraisal of the Core Strategy and Development Policies.	The ongoing assessment of the Local Plan objectives was one way the SA influenced the Plan development.
B2 Developing the options	The process of developing the options is outlined in detail in section 4 and section 5. This was lengthy and entailed a number of different types and scales of options.	The policy context has changed significantly during the Plan development process, particularly the requirement to develop a target for housing numbers, and this has required several reviews of options for housing provision.
<p>B3 Predicting the effects of the Local Plan</p> <p>B4 Evaluating the effects of the Local Plan</p> <p>B5 Considering ways of mitigating adverse effects and maximising beneficial effects</p>	<p>Appraisal of initial strategic and policy options was completed in August 2005, as part of the appraisal of the Core Strategy and Development Policies. Additional policy options on the Local Plan review were appraised in the 2021 Report Addendum.</p> <p>Appraisal of options for housing numbers was undertaken in July 2016 and included in this report.</p> <p>In July 2016 all viable site options included in the Strategic Housing Land Availability Assessment (SHLAA) were</p>	Data issues are discussed in the significance criteria which are contained in Appendix 5.

Appraisal stage	When	Comments or Difficulties
	<p>appraised, either by updating an existing appraisal of an earlier document, or undertaking a new appraisal. A review was undertaken of all significant negative effects, and how these could be mitigated. Site options were appraised in various previous documents in 2007, 2009, 2013, and 2014.</p> <p>All policies were appraised in July and August 2016. An appraisal of all site-specific policies was undertaken in 2018 and published in the Report Addendum. Changed and new policies that arose from the examination process were appraised in the Report Addenda in 2018 and 2021.</p>	
B6 Proposing measures to monitor the significant effects of the Local Plan	Significant effects indicators are to be included in the Local Plan Annual Monitoring Report as detailed in Section 9 of this report.	Monitoring is resource intensive and therefore needs to be realistic and measurable.

1.5.2 The testing process

This Sustainability Appraisal is an objectives-led process. This means that the potential effects of a plan are tested against a series of objectives for sustainable development (e.g. an objective “to use resources efficiently”). The development and detail of these objectives (called the appraisal framework) are described in section 2.6 below.

The SEA Regulations require the appraisal to identify significant effects of the Plan. In practice this involves assessing each aspect of the Plan against each of the sustainability objectives included in the appraisal framework. This was done using a formal matrix and has occurred at different stages of policy and site appraisal.

The effect of the option or policy on the SA objective was scored as follows: Major positive $\checkmark\checkmark$; positive \checkmark ; major negative **XX**; negative **X**; uncertain **?**; or neutral **O**. In testing the Plan objectives, the same symbols were used, except that no double tick or cross was used. The testing process assessed the effect in the short, medium and long term, and included an explanation of the reasons for making the judgement.

The next section gives more detail on the testing process. The full matrices and summary conclusions for sites are included in Appendix 6 and 7, for the objectives in Appendix 3 and for policies in Appendix 10 and 11.

In completing the appraisal matrices, a range of information was used. The assessment was based on the expert opinion of consultants and relevant technical officers, drawing on the baseline data and analysis of key sustainability issues, relevant research and site-specific information.

For site assessments a wide range of other information was used. In order to make the assessment process of the sites consistent, significance criteria were developed before the assessment was undertaken. These defined the criteria used for identifying significant positive and negative effects for sites, and are included as Appendix 5. The criteria included reference to accepted standards and thresholds where relevant. The full list of data used in the assessment against each objective is included in the significance criteria.

1.5.3 Defining significant effects

The SEA Regulations require the appraisal to identify significant effects. In our appraisal, major positive, positive, major negative and negative effects can all be defined as 'significant'. Significance is assessed in terms of the **size** of the effect (e.g. whether a development will use a large or small amount of greenfield space) and the **importance** (e.g. will it take place on an important biodiversity site). In addition, the **cumulative** effect of a number of small insignificant effects, when taken together can produce a significant effect (e.g. the effect on landscape of a number of small developments in the countryside).

The Regulations also require the SEA to consider different characteristics of effects. These include: (a) probability, duration, frequency and reversibility; (b) the cumulative nature of the effects; (c) the trans-boundary nature of the effects; (d) the risks to human health or the environment (for example, due to accidents); and (e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected). These characteristics are considered through the appraisal matrices and the commentary in the matrices. For example, the matrices define short, medium, and long effects, and also include an assessment of impacts on human health. Where relevant they comment on the other characteristics. The residual effects of the Plan after mitigation are also summarised in section 8 and, where relevant, characteristics of effects are described. Cumulative effects are discussed further in section 7.

When appraising effects, the Regulations also require that value and vulnerability of the area likely to be affected be taken into account. This could be due to: the special natural characteristics or cultural heritage; exceeded environmental quality standards or limit values; intensive land-use; and the effects on areas or landscapes which have a recognised national, community or international protection status. These factors have been included in the significance criteria and are addressed, where relevant, in the commentary in individual appraisal matrices.

1.5.4 Consultation

In order to meet the requirements of the SEA Regulations, the planning authority must seek the views of Historic England, Natural England and the Environment Agency on the scope of the appraisal and on the draft report. It must also consult with the public on the draft report. The table below shows the consultation process throughout the development of the Plan. Appendix 10 lists comments made and how they have been addressed.

Table 16: Consultation process

Planning Document	Stage of SA	Date	Consultation methods
Core Strategy and Development Control Policies ²⁶	Draft Scoping report: tasks A1-A4	June and July 2005	It was sent to a range of consultees, including the statutory consultees, who were given a five-week period to respond with comments. It was also made available on the Council's website.
	Appraisal of Options	September and October 2005	Issues and Options paper sent out to same consultees and made available on the Council's website. They were also directed to the Options Appraisal Report, which was available on the Council's website.
Local Plan	Housing Options	February-March 2013	The Housing Options consultation documents were sent out to statutory consultees and other key stakeholders, and made available on the Council's website. The Housing Options Appraisal Report was also made available on the Council's website.
	Housing Additional Location Options	July-August 2013	The Housing Additional Location Options consultation documents were sent out to statutory consultees and other key stakeholders, and made available on the Council's website. The Housing Additional Location Options Appraisal Report was also made available on the Council's website.
	Preferred Options	December 2014 - January 2015	The Preferred Options consultation documents were sent out to statutory consultees and other key stakeholders, and made available on the Council's website. The Preferred Options Appraisal Report was also made available on the Council's website.

²⁶ As a result of changes to the planning system, this was changed to the Local Plan in 2012.

	Proposed Submission version	October – November 2016	The Proposed Submission Local Plan was sent out to statutory consultees and other key stakeholders, and made available on the Council's website. This Appraisal Report was made available on the Council's website.
	Main Modifications	January-April 2019	The schedule of Main Modifications was sent out to statutory consultees and other key stakeholders, and made available along with the 2019 Sustainability Appraisal addendum on the Council's website.
	Further Proposed Main Modifications	May- June 2021	The schedule of Further Proposed Main Modifications was sent out to statutory consultees and other key stakeholders, and made available along with the 2021 Sustainability Appraisal on the Council's website.

2 Context, baseline and sustainability objectives

2.1 North Hertfordshire – overview

The following gives a brief profile of the District. More detailed baseline information is discussed in 2.3 below.

2.1.1 Environment

North Hertfordshire comprises a broad band of 375km² of attractive undulating countryside following the chalk escarpment of the Chiltern Hills and East Anglian Heights, which are separated by the 'Hitchin Gap' through which the East Coast Main Line railway passes. This ridge forms the watershed between the river basins of the Thames and the Wash. The highest point is Telegraph Hill at Lilley, at 184m above sea level, and the lowest point of 32m above sea level is where the River Rhee leaves the district north of Ashwell. Most of the rural area is farmland, although there is some woodland, especially in the west of the district. Part of the district around Lilley and Hexton is within the Chilterns Area of Outstanding Natural Beauty (AONB). The District contains a variety of habitats for wildlife and plants, including areas of high biodiversity - notably the chalk grasslands and chalky boulder clay woodlands and meadows in the east of the district, the oak and hornbeam woodlands of the west of the district and the wet meadows and fens along the River Hiz and its tributaries. This includes 6 Sites of Special Scientific Interest (SSSIs). The SSSIs include Therfield Heath, which is the most important herb rich chalk grassland in the county. Three European wildlife sites are within 15km of the District's boundaries²⁷.

The District has four main settlements: the historic market towns of Hitchin, Baldock and Royston and the world's first Garden City, Letchworth. It also includes most of the Great Ashby estate, which is part of the urban area of Stevenage, and numerous villages and hamlets. The District has 35 civil parishes and three unparished areas (Hitchin, Letchworth and Baldock). All the towns and many of the villages have historic areas and buildings; there are 40 conservation areas and approximately 2,750 listed buildings. The District has a long history of human habitation and is crossed by the prehistoric Icknield Way. It also contains many ancient monuments, including the Iron Age Ravensburgh Castle at Hexton, the largest fort in south-east England.

In common with the rest of the world, the District needs to look at how to minimise the impacts of climate change, both by minimising the contribution human life makes to climate change and by adapting to new climate patterns. Whilst the District is highly unlikely to be directly affected by rising sea levels (although if all the world's ice sheets melted, Hitchin and Royston would likely be submerged²⁸), the changing climate will have a profound effect on our water and food supplies and way of life in general.

²⁷ Habitat Regulation Assessment Screening Report, NHDC, Feb 2013.

²⁸ National Geographic Climate Change Map

2.1.2 Society

The district has a population of about 127,100²⁹ people. Just over 75% of the population live in the four towns or Great Ashby. A combination of factors, including people living longer, fewer people living in each home, proximity to London and relatively low interest rates have been causing housing costs to rise. The cost of housing relative to local incomes in the District is high and is beyond the reach of many, especially young adults. This is reflected in a skewed age profile - the District has significantly fewer people aged 18 - 30 than it does under 18s and over 30s.

All the towns have a range of sport, recreation and community facilities, schools and libraries. Knebworth, the largest village, also has a library. There are three public indoor swimming pools, two public outdoor swimming pools and three major leisure centres. There are several museums and a three-screen cinema at Letchworth Garden City. There are several community and village halls across the district.

2.1.3 Economy

The District has good rail and road links. There are five stations in the district and one just 300m outside it (Ashwell & Morden). Direct services from the District's stations run north to Peterborough, north east to Cambridge and King's Lynn and south to London and Hertford. There are direct rail services between each of the stations in the district and also to Stevenage for connections to the inter-city service to the north east and Scotland. However, there are no rail links from the District's stations to the west. There is a range of local bus services, although services can be infrequent, particularly in the rural area. The A1 from London to Edinburgh passes through the District, and for most of its length in the District is a motorway. The A505 is the main east-west route, from Leighton Buzzard to the M11 near Duxford. Other main roads include the A600, A602 and A507. Car usage and ownership is high in the District, and traffic congestion is seen as one of the areas where residents would most like to see improvements³⁰.

The District is also near to two international airports, London Luton Airport immediately adjoining the District boundary to the west and London Stansted Airport a further away to the east. They are a source of employment and bring economic benefits, but they also bring environmental impacts from noise, air pollution and vibrations, both from the air traffic itself and from land traffic to and from the airports. There is no one dominant centre serving the District. Hitchin town centre is the largest retail destination, followed by Letchworth and there are large employment areas in Letchworth, Hitchin and Royston. There are traditional markets in Hitchin, Baldock and Royston and Business Improvement Districts are currently operating in Hitchin, Letchworth Garden City and Royston. The District's settlements have a complex system of interdependencies with each other and with surrounding larger towns, notably Stevenage, Luton, Cambridge, Welwyn Garden City, Milton Keynes and London. A substantial proportion of the district's population commutes to these larger centres for work and for shopping. There is noteworthy leakage of retail expenditure from the district's

²⁹ From 2011 Census

³⁰ Census 2011 / NHDC Local Plan Preferred Options consultation responses

population using retail centres elsewhere³¹. In the rural areas, there are a number of village shops and services, although these have declined in recent years.

2.2 Links to other policies, plans and programmes

Task A1 of the appraisal process involves identifying other relevant policies, plans, programmes (PPP) and sustainability objectives.

Relevant documents at international, national, regional and local level have been reviewed. For each document the following information has been collated:

1. Key objectives relevant to the Local Plan and SA
2. Key targets and indicators relevant to the Local Plan and SA
3. Implications for the Local Plan
4. Implications for SA

Key messages from the review are shown in the table below.

Table 17: Key messages from review of other policies plans and programmes.

SA Theme	Key messages from PPP Review
Economic activity	<ul style="list-style-type: none"> • Promote green growth • Use infrastructure levy to help fund infrastructure projects that support growth • Investment in infrastructure, including public transport infrastructure • Recognise the economic value of ecosystem services • Encourage and enable housing growth • Create local employment opportunities • Enhance skills to reduce unemployment and deprivation • Ensure that there is an adequate supply of employment land to meet local needs and to attract inward investment • Encourage growth in science and technology and creative industries. • Support small businesses
Land-use and development patterns	<ul style="list-style-type: none"> • Encourage the use of previously developed (brownfield) land • Promote the re-use of derelict land and buildings • Reduce amount of contaminated land • Avoid using best and most versatile agricultural land for development • Encourage land management that will protect water quality • Improve public transport • Improve cycling and walking infrastructure

³¹ NHDC Town Centre and Retail Study (2016)

	<ul style="list-style-type: none"> • Deliver networks of green infrastructure and open space • Encourage sustainable transport and reduce the need to travel • Promote access to the countryside and green space • Reduce traffic and congestion
Environmental protection	<ul style="list-style-type: none"> • Halt biodiversity loss, support well-functioning ecosystems and establish coherent ecological networks • Protect and enhance designated sites, priority species and habitats and ecological networks • Combat alien species • Reduce / minimise water pollution • Protect surface and groundwater quality • Prevent further deterioration of aquatic ecosystems in accordance with the Water Framework Directive • Protect and enhance natural landscapes and townscapes • Promote high quality design that protects the natural and historic environment • Respect cultural heritage assets and their settings • Improve the quality of the built environment
Climate change	<ul style="list-style-type: none"> • Reduce greenhouse gas emissions • Move towards a low carbon economy • Build resilience to climate change and in particular flood risk • Support renewable energy • Avoid development in areas of flood risk • Reduce the risk of flooding arising from new development • Promote the use of Sustainable Drainage Systems (SuDS)
A just society	<ul style="list-style-type: none"> • Reduce fuel poverty • Promote improvements in health and wellbeing • Connect people with nature to deliver health and well-being improvements • Ensure social equality and prosperity for all • Promote integrated communities and foster social capital • Make appropriate provision for travellers • Encourage and enable housing growth and deliver an appropriate mix of housing to meet local needs, built to high design quality and environmental standards • Improve road safety • Promote walking and cycling as a healthy lifestyle choice • Ensure that air quality is maintained or improved and that air pollutants are minimised
Resource use and waste	<ul style="list-style-type: none"> • Improve water efficiency • Ensure sustainable water catchment management

	<ul style="list-style-type: none"> • Ensure appropriate investment in water and waste management infrastructure to accommodate new development • Work towards a more sustainable and efficient approach to resource use and waste management • Drive waste management up the waste hierarchy
Town centres	<ul style="list-style-type: none"> • Reinvigorate Hertfordshire's places • Address localised disadvantage in the New Towns • Improve vitality of town centres

This information has been used to inform the subsequent stages of the SA and Local Plan process, which are covered in later sections of this document. The themes arising from the review, and the key messages were used in the following stages of the SA:

- Identification of sustainability issues (task A3);
- Development of the SA framework (task A4); and
- Baseline review (task A2).

The review was updated in July 2012 to reflect the changes in the planning system, and further updated in April 2016. The updated review is included as Appendix 1 to this report.

2.3 Baseline review

Task A2 of the appraisal process involves collecting relevant social, environmental and economic baseline information and producing a characterisation of North Hertfordshire.

As its name implies, the baseline review describes the current social, economic and environmental conditions in the District. The Practical Guide notes that baseline information provides the basis for predicting and monitoring effects and helps to identify problems and alternative ways of dealing with them³².

Collecting baseline information therefore contributes to the effectiveness of the appraisal. The aim is to collect information relating to each of the sustainability objectives. However, in reality there will be gaps in data availability. The Practical Guide comments that *not all information may be available immediately. The SEA team may need to consider whether improvements are needed to current information collection to fill existing gaps.*³³

The baseline review meets the requirements of the SEA Regulations to provide information on *the environmental characteristics of the area likely to be affected*³⁴.

³² See page 27 of the Practical Guide.

³³ See page 50 of the Practical Guide

³⁴ Schedule 2

This stage has taken place during all stages of the documents' production. Most recently it was completely reviewed and updated in July 2016. It was first undertaken as part of the Core Strategy Scoping Report in 2005. It was then completely reviewed and updated in June 2012 to reflect changes in national planning policy and the introduction of the NPPF.

The full update was undertaken prior to the assessment of the policies and sites. It is included as Appendix 2. It also summarises data for a series of indicators associated with each of the Sustainability Appraisal objectives. Where it is available, the review gives comparable data for Hertfordshire, the East of England region and the UK.

The information from the baseline review was used to identify key sustainability issues and identify the objectives to be used in the appraisal framework. Both of these are discussed in the following sections.

2.4 Sustainability Issues

Task A3 of the appraisal process involves identifying key sustainability issues for the SA to address.

The identification of sustainability issues helps to define key issues for the Local Plan and develop sustainable plan objectives and options. It also provides useful information for the Sustainability Appraisal process itself. It informed stage B of the process where options and policies were tested against the appraisal objectives. For example, when testing options for development in villages, information that *access to services for those in villages without a car* is a sustainability problem informed the judgements made in the testing process and influenced the choice of options.

The identification of sustainability issues meets the requirements of the SEA Regulations to identify any existing environmental problems which are relevant to the Plan or programme including, in particular, those relating to any areas of a particular environmental importance³⁵.

The key sustainability issues were developed from the review of plans, programmes and policies and the baseline review, both discussed above.

Most recently, it was fully reviewed and updated in July 2016 with some minor updates in 2021 as a result of the examination process. It was first produced as part of the Scoping Report in 2005, drawing on discussions with the Officer Steering Group in May 2005. This was then further updated in May 2011, June 2012 and again in August 2014. The 2016 update informed the 2016 sites and policies appraisals. The revised list is shown in Appendix 2 and is summarised in the table below, under the themes identified through the review of other Plans, Policies and Programmes.

³⁵ Ibid

Table 18: Key sustainability issues

Economic activity
Need to provide more highly-skilled employment opportunities in the District. There is a significant net daily outflow of commuters, with the average out-commuter being more highly skilled than the average in-commuter.
Difficulties in competing with large urban centres for the provision of employment and facilities.
Promotion of rural tourism. Visitors can be important to rural areas, but the District is not seen as a prime tourist location.
Land use and development patterns
Significant and increasing pressure on greenfield sites in order to meet the needs for housing and economic growth.
The development of greenfield sites on the edges of existing settlements may reduce access to open countryside for existing residents.
Population and mobility factors have changed the function of villages from employment service centres to dormitory/residential functions reducing their social and physical diversity.
The density of traffic on the principal road network is high and increasing but the rural nature of the District makes the provision of sustainable travel modes more challenging.
Environmental protection
Pressures on locally significant habitats and species in the District. These include fragmentation of habitats, loss of corridors and the direct impacts of agriculture and new development, including waste water treatment, water extraction and recreational disturbance.
Landscape and townscape character likely to be impacted by the significant level of new development needed in the District.
The District's rich heritage of market towns and the Garden City suggest that there are localised heritage issues which will arise over more detailed site selection.
Quality of surface and ground water could be threatened by the water supply needs and drainage from future developments. North Hertfordshire is in an area of groundwater sensitivity and there are constraints on sewage infrastructure around Royston and Stevenage.
Air quality issues could become more significant with continued growth in development and traffic.
Climate change
Emissions of greenhouse gases in the District could rise with further development in the District and associated growth in transport.
A significant number of existing homes and potential new development sites face surface water flood risks.
A just society
Whilst the District is relatively prosperous there are pockets of income and/ or multiple deprivation in relation to national standards. In the towns these occur in parts of Hitchin and Letchworth. In the rural areas specific issues are isolation and lack of access to services.
There has been a reduction in village services and employment over the last 20 years. This particularly affects the elderly and young people.

Although lower than the County average, high and increasing property prices mean home ownership is out of the reach of many households.
Noise from air and road transport has a significant effect on quality of life in the District. Proposed developments will have significant additional impacts.
Resource use and waste
Although not yet a barrier to new development, water supply in the District could become constrained in future decades.
The costs of and constraints on landfilling waste and the need to reduce emissions mean there is a need for ongoing improvements to waste reduction, reuse and recycling.

2.5 What would happen without the Plan?

The Guidance requires the SA report to consider the likely evolution of the environment without implementation of the Plan.

By not preparing a Local Plan the Council would lose control of where development occurs. This would mean that any potential development could be considered favourably depending on the merits of the application. Whilst NPPF policies and other national guidance would apply, locally set policies that could deliver local benefits and take account of local circumstances would not be implemented. It would also not be possible to plan strategically for development.

This could mean that the need for delivering housing in an area of high demand might be considered through the planning process to outweigh any potential environmental impacts and so impacts could be substantial and potentially not mitigated.

There would be no cumulative assessment of the sites; on a case-by-case basis a site may be considered acceptable but in combination with another it may not. By not preparing a Local Plan this assessment will not happen and small impacts of sites may combine to create more significant impacts.

The table below outlines what could happen against each of the sustainability objectives developed for the Plan (as discussed in the next section).

Table 19: What could happen in the absence of a plan?

SA objective	What could happen in the absence of a plan
1 Achieve sustainable levels of prosperity and economic growth	Economic development and redevelopment would continue within the existing designated areas and in accordance with the NPPF. However, additional land for economic development as detailed in evidence to the Local Plan, would not come forward as some of it is proposed in areas that are currently designated green belt.

	As a result, economic activity would be stifled and pressure for residential may in fact reduce in the amount of land available for employment and economic uses in the long term.
2(a) Minimise the development of greenfield land and other land with high environmental and amenity value?	<p>Whilst national policy encourages use of brownfield land, the potential for development to occur anywhere means that development would not prioritise the use of brownfield sites and land of low environmental and amenity value.</p> <p>A do-nothing approach would also not maximise reuse of vacant buildings and derelict land or minimise the loss of the best and most versatile agricultural land as development could occur anywhere.</p> <p>It may reduce the quantity of unremediated contaminated land as all potential sites would be considered as acceptable in principle.</p>
2(b) Provide access to green spaces	<p>Whilst national policy would apply, locally defined policies providing guidance on improving access for all residents of the District to green spaces would not necessarily occur.</p> <p>Unplanned development would not facilitate opportunities for people to come into contact with and appreciate wildlife and wild places.</p> <p>There is no certainty that this would maintain/improve the public right of way network.</p>
2 (c) Deliver more sustainable location patterns and reduce the use of motor vehicles	<p>Unplanned development wouldn't necessarily locate development so as to reduce the need to travel or reduce car reliance, encourage walking, cycle, bus and train use.</p> <p>It wouldn't reduce road freight movements or avoid exacerbating local traffic congestion.</p> <p>As development would not be coordinated there's no guarantee that it would provide affordable and accessible public transport in towns and in rural areas.</p>
3(a) Protect and enhance biodiversity	Whilst national policies and guidance to protect biodiversity will still apply; protection of locally identified habitats and creation of links between habitats may not be taken into account.
3(b) Protect and enhance landscapes	Whilst national policies and guidance to protect and enhance landscapes, especially those of historic, recreational or amenity value, and within the Chilterns AONB will apply the unplanned development may have a cumulative impact.
3(c) Conserve and where appropriate, enhance the historic environment	Whilst national policies and guidance to conserve and enhance the historic built character of the District's towns and villages may apply locally designated assets may not be adequately protected.
3(d) Reduce pollution from any source	National legislation would apply and so legally protected issues would be mitigated, but cumulative impacts and local issues may not be considered adequately.

4(a) Reduce greenhouse gas emissions	Locations of developments would not be planned and so opportunities for minimising energy consumption by transport and in buildings would not be realised.
4(b) Improve the District's ability to adapt to climate change	National guidance on flood risk would still apply, but sequential testing of sites would not occur in advance of the application process and so areas at risk of flooding may not be considered.
5(a) Share benefits of prosperity fairly	Without a plan, development would still occur within settlement boundaries, which may contribute to deprived areas. However, pressure for residential development may impact on employment areas and the opportunities they bring.
5(b) Provide access to services and facilities for all	Without a plan, development would still occur within settlement boundaries, which may contribute to local infrastructure. However, there would be no large-scale residential allocations which will include opportunities for improved infrastructure on a larger scale.
5(c) Promote community cohesion	Without a plan development would still occur within settlement boundaries, which may contribute to local community infrastructure, however there would be no large scale residential allocations which will include opportunities for improved community infrastructure on a larger scale.
5(d) Increase access to decent and affordable housing	Without a plan, development would still occur within settlement boundaries. However, the levels of affordable housing would not reflect the levels required by the new plan and larger sites are traditionally more viable, meaning the overall quantum would be significantly reduced.
5(e) Reduce crime rates and fear of crime	Without a plan, development would still occur which may or may not impact on crime and fear of crime. Large-scale development may present greater opportunities to reduce crime through design as opposed to unplanned ad-hoc locations.
5(f) Improve conditions and services that engender good health and reduce health inequalities	<p>Unplanned development may not help promote healthy lifestyles as it wouldn't necessarily be located to deliver solutions in the right location, especially cumulatively and in combination with other developments. The ad hoc nature of development means private cars would be the main mode of transport.</p> <p>New development provides potential for additional greenspaces and facilities; without a plan spaces within urban areas will come under increasing pressure for development.</p> <p>That said, without a plan the level of housing would not be as high and so there wouldn't be as many additional cars and noise pollution.</p>
5(g) Increase participation in education and life-long learning	Without a plan, development could still contribute to education facilities. However, large-scale development provides the

	opportunity for large-scale new facilities as well as an increase in employment land.
5(h) Maintain and improve culture, leisure and recreational activities that are available to all	New large-scale development provides potential for additional greenspaces and facilities. Without a plan, spaces within urban areas will come under increasing pressure for development. The existing facilities may also be overcrowded.
6(a) Use natural resources efficiently; reuse, use recycled where possible	Development would not minimise the demand for raw materials or minimise wastage caused by construction methods as development would be uncoordinated. National standards would ensure water consumption to levels supportable by natural process and storage systems.
6(b) Reduce waste	Whilst national policies would apply, there is no guarantee that development would reduce, reuse or recycle waste generated.
7 Promote sustainable urban living	Without a plan, redevelopment of town centre sites for mixed use could still occur depending on market share and increased population. Without large scale development identified in the Plan, which includes additional retail floorspace in the form of strategic sites, the vitality and trade draw of the district's town centres may also increase. However, it may not provide facilities in the locations that people want them and may mean an increase in out-of-town retail applications if sites in the town centre aren't deliverable.

2.6 The Sustainability Appraisal framework

As outlined earlier, Sustainability Appraisal is an objectives-led process. Task A4 of the appraisal process involves developing the SA framework, consisting of the sustainability objectives³⁶.

The Practical Guide suggests that planning authorities may also choose to include more detailed sub-objectives in their SA Framework. Sub-objectives can help to ensure that all the key issues to be considered in the SA are incorporated in the SA Framework. An example of a sub-objective for resource efficiency could be to reduce water use.

It should be noted that the SA objectives are distinct from the Plan objectives though they may in some cases overlap with them.

The SA objectives were drawn up using the themes from the review of other Policies, Plans and Programmes, and drawing on the baseline review, and specifically the key sustainability issues listed

³⁶ We have chosen not to link the framework itself to targets and indicators, however the Baseline Review includes indicators and any targets related to each of the Sustainability Objectives.

above. It was refined in consultation with council officers³⁷ and in response to consultation comments received. Consultation comments received on the appraisal framework are included in Appendix 12, which outlines the changes made as a result. All topics required by the SEA Regulations have been addressed by the objectives and none have been scoped out.

The framework was fully reviewed in June 2012, August 2014 and again in August 2016. These reviews took account of the review of plans, programmes and policies (particularly the introduction of the NPPF), and of key sustainability issues. It was originally produced in 2005, with a modified version being produced in 2007 for site appraisals.

This framework was used for the **appraisal of objectives, alternatives and policies** and is shown in the table below. The objectives which address the issues which are required to be covered by the SEA Regulations³⁸ are shown underlined. It should be noted that the appraisal method used did not involve using baseline and monitoring indicators as part of the assessment.

Table 20: Appraisal framework

SA Objective ³⁹	SA Sub Objective: <i>will the policy or proposal help to...</i>
ECONOMIC ACTIVITY	
1 Achieve sustainable levels of prosperity and economic growth	<ul style="list-style-type: none"> • maintain a diversified economy, with increased resilience to external shocks? • encourage new business to start-up and thrive in the District? • support and encourage the rural economy and diversification? • support and promote sustainable tourism in towns and rural areas? • improve the quality of local jobs available to people in the District? • increase the skills base? • make the cost of housing more affordable to those employed in the District?
LAND USE AND DEVELOPMENT PATTERNS	
<u>2(a) Minimise the development of greenfield land and other land with high environmental and amenity value?</u>	<ul style="list-style-type: none"> • promote the use of brownfield sites and, if brownfield sites are not available, land of low environmental and amenity value? • maximise reuse of vacant buildings and derelict land? • minimise the loss of the best and most versatile agricultural land? • reduce quantity of unremediated contaminated land?
<u>2(b) Provide access to green spaces</u>	<ul style="list-style-type: none"> • provide/improve access for all residents of the District to green spaces? • provide opportunities for people to come into contact with and appreciate wildlife and wild places? • maintain/improve the public right of way network?
<u>2 (c) Deliver more sustainable location</u>	<ul style="list-style-type: none"> • locate development so as to reduce the need to travel? • reduce car reliance, encourage walking, cycle, bus, and train use?

³⁷ Officer Steering Group at a meeting on May 18th 2005

³⁸ Listed in Schedule 2

³⁹ Those relevant to the SEA Regulations are shown underlined

SA Objective³⁹	SA Sub Objective: will the policy or proposal help to...
<u>patterns and reduce the use of motor vehicles</u>	<ul style="list-style-type: none"> • reduce road freight movements? • avoid exacerbating local traffic congestion? • provide affordable, accessible public transport in towns and in rural areas?
ENVIRONMENTAL PROTECTION	
<u>3(a) Protect and enhance biodiversity</u>	<ul style="list-style-type: none"> • protect habitats and species, especially those designated as being of importance, and provide opportunities for creation of new habitats? • support and maintain extent of wetland habitat and river habitats?
<u>3(b) Protect and enhance landscapes</u>	<ul style="list-style-type: none"> • protect and enhance landscapes, especially those of historic, recreational or amenity value, and within the Chilterns AONB?
<u>3(c) Conserve and where appropriate, enhance the historic environment</u>	<ul style="list-style-type: none"> • conserve and enhance the historic built character of the District's towns and villages? • protect sites of archaeological and historic importance, whether designated or not?
<u>3(d) Reduce pollution from any source</u>	<ul style="list-style-type: none"> • improve the water quality of rivers and groundwater supplies? • achieve good air quality? • reduce ambient noise, especially from traffic? • reduce light pollution in the District? • protect soil quality?
CLIMATE CHANGE	
<u>4(a) Reduce greenhouse gas emissions</u>	<ul style="list-style-type: none"> • minimise energy consumption by transport and in buildings? • increase proportion of energy generated by renewable sources? • encourage use of local suppliers and the consumption of local produce?
<u>4(b) Improve the District's ability to adapt to climate change</u>	<ul style="list-style-type: none"> • reduce vulnerability to climate change, exploit any benefits? • avoid development in areas at risk from flooding?
A JUST SOCIETY	
5(a) Share benefits of prosperity fairly	<ul style="list-style-type: none"> • reduce disparities in income levels? • contribute to regeneration of deprived areas (estates in Letchworth and Hitchin)? • provide employment and other opportunities for unemployed, especially long-term unemployed and the disabled? • encourage entrepreneurial activity in deprived areas?
5(b) Provide access to services and facilities for all	<ul style="list-style-type: none"> • provide access to services and facilities without need to use a car? • retain rural services, especially shops, post offices, schools, health centres and bus services? • recognise the needs of specific groups such as minority ethnic groups, the young, the elderly and the disabled?
5(c) Promote community cohesion	<ul style="list-style-type: none"> • support development of voluntary sector? • encourage development of community run business?

SA Objective³⁹	SA Sub Objective: <i>will the policy or proposal help to...</i>
	<ul style="list-style-type: none"> encourage people's feelings of belonging, for example by providing community meeting places? recognise and value cultural and ethnic diversity?
5(d) Increase access to decent and affordable housing	<ul style="list-style-type: none"> help improve the quality of the housing stock and reduce the number of unfit homes? increase access to affordable housing, particularly for the young, the disabled and key workers?
5(e) Reduce crime rates and fear of crime	<ul style="list-style-type: none"> encourage crime reduction, particularly through the appropriate design of new development? help reduce the fear of crime?
<u>5(f) Improve conditions and services that engender good health and reduce health inequalities</u>	<ul style="list-style-type: none"> help promote healthy lifestyles? improve access to health services by means other than private cars? reduce ambient noise near residential and amenity areas? reduce road accidents? reduce accidents and damage from fires?
5(g) Increase participation in education and life-long learning	<ul style="list-style-type: none"> improve access to skills learning by young people? improve access to skills learning by adults?
5(h) Maintain and improve culture, leisure and recreational activities that are available to all	<ul style="list-style-type: none"> increase access to culture, leisure and recreational activities?
RESOURCE USE AND WASTE	
<u>6(a) Use natural resources efficiently; reuse, use recycled where possible</u>	<ul style="list-style-type: none"> minimise the demand for raw materials? encourage sustainable design, use of sustainable building materials and minimise wastage caused by construction methods? limit water consumption to levels supportable by natural process and storage systems? protect groundwater resources? promote sustainable drainage systems? reduce minerals extracted and imported?
<u>6(b) Reduce waste</u>	<ul style="list-style-type: none"> reduce, reuse or recycle waste generated?
TOWN CENTRES	
7 Promote sustainable urban living	<ul style="list-style-type: none"> encourage wider range of shops and services in town centres? encourage more people to live in town centres? encourage mixed use developments in town centres? improve transport connections in, and to, town centres? encourage synergy in land uses, which supports the continued and enhanced viability of a wide range of shops and services? protect or improve the quality of the public realm in towns?

A modified version of this framework was used for the appraisal of sites. This modified framework includes specific sub-questions related to site allocations and excludes issues which are addressed in

the Local Plan and cannot be influenced by site allocations. It was also modified in response to consultation comments on the Land Allocations SA/SEA Scoping Report (September 2007). These comments and the changes made as a result can also be viewed in Appendix 12. The modified framework is shown in Appendix 5.

3 Testing the Plan objectives

3.1 Overview

Task B1 requires that the Plan objectives be tested against the Sustainability Appraisal objectives. The Local Plan includes a set of objectives which are quoted in section 1.3 above.

The new Local Plan objectives were appraised in September 2014 and again in August 2016. This stage was first undertaken in August 2005 as part of the appraisal of the Core Strategy and Development Policies.

3.2 Assessment

The final version was reassessed in September 2021 as part of this report. No recommendations have been given at this final stage, though recommendations were included in previous assessments and have had an impact on the objectives' development.

The strategic objectives are assessed against the SA objectives in terms of positive compatibility, conflict, uncertain and neutral. Positive compatibility is given where there is a clear positive alignment between the Plan strategic objective and the SA objective. The assessment matrix can be seen in Appendix 3.

Table 21: Conclusions of appraisal of objectives

<p>Conclusions</p> <p>Almost all the Local Plan objectives are positively compatible or neutral when tested against the Sustainability Appraisal objectives.</p> <p>A number of tensions between objectives are identified:</p> <ul style="list-style-type: none">• ENV1 in directing development towards existing settlements could have a negative health impact through noise and light pollution.• SOC4 in enabling rural communities to meet their own needs could result in development in less sustainable locations.• Employment land and housing are proposed through ECON2 and SOC1. There may be greenfield development and arising impacts to biodiversity and landscape. This impact is partly mitigated by ENV1 which directs development towards the most sustainable locations. <p>The negative or uncertain effects will be mitigated by individual policies, as outlined in Appendices 8 and 9.</p>
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4 Options development and appraisal

4.1 Introduction

A key part of the process of producing the Local Plan has been to identify policy options for how the District should develop and, in particular, where development should happen and how much development there should be. Options development (known as alternatives in the language of the SEA Regulations but referred to as options in this report to reflect common practice in planning in the UK) is also an important part of the SA/SEA process.

Options for housing numbers have been considered throughout the Local Plan development process. In order to reflect changing circumstances and support the decision-making process, a new set of options for housing numbers was identified and appraised in 2016. The purpose of this was to assess the likely significant effect of the amount of housing proposed and understand the impacts of potential reasonable alternatives. The results are summarised in 4.2 below and full matrices for each option can be found in Appendix 4.

Strategic and policy options were kept under review throughout the Plan development process. They were initially outlined, appraised and consulted on in 2005.⁴⁰ These covered a range of issues including options for the location of new housing. These options were then reconsidered by the Council at a number of stages in the Local Plan development process. The Council's preferred options for each of the policy areas and the reason for choosing them are outlined in the sections starting from 4.3 below.

Options were assessed for seven topics: 1. Natural and Built Environment, 2. Rural Areas and Settlement Pattern, 3. Housing, 4. Employment and Tourism, 5. Town Centres, 6. Transport, 7. Leisure and Community Facilities. Housing is discussed first, followed by the other six topics. This is because housing numbers is the key strategic issue the Plan needs to address. The appraisal matrices and summaries for these options are included as Appendix 3 to this report. Site options are addressed in Section 5 below.

4.2 Options for housing numbers

An appraisal of housing options was undertaken in 2016 to assess the likely significant effect of the amount of housing proposed. Three options were considered for provision of additional housing:

- a) 17,000 houses (the total provision included for consideration in the Draft Local Plan.)
- b) 11,000 houses (an intermediate figure between 17,000 and 6,500)

⁴⁰ See <http://www.north-herts.gov.uk/planning/planning-policy/local-plan-emerging-policy/core-strategy/core-strategy-sustainability>

- c) 6,500 houses (this is the 'business as usual' option, which assumes there is no Local Plan produced and excludes the use of green belt sites).

The numbers for each option included 2,500 new houses which had already been completed, or granted planning permission at this time.

The Council chose option a), as this was the only option which met the objectively assessed need for North Hertfordshire and contributed to the unmet need for Luton. As was clarified in the examination process, not all this housing will now be delivered in the Plan period. However, as outlined in SP8, the Plan identifies Strategic Housing Sites that will continue delivery beyond the end of the Plan period in 2031.

Section 4.3.2 below discusses how options were assessed for contributing to the unmet need of Luton. A comparative summary and full matrices for each option can be found in Appendix 4.

4.3 Housing options

4.3.1 Housing location

The following options for housing delivery were identified:

- a) Continue current policy of focusing development on the four towns and fourteen villages, which may include limited development of greenfield sites;
- b) Focus development on previously developed land (PDL) within existing urban areas;
- c) Urban extensions on greenfield land adjoining existing towns;
- d) Build a new settlement; and
- e) Use smaller greenfield sites in the villages.

A summary of the performance of each option and the appraisal matrices for each option is shown in Appendix 4.

In summary, the Council has chosen a combination of options a), b) and c) and e) as part of the solution to providing additional housing to meet the District's need. The development is spread across the District combining a number of the spatial options. Sites have been assessed against planning issues and those performing well in terms of constraints, as well as being located closer to services and facilities, have been chosen. The quantum of development is such that all options have been considered where deliverable sites are identified. There is also more development in the villages based on the number of sites that have been submitted in these locations and the site's suitability based on the services that exist.

The option to build a new settlement has not been pursued. This is because no options for new settlements have been put to the Council and with the amount of deliverable land submitted as part

the Local Plan process by developers and landowners, compulsory purchase would not be considered in the public interest.

4.3.2 Contributing to the unmet need of Luton

The four local authorities in the Luton Housing Marking Area (HMA) commissioned a study to consider reasonable alternatives for delivering the housing need for the HMA and to help meet unmet need arising from Luton BC. The four authorities on the Steering Group for the study comprise Central Bedfordshire Council (CBC), Luton Borough Council (Luton BC), Aylesbury Vale District Council (AVDC), and North Hertfordshire District Council (NHDC).

As outlined in this study⁴¹, it is possible to meet this need within the HMA. As part of the study, sites EL1, EL2 and EL3 (jointly named East Luton) are assessed as having a high deliverability and medium viability. NHDC has concluded that there are no reasonable alternatives to developing these sites to contribute to the need for the HMA and unmet need arising from Luton. That is because:

- The duty to co-operate as set out in the NPPF and PPG requires the Council to make every effort to secure cooperation on strategic issues; in this regard meeting unmet need arising from Luton. The sites to the east of Luton are in close proximity to Luton (within the HMA) and are deliverable within the timescale and their selection is justified through the Plan process;
- The NPPF outlines that housing need should be met within a HMA (i.e. it is not reasonable to seek sites outside the HMA for this purpose). Whilst large portions of the HMA lie outside the North Hertfordshire district area, it is not in the authority's jurisdiction to make judgements regarding the acceptability of these alternative sites⁴². As neighbouring authorities Plans have emerged, the provision of need within the HMA has become clearer. The HMA Growth Study has highlighted that the need can be accommodated within the HMA boundary and so alternatives outside the HMA boundary cannot be considered as reasonable at this time; and
- There are no other reasonable alternative sites within the North Hertfordshire part of the HMA that can contribute significantly to meeting the need. The HMA area is assessed in the growth study through constraints mapping and absolute constraints cover a large majority of the area within North Hertfordshire outside of the allocated sites.

4.3.3 Other housing options considered

A number of other policy options were considered for housing and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

⁴¹ *Luton HMA Growth Options Study*, LUC in association with BBP Regeneration, November 2016

⁴² Although there were discussions between authorities about the provision of housing across the HMA, this SA can only appraise alternatives within North Herts District.

Table 22: Housing policy options

Issue around which options were Developed	Local Plan Policy Option	Council's Reasons for Selecting
3.2 ⁴³ Provision of affordable housing	<p>The following options form part of Policy HS2:</p> <ul style="list-style-type: none"> • Increase the amount of affordable housing on larger sites to a higher percentage. • Lower the threshold to include smaller sites. <p>The Council has issued draft supplementary guidance which provides further information on the provision of affordable homes in the District⁴⁴.</p>	<p>The issue of affordable housing is well recognised across the country as a whole and the Government encourages local planning authorities to set out policies on affordable housing, based on assessments of local housing needs. The policy is based on what's viable, but recognises that larger sites have the potential to deliver a higher figure.</p> <p>The requirement starts at 10 houses reflecting current Government guidance in the PPG.</p>
3.3 How to obtain additional funding for affordable housing	This matter is not addressed in the Plan.	-
3.4 Affordable housing in rural areas	The option to continue to encourage rural exception sites, in or adjacent to villages, where appropriate, in environmental terms and where there is a proven local need, has been pursued as policy CGB2(a) and (b).	Policy provides opportunity to deliver affordable housing in the rural area where issues of affordability are particularly acute. Applications would need to be supported by specific evidence of need commissioned, or otherwise endorsed by, the relevant Parish Council.
3.5 Ensuring a range of housing types and styles	The option to include a policy which ensures that a mix of sizes and types of property is built on all sites over a certain size has been pursued as Policy HS3.	Policy applies to all residential allocations and requires a mix of housing that meets the requirements of different groups within the community.
3.6 Accommodation for Gypsy and Traveller families	The option to develop a new site has been included in Policy HS7 on sites for Gypsies and Travelling Showpeople. This is a criteria-based policy to be used	The Plan includes an allocation as national guidance requires the council to meet its own need. Meeting need where it arises is the most sustainable option.

⁴³ Numbering of options is as per initial options assessments as outlined in Appendix 3

⁴⁴ Planning Obligations Supplementary Planning Document (SPD) (North Hertfordshire District Council, 2006)

Issue around which options were Developed	Local Plan Policy Option	Council's Reasons for Selecting
	to assess any application for a site should it come forward.	
3.7 Contributions to local facilities	The option to include a policy requiring contributions from all new housing developments is reflected in the Plan (Policy SP7) within restrictions of national government and the pooling restrictions. Strategic Policies SP14-SP19 set out the infrastructure requirements and mitigation measures for strategic sites. The communities chapter of the Plan provides the same detail for the non-strategic sites. The IDP sets out the infrastructure requirements for the District which is translated into the infrastructure chapter of the Local Plan.	Approach to infrastructure is transparent and identifies what is required over the Plan period.

4.4 Other strategic and policy options

4.4.1 Natural and built environment options considered

A number of policy options were considered for the natural and built environment, and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

Table 23: Natural and built environment policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
1.1 ⁴⁵ Protecting landscapes	The option to include policies protecting landscapes based on their amenity and recreational value and national designations (such as AONB) is reflected in Policy NE3.	NPPF (para 109) requires the protection and enhancement of valued landscapes. The emphasis of the policy is to ensure that the design of a development proposal is sensitive to the local context

⁴⁵ Numbering of options is as per initial options assessments as outlined in Appendix 3

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
		to ensure that the scheme makes a positive contribution to the landscape.
1.2 Protecting biodiversity	<p>The option to include a policy requiring all new developments to protect or enhance biodiversity <i>and</i> encouraging additional wildlife features, such as green corridors linking open spaces within urban areas to each other and the countryside is reflected in the Plan. The protection and enhancement of existing sites together with a clause which will encourage developers to contribute to the biodiversity of the District as part of the development scheme is set out in Policies SP9, NE1 and NE4. SP9 and NE4 encourage a net gain for biodiversity.</p>	Policies provide protection to sites in line with NPPF, but provide opportunity for appropriate mitigation as last resort, the policy identifies a net gain for biodiversity.
1.3 Minimising pollution	<p>The following options are reflected in the Plan:</p> <ul style="list-style-type: none"> • To aim to protect watercourses and groundwater sources from pollution is reflected in the Plan. • Encourage alternative forms of drainage such as soakaways and filter strips which increase infiltration and natural recharge of groundwater resources. • Prohibit development in natural floodplains and in locations where development would increase flood risk in areas downstream because of additional surface run-off, unless appropriate attenuation measures are put in place. <p>Policies SP11, NE10 and NE11 aim to protect watercourses and groundwater sources from pollution, including taking into account the impact of new housing developments. Policy NE8 encourages sustainable drainage solutions.</p>	<p>The Water Framework Directive requires improvement to watercourses. Policies take account of the Flood and Management Act, NPPF and the NPPF and PPG.</p>

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	Policy NE8 prohibits development in floodplains and areas of surface water flood risk.	
1.4 Energy generation	The original options have been modified to take account of the Hertfordshire Renewable Energy Study and ministerial statements on renewable energy and national guidance. Policy NE12 seeks to guide renewable energy and energy efficiency to appropriate locations across the district.	Policy is positive in trying to deliver renewable energy schemes where acceptable – The National Planning Policy Framework says that Local Plans should maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily.
1.5 Waste Management	The option to encourage the use of renewable resources and the re-use of building materials in new developments is reflected in the Plan. Policy D1 ensures that development uses sustainable design and sustainable materials.	Using innovative design to reduce energy consumption and waste from the construction and use of buildings can optimise the potential of the site and have a positive influence on the environment.
1.6 Local character	The Plan reflects the options to include a general policy requiring development to preserve or enhance local character and open space pattern. Policy D1 in relation to design includes a criterion on responding positively to the site's local context.	Development must respond positively to the site and the local context taking into consideration position, orientation, scale, height, layout, massing, detailing and use of materials.
1.7 Density of development	The Plan reflects the option of not including a specific policy on density. However, there is guidance in Policy D1, HS3 and the Design SPD.	Given the design-led approach to development set out through this Plan, district-wide density standards have not been prescribed. Development on the periphery of settlements should generally be at a lower density to mark the transition to the rural area beyond. In town centres and close to the railway stations higher densities will be considered appropriate in principle but will require particular care in the design with respect to avoiding the sense of overcrowding or congestion.
1.8 Historic environment	The Plan reflects the following options: <ul style="list-style-type: none"> • Ensure that developers carry out investigation and evaluation of archaeological sites if it is 	The Council recognises the significance of designated heritage assets within the District and the contribution they make to defining local character, providing a sense

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	<p>established there is a potential interest.</p> <ul style="list-style-type: none"> • Make sure that development does not adversely affect or lead to the loss of important areas and features of the historic landscape. • Ensure that developments related to listed buildings are not detrimental to their setting and that materials are sympathetic to those used in the original dwelling. • Make sure that any development proposals respect or enhance the special character or appearance of Conservation Areas, especially in terms of scale, mass, height or materials. <p>Strategic policy sets the context for historic environment in North Hertfordshire. There are specific development management policies relating to archaeology, conservation areas and listed buildings. Policies HE1-HE4 set specific requirements for local issues, providing appropriate protection of the historic environment.</p>	<p>of place and achieving sustainable development. Their conservation and preservation is an important consideration within the planning process and is recognised within specific legislation.</p>

4.4.2 Rural areas and settlement pattern options considered

A number of policy options were considered for rural areas and the settlement pattern, and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

Table 24: Rural areas and settlement pattern policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
2.1 ⁴⁶ How to identify which villages within the rural area might be	The Plan reflects the option to identify villages which may take further development based on the	The North Hertfordshire villages tend to be more expensive than the towns and are therefore finding it harder to retain

⁴⁶ Numbering of options is as per initial options assessments as outlined in Appendix 3

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
able to accommodate development	<p>level of facilities in the village and the availability of appropriate sites. Policy SP2 defines a list of villages based on those which have schools and appropriate services and the levels of development that will take place. New development is fairly substantial in certain locations. Villages will have a boundary drawn around their existing built-up areas within which additional infill development is acceptable.</p>	<p>young families, which is leading to a skewed age population.</p> <p>On the need to travel, modelling to show modal share arising from new development in these villages would give an incomplete answer. One justification for allowing additional development in these villages is in order to safeguard existing facilities. Using the schools as an example, villages without schools export all their children every day to other villages or towns for schooling. If the schools in any of these villages closed, there would be a significant increase in journeys to and from these villages. A small amount of additional development as infill or for local needs (which would by definition be for people who already live or work in the area) will therefore give a small increase in travel, but may prevent the even larger increase in travel that would arise if the schools closed.</p> <p>On social and economic aspects of sustainability, village schools act as a focus point for the villages and ensure that villages continue to attract and retain young families, which prevents them stagnating as dormitories for older families and retirees. Schools also provide local employment.</p>
2.2 Whether to distinguish between levels of development appropriate at different villages	<p>The Plan has been modified to outline development expected in the villages. This reflects the recommendation made when options were originally assessed to clarify the type and level of development that would be allowed in villages. Five villages are identified as accommodating a greater share of development than the Category A villages: Knebworth, Codicote, Ickleford, Little Wymondley and Barkway.</p>	<p>This is a combination of factors.</p> <p>The two largest villages where major development is identified (Knebworth & Codicote) are those which have a good range of local shops and other facilities. Ickleford and Little Wymondley are recognised as being located close to towns with a wide range of services (Hitchin and Hitchin / Stevenage respectively). Barkway is identified as a focus for development in the rural east, in preference to a potentially more dispersed approach to development.</p>

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	Knebworth and Codicote include a greater number of services and facilities and so have a greater ability to potentially accommodate growth.	The other villages identified as Category A villages are those which have a school and a range of other local facilities. All villages may also see some development for local needs - notably affordable housing - where there is a proven local need.
2.3 Development in the rural areas outside the villages	The Plan reflects the option to afford the green belt greater protection than the remainder of the rural area. There is no specific policy on green belt other than SP5, which sets out the strategy for the areas of green belt and the rural area. In the green belt, national policies in the NPPF will apply. Policy CGB1 controls the type of development allowed outside of green belt areas. A separate policy (NE3) applies in addition to SP12 within the Chilterns AONB.	Policy on the green belt reflects the NPPF. The Rural Area beyond the green belt covers the countryside to the east of the District that lies outside of the towns and Category A villages identified in Policy SP2 [settlement hierarchy]. These areas do not meet the necessary criteria to be designated as green belt, but it is still necessary to impose restraints on development to prevent inappropriate schemes.
2.4 Replacement buildings in the countryside	Policy CGB4 is based on the option to allow replacement buildings, providing the new building would not have a materially greater impact than the existing one. CGB1 and ETC8 allow for farm diversification schemes. Policy D1 requires all new buildings to be in harmony with their surroundings, so it is inappropriate to stipulate that in every policy.	In line with the NPPF, the policy seeks to support economic growth in rural areas and also avoid the provision of new, isolated homes in the countryside.

4.4.4 Employment and tourism options considered

A number of policy options were considered for rural areas and the settlement pattern, and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

Table 25: Rural areas and settlement pattern policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
4.1 ⁴⁷ Location of additional employment land	<p>The Plan reflects these options:</p> <ul style="list-style-type: none"> • Completely new Employment Areas should be designated within or adjoining existing settlements. • There should be extensions to existing Employment Areas, but only within existing settlements. <p>Strategic Policy 3: Employment clarifies where sites are allocated.</p>	<p>A significant new employment site will be developed at the east of Baldock, supporting the proposed increase in residential development in the town (see Policy SP8). The allocation benefits from proximity to existing employment uses as well as existing and planned residential development. It has access to the strategic road network via the A505 Baldock Bypass. Economic activity is not contained by the District boundary and, within Hitchin and Letchworth Garden City, employment area designations from the previous local Plan will be broadly retained, with some modest releases of sustainable brownfield sites for residential development. The Royston economy is influenced by both Hertfordshire and Cambridgeshire economies. Consequently, the employment area has a low vacancy rate. The allocation of further land here as a planned extension to the York Way employment area is a sustainable approach that will enable flexibility in the long term, especially in conjunction with the additional residential growth allocated to this area.</p>
4.2 Loss of employment uses	<p>The Plan reflects the option to safeguard employment uses within the Employment Areas, unless studies demonstrate lack of need in the area. Policies ETC1 and ETC2 set out policies protecting allocated and non-allocated sites in order to protect the supply of land currently used for employment uses. Additionally, the overall quantum of employment land includes any active</p>	<p>Land in employment uses will be protected where it is still appropriate for the use unless evidence suggests otherwise in line with NPPF.</p>

⁴⁷ Numbering of options is as per initial options assessments as outlined in Appendix 3

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	employment land that is to be lost as a result of employment allocations.	
4.3 Distribution of employment provision	The Plan reflects the option that any new employment provision should be allocated where there are available sites which are accessible by public transport and a market for the premises Policy SP3 clarifies where sites will be located (see 4.1 above), largely in the locations where employment land currently exists but also in combination with new residential development	See 4.1 above.
4.4 Promotion of tourism	The Plan reflects the option to include a general policy covering a variety of tourist related proposals. Policy ETC8 is a fairly general policy in relation to tourism, identifying locations where tourism development will be appropriate.	The Council supports proposals for new or extended tourist developments as a means to strengthen the local economy and increase visitors to the area in line with policies in the NPPF.

*Numbering of options is as per initial options assessments as outlined in Appendix 3.

4.4.5 Town centre policy options considered

A number of policy options were considered for town centres and the preferred option and the reason for choosing it for each is outlined in the table below. The full details of options and their appraisal is contained in Appendix 3.

Table 26: Town centre environment policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
5.1 ⁴⁸ Shopping uses	The Plan reflects the option to define primary and secondary shopping areas, with greater restrictions on the loss of shops in the primary areas. Policies ETC4 and ETC5 set the policy on primary and secondary shopping frontages. The primary shopping frontage part will list Hitchin, Letchworth Garden City and Royston as town centres	The Council wants to ensure that the town centres maintain their primary retail function whilst increasing their diversity with a range of complementary uses, promoting competitive, flexible town centre environments. The concept of shopping as a leisure activity supports the encouragement of uses which increases the vitality throughout the day, extending

⁴⁸ Numbering of options is as per initial options assessments as outlined in Appendix 3

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	where primary shopping frontage has been identified, while the secondary shopping frontage will list Hitchin, Letchworth Garden City, Royston and Baldock as town centres where secondary shopping frontage has been identified.	the range of services for local people throughout the day and into the evening.
5.2 Other uses in town centres	The Plan reflects a modification of the option to include policies requiring large town centre developments to contain a mix of uses. Allocations for town centre uses are titled 'mixed use allocations'. The sites are allocated for mixed use to ensure flexibility. Policy ETC3 encourages a mix of town centre uses.	The policies and allocations will ensure that a mixture of uses is delivered within the town to meet the need identified by the Town Centre and Retail study (2016).
5.3 How to promote the health and wellbeing of the smaller centres	<p>The Plan reflects both the options:</p> <ul style="list-style-type: none"> • Allow the loss of shops and services where it can be shown that there is no longer a demand for the unit. • Resist the loss of any shops or services to other uses. <p>The Council collects data on vacancies in the local centres, and will use this when monitoring its policies on local centres. Policy ETC4, 5 and 6 seek to protect existing town centre uses.</p>	In all local centres, the Council wants to retain local facilities and at the same time prevent changes to non-retail uses that would be more appropriate in larger centres or employment areas. Attempting to stop any further losses of retail, under any circumstances, would have been difficult to sustain, and may harm the centre by leading to more vacant units.
5.4 Should all the smaller centres be treated the same?	<p>The Plan reflects the option that all planning applications within the smaller centres should be assessed in the same way.</p> <p>Local centres as identified in the Plan consist of village centres such as Codicote, Knebworth and Ashwell, and neighbourhood centres such as Walsworth (Hitchin), Jackmans (Letchworth Garden City) and Great Ashby. ETC6 sets the requirements which apply to all local centres.</p>	In all local centres, the Council wants to retain local facilities and at the same time prevent changes from main town centre uses. Additional protection is afforded to A1 retail uses.
5.5 Should we promote the 'evening economy' in the four main towns and, if so, how?	The Plan reflects the option to let market forces determine the level and mix of 'evening' uses in the town centres. Whilst the Plan does not include a specific policy on this issue, flexibility is built into the	Encouraging a mix of uses increases footfall and makes the town centres more vibrant.

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
	frontage policies to enable this part of the economy to grow.	

4.4.6 Transport options considered

A number of policy options were considered for transport, and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

Table 27: Transport policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
6.1 ⁴⁹ Encouraging alternative modes and reducing car use	<p>The Plan reflects the following options:</p> <ul style="list-style-type: none"> • Ensure that developers make adequate provision for non-car modes; public transport, cycling and walking. • Introduce car parking standards that are compatible with the location in line with maximum standards. • Make sure large developments make provision for improved and integrated transport infrastructure <p>Policy SP6 promotes non-car modes hierarchy and individual policies on non-car modes secures provision of services/infrastructure in lasting manner. Mode hierarchy set out in Policy T1. Car-sharing potential will be explored via policy on Travel Plans.</p> <p>Adopted SPD on vehicle parking at new development introduces zonal based reduction in maximum parking standards, reflecting location and accessibility. This SPD will be carried forward in Policy T2.</p>	Sustainable development, including sustainable transport, underpins national planning policy and the Council seeks to promote this in new development. However, paragraph 29 of the National Planning Policy Framework 2012 does state that “different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.”
6.2 Park and ride	The Plan reflects the option to not pursue park and ride schemes.	There is no specific policy recommendation for Park and Ride as previous considerations

⁴⁹ Numbering of options is as per initial options assessments as outlined in Appendix 3

		have concluded that there is no commercial case for Park and Ride. Policy on passenger transport does not rule provision of Park and Ride if the situation changes.
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4.4.7 Leisure and community facilities policy options considered

A number of policy options were considered for leisure and community facilities and the preferred option and the reasons for choosing it are outlined in the table below. The full details of options and their appraisal are contained in Appendix 3.

Table 28: Leisure and community facility policy options

Issue around which options were developed	Local Plan policy option	Council's reasons for selecting
7.1 ⁵⁰ How should we secure adequate provision of sports pitches and sports facilities in the District?	The Plan reflects the option to seek contributions from developers to provide or improve sports facilities. Policy NE6 will ensure open space and sports facilities as part of developments.	To support growth over the Plan period, relevant development proposals will be expected to contribute towards open space provision in the District.
7.2 Should developers contribute more towards community facilities and services?	The Plan reflects the option to seek to improve existing facilities <i>and</i> encourage the provision of new community facilities where new development takes place. Policy HC1 will combine the options to allow community facilities to be enhanced or improved whilst at the same time, in new developments, expecting developers to provide new facilities at an appropriate scale.	The nature of planned growth in the District is such that new facilities and infrastructure will be required. In promoting the creation of healthy communities, the NPPF states that local authorities should identify specific needs, qualitative and quantitative deficits and any surpluses in open space provision, as well as any open space that is required. These requirements are set out in the detailed policies In development schemes, the Council will expect developers to make provision for new community, cultural, leisure and recreation facilities on or off-site at a scale which is proportionate to the scale of the development. Where on-site provision is not appropriate, the Council will seek contributions towards community facilities in accordance with the Planning Obligations Supplementary Planning Document.

⁵⁰ Numbering of options is as per initial options assessments as outlined in Appendix 3

4.4.8 Plan review policy options considered

Following on from the examination process, the Further Proposed Main Modifications⁵¹ proposed a new policy on Local Plan review. Two options were considered and appraised for this policy, as shown below.

Option (a) Review Plan after 2 years

Conclusions

Because of current uncertainties in the short term, the review will ensure that the plan responds effectively to changes which may arise in this time scale, and continues to deliver housing and other services and support economic growth. This option will have a positive effect on the objectives of achieving sustainable economic growth and increasing access to affordable housing.

Many of the other effects are uncertain, since a review may result in different levels or location of development provision.

Option (b) Follow statutory requirements and review Plan after five years

Conclusions

This option will result in more uncertainty in the short term (up to five years) as it is unclear whether it will still be possible to effectively deliver housing and other services. It will have uncertain effects on the objectives of achieving sustainable economic growth and increasing access to affordable housing.

Many of the other effects are uncertain, for the medium and long-term, since a review may result in different levels or location of development provision.

The Council's evidence to the examination recognised that there will now likely be around 10 years of the Plan period remaining at the point of any future adoption, whereas the National Planning Policy Framework suggests plans should preferably cover a period of 15 years. The Council considered and rejected a number of options for addressing this matter within the current examination. In light of this and a number of matters which became apparent through the examination (and which are set out in Policy IMR2), the Council considered the most reasonable alternative was to commit to an early review rather than rely upon the statutory maximum five-year period.

⁵¹ Schedule of Further Proposed Modifications to the North Hertfordshire Local Plan 2011-2031, available at <https://www.north-herts.gov.uk/sites/default/files/Schedule%20of%20Further%20Proposed%20Main%20Modifications%20for%20Consultation%20-%20May%202021.pdf> (last accessed 30/8/21)

5 Site appraisals

5.1 Overview

All of the sites included in the adopted Local Plan have been appraised using the appraisal framework included in Appendix 5. This includes some sites which were appraised in earlier iterations of the Sustainability Appraisal.

Since almost all the site appraisals were originally produced over a period from 2008 to 2014, there was a need to review them to ensure the information provided was up-to-date, consistent and accurate. This review was undertaken in April-June 2016. The information review took account of a number of new or revised sets of information, including:

- Surface water flooding data;
- Flood risk data;
- Bus routes and frequencies data; and
- Consultation comments.

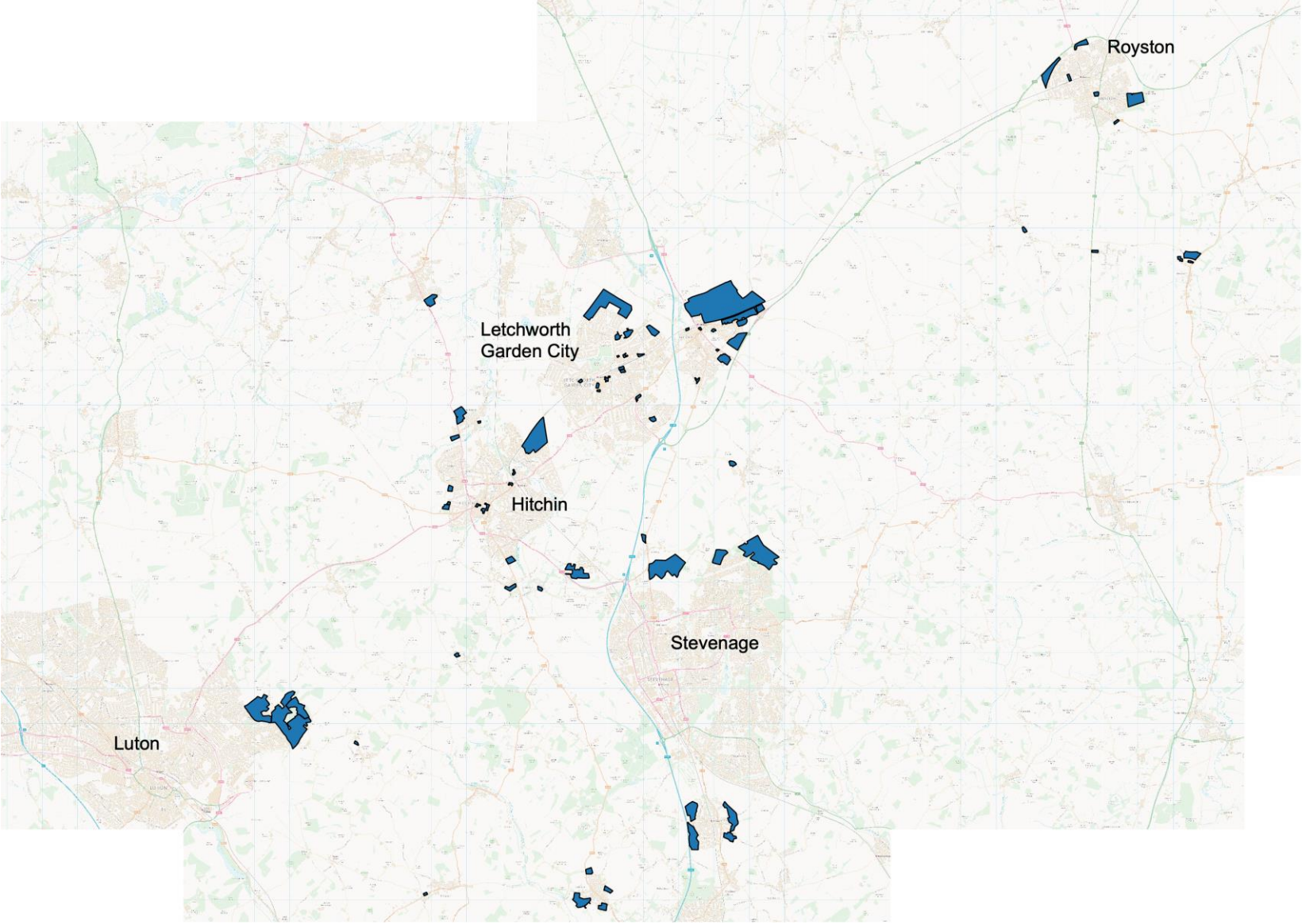
At the same time as this review, new appraisals were conducted for additional sites which had been added or had changed significantly since they were previously appraised.

For all site appraisals, significance criteria were utilised in order to aid the identification of significant positive and negative effects. These criteria were also reviewed in 2016 and the wording tightened in some instances to clarify the meaning. Additional minor clarification was also made in 2017 as a result of consultation comments received. The revised significance criteria are included in Appendix 5.

Summaries of the site appraisals are shown below in 5.3. Detailed appraisal matrices are included in Appendix 6 for preferred sites and Appendix 7 for non-preferred sites.

The map below shows the preferred sites in the adopted Plan.

Figure 5.1: Preferred sites in the Local Plan



5.2 Reasons for selecting sites

5.2.1 Housing sites

The Strategic Housing Land Availability Assessment (SHLAA) process helped identify sites which were deliverable. It considered sites which may be available for residential development over the period between 1 April 2011 and 31 March 2031. It assessed sites against three tests:

- Is the site suitable for development? This question is about the physical ability of the site to accommodate development and identification of (potential) policy constraints which might influence how desirable it is to develop it.
- Is the site available for development? This is about landowner intentions.
- Would development here be achievable? This question is about whether development would be financially viable or whether there might be any other reasons why it may not be delivered.

Sites which met all three tests in the SHLAA were then reviewed by the Council and a final decision made on which sites to include based on the results of the Sustainability Appraisal and a number of key planning considerations. The process is explained in detail in a Statement by the Council at the examination hearing sessions⁵². A summary showing the reasons for selecting or rejecting each site is included in Appendix 13 to this SA report.

5.2.2 Other sites

The process for selecting employment sites and retail sites largely took into account the same considerations as those for residential, including the results of the Sustainability Appraisal. The information is reported in evidence base documents and concluded in the Employment and Retail Background Papers. A summary showing the reasons for selecting or rejecting each site is included in Appendix 13 to this SA report.

5.3 Summary of site assessments

The results of the assessments of the preferred sites are shown below. Detailed matrices are shown in Appendix 6. Summaries and detailed matrices for non-preferred sites are shown in Appendix 7.

⁵² Matter 9, Statement of North Hertfordshire District Council, para 25, available at <https://www.north-herts.gov.uk/sites/default/files/NHDC%20Matter%209%20FINAL.pdf>

Table 29: summary of site assessments

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Baldock		
<p>BA1 – formerly site 200</p> <p>Land north of Baldock</p>	<p>Will provide over 2,800 dwellings, a significant proportion of which will be affordable housing.</p> <p>Southern part of the site is within 400m of a bus stop and 800m of a train station and a development of this size is likely to be able to support an improved bus service.</p> <p>Significant opportunities for sustainable energy measures, given the size of the development, and proximity to employment land.</p> <p>Additional residents would support local services and facilities and the town centre.</p>	<p>Large greenfield site grade 2/3 agricultural land.</p> <p>Contains Baldock Road Verge wildlife site and the Blackhorse Farm Meadow and Ivel Springs wildlife sites are located adjacent to the west. This area is one of the most important for the remaining Corn Bunting population in Hertfordshire.</p> <p>Will reduce access to the countryside for north Baldock residents.</p> <p>A development of this size is likely to have significant impact. The 2013 Landscape Sensitivity Report identifies the areas to the north of Bygrave Road as having moderate to high sensitivity and areas adjacent to the railway line as having moderate to low sensitivity.</p> <p>The site includes five designated areas of archaeological significance and is adjacent to Ivel Springs Ancient Monument.</p> <p>Development on this greenfield site will have significant effects on the amenity of the properties in Bygrave Road and will reduce tranquillity for residents in Ashwell Road and Bygrave. The site borders the railway line and there will be significant noise impacts for the housing close to the railway.</p> <p>Potential surface water flooding issues onsite.</p> <p>Scale of development will put pressure on water resources.</p>
<p>BA2 –formerly B/r04</p> <p>Land off Clothall Road Baldock</p>	<p>Close proximity to Baldock town centre and Superstore.</p> <p>Within 400m of regular bus route.</p> <p>Will provide 200 dwellings, some of which will be affordable housing.</p>	<p>High agricultural value (grade 2).</p> <p>Further than 800m from the station.</p> <p>Noise from nearby bypass.</p> <p>The site is situated close to a designated wildlife area to the west, and development may have an impact.</p> <p>Majority of the site is designated as being of archaeological importance.</p> <p>Loss of informal open space (though some will be retained in development).</p> <p>Moderate landscape capacity and moderate landscape sensitivity, mitigation measures may not completely reduce the effects of the development.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>The site is partly located in Groundwater Source Protection Zone 2.</p> <p>Limited sewage treatment capacity.</p> <p>The site is a major development in a residential area.</p>
<p>BA3- formerly B/r12</p> <p>South of Clothall Common Baldock</p>	<p>Will provide 200 dwellings, some of which will be affordable housing.</p> <p>Access to green space within 400m.</p> <p>Within 800m of town centre.</p>	<p>Site feels isolated which could discourage walking.</p> <p>Not within 400m of a frequent bus service.</p> <p>More than 800m from the station.</p> <p>Site is opposite out of town supermarket, so local residents are very likely to use this instead of town centre facilities.</p> <p>High agricultural land value (Grade 2).</p> <p>Because the location feels isolated, development would feel intrusive on the landscape. Landscape Capacity Study defined it as moderate landscape capacity and moderate sensitivity. Mitigation measures may not completely reduce the effects of the development.</p> <p>Noise from nearby bypass.</p> <p>Archaeological Designation covers the site and it is close to an ancient monument.</p> <p>Potential surface water flooding.</p> <p>The site is a major development in a residential area.</p>
<p>BA4 – formerly B/r03</p> <p>Land east Clothall Common Baldock</p>	<p>Site within 400m of green space.</p> <p>Will provide 50 dwellings, some of which will be affordable housing.</p>	<p>Not situated within 400m of a regular bus service, nor within 800m of the railway station.</p> <p>Noise from nearby railway line.</p> <p>Greenfield site, agricultural grade 2. The location of the site further suggests some value for formal recreation (dog walking for local residents).</p> <p>The Landscape Sensitivity and Capacity Study identified the site as having high to moderate capacity.</p> <p>The site is a major development in a residential area.</p> <p>Site borders a designated area of archaeological interest.</p> <p>Possible ecological interest.</p> <p>Site subject to surface water flooding.</p>
<p>BA5 – formerly site 16</p>	<p>Will provide 25 dwellings, including affordable housing</p>	<p>Site includes scheduled ancient monument.</p> <p>Site is greenfield land.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Land off Yeomanry Drive, Baldock	Within 400m of green space. Public rights of way borders the site. Within 800m of train station. Within 800m of town centre. Will provide 25 dwellings including affordable housing.	Uncertainty – wildlife corridor function could be impacted but dependent on site layout. Uncertainty - site falls within a Landscape Character Area of Baldock gap. Site adjacent to a residential area. Development of this site would reduce green space available for residents living nearby.
BA6 – formerly B/e03 Icknield Way Baldock	Brownfield site. Within 400m of a regular bus route. Very close to the station – less than 400m. Opportunity to reclaim contaminated land. Will provide 26 dwellings, including affordable housing. Site within 400m of green space. Within 800m of town centre.	If the site is developed as a purely residential site, where it was formerly an employment site, this might reduce the potential for economic growth. Next to the railway line – potential noise issues. In designated area of archaeological interest. Borders residential properties. Contaminated land – gas works and underground tanks. Adjoins conservation area. Entire site subject to surface water flooding.
BA7 – formerly B/r14 r/o Clare Crescent Baldock	Within 400m of green space. Within 400m of a regular bus route and bus stop. Will provide 20 homes, including affordable housing.	The site is located in Groundwater Source Protection Zone 1 and 2. Would result in loss of allotments. Site subject to surface water flooding. Uncertainty – no information about landscape impacts.
BA10 – employment (formerly B/e01) Land off Royston Road, Baldock	Brownfield land. Site within 400m of green space. Help to support and regenerate the area and provide local employment Train station within 800m of site. Bus stop within 20m of site, but less than hourly frequency. The site is identified as having a high capacity for development and a low sensitivity for development.	Next to the railway line – potential noise issues. Site contains designated area of archaeological interest. Employment uses adjacent to residential properties may have negative impact on amenity. Site subject to surface water flooding.
BA11 – Dean’s Yard, South Road	Within 400m of a bus stop with regular service. Brownfield land. Greenspace within 400m. Will provide 20 dwellings including affordable housing. Within 800m of town centre.	Potential surface water flooding. Site within area of archaeological significance. Likely to be contaminated. Development of the site will force businesses to relocate.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Barkway		
BK2 –formerly BK/ro2 Land off Windmill close Barkway	Will provide affordable housing. Close to public rights of way and green spaces. Will provide 20 dwellings including affordable housing.	Not within 400m of a bus stop with a regular service, nor within 800m of a railway station. Greenfield site of Grade 2 agricultural land. Loss of current recreational area for adjacent sites. Small part of site subject to surface water flooding. Uncertainty - no landscape impact assessment available. Adjacent to area of archaeological interest.
BK3 - Land between Cambridge Road & Royston Road, Barkway. Greenfield. Residential.	Good access to green space. Development in this location should help to support shops, services and other facilities in Barkway. Will provide 140 dwellings including affordable housing.	Uncertain impact on rural economy. Grade 2 agricultural land. A right of way crosses the site and another runs along one of the site boundaries so the site is likely to have amenity value. Poor access to public transport. Potential impact on the setting of the Cockenach Estate (historic park and garden). Significance of potential landscape impacts is unclear. Potential noise/amenity impacts on adjacent housing.
Codicote		
CD1 –formerly site 29 Land south of Cowards Lane, Codicote	Will provide 73 dwellings including affordable housing. Access to greenspace within 400m.	The site is not served by a regular bus service, nor a nearby railway station. Adjacent to wildlife site. Greenfield site, classified as grade 3 agricultural land. Site is located within groundwater source protection zone 2. Site subject to surface water flooding. Uncertain landscape impacts Adjacent to existing residential – noise/amenity impacts.
CD2 – formerly site 205 – Codicote Garden Centre,	Next to open space. Will provide 54 dwellings, including affordable housing.	The site is not served by a regular bus service, nor a nearby railway station. Loss of a local business. Most of site is located within groundwater source protection zone 2. Site subject to surface water flooding. Landscape has moderate to high sensitivity.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		Adjacent to existing residential – noise/amenity impacts.
CD3 – formerly site 32 Land NE of The Close, Codicote	Will provide 48 dwellings, including affordable housing. Access to greenspace within 400m.	The site is not served by a regular bus service, nor a nearby railway station. Greenfield site, classified as grade 3 agricultural land. Uncertainty - possible reptile interest and compensation grassland may be required. Site is located within groundwater source protection zone 2. Potential surface water flooding issues onsite. Access to greenspace within 400m. Adjacent to existing residential – noise/amenity impacts.
CD5 - Land south of Heath Road	Access to greenspace within 400m. Will provide 140 homes, including affordable housing.	The site is not served by a regular bus service, nor a nearby railway station. Site located upon grade 3 agricultural land. Site lies in between several wildlife sites. Landscape has moderate sensitivity and moderate landscape value. Site close to conservation area and listed buildings. Site likely to be contaminated. Site within SPZ2. The site is a major development adjacent to a residential area.
CD6 Land at Danesbury Park Road	Will meet the needs of four Gypsy and Traveller families.	The nearest bus stop is located approximately 1km from the site.
Graveley		
GR1 –formerly part of site 208 - Land at Milksey Lane	Within 400m of greenspace. Within 400m of a regular bus service.	Part of site is in conservation area and is adjacent to designated archaeological area. Site located upon grade 3 agricultural land. Site is proximate to the A1 – potential noise issues for residents. Location means that people are likely to rely on personal cars and commute out. Landscape capacity uncertain.
Hitchin		
HT1 – formerly site 39	Will provide 700 dwellings including significant affordable housing.	Greenfield site, classified as grade 2 agricultural land.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
<p>Higover Farm, Stotfold Road, Hitchin</p>	<p>Within 400m of green space</p>	<p>Hertfordshire Ecology notes that it has moderate ecological sensitivity. They recommend phase 1 and species surveys – Great Crested Newt and reptiles. They note that grasslands may retain some interest.</p> <p>The site is a major development and adjoins a residential area.</p> <p>Development here would be more than 800m from the station.</p> <p>The site is more than 400m from the nearest bus stop with a frequent service.</p> <p>Proximity to rail lines could affect potential in terms of noise/vibration.</p> <p>Small pockets of the site are susceptible to surface water flooding.</p> <p>Scale of development will put pressure on water resources.</p>
<p>HT2 –formerly site 98</p> <p>Land north of Pound Farm, London Road, St Ippolyts</p>	<p>Site will provide 84 dwellings including affordable housing.</p> <p>Access to green space.</p>	<p>Not within 400m of a regular bus service, nor within 800m of a railway station.</p> <p>If site were developed, it could reduce informal access to green space for local residents.</p> <p>The site is a major development and adjoins a residential area.</p> <p>Site adjoins watercourse.</p> <p>Greenfield site, classified grade 3 agricultural land.</p> <p>Site adjoins a wildlife site.</p> <p>Site is subject to surface water flooding</p>
<p>HT3 –formerly H/r30</p> <p>Land south of Oughton Lane Hitchin</p>	<p>Site was identified within the Edge of Settlement Study⁵³ as being an appropriate and sustainable peripheral site for housing.</p> <p>Situated within 400m of a bus stop with frequent services.</p> <p>This site is within walking distance of a primary school (350m) and secondary school (1200m).</p> <p>Conveniently located within 800m of town centre and other shopping and community facilities.</p> <p>Will provide 46 dwellings including some affordable housing.</p>	<p>Loss of informal open space for neighbouring housing, exacerbated by the development of the nearby football field (Hr24) which provides formal recreation provision (though site density provides for inclusion of open space).</p> <p>Greenfield site, classified as grade 3 agricultural land</p> <p>The site is a major development and adjoins a residential area</p> <p>Landscape: site has a moderate to high capacity but low to moderate sensitivity</p> <p>More than 800m radius from the train station.</p> <p>Possible ecological interest.</p> <p>Site subject to surface water flooding.</p>

⁵³ North Hertfordshire Edge of Settlement Study, Halcrow March 2003

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
	<p>The Landscape Sensitivity and Capacity Study rated the site as having a moderate to high capacity and a mixture of low and moderate sensitivity⁵⁴.</p> <p>A footpath runs along the north of the site offering access to the country side for informal recreation</p>	
<p>HT5 –formerly H/r25</p> <p>Land at junction of Grays Lane and Lucas Lane Hitchin</p>	<p>Site was identified within the Edge of Settlement Study as being an appropriate and sustainable peripheral site for housing⁵⁵.</p> <p>Footpath runs along site boundary, providing access to countryside.</p> <p>This site is within walking distance, to a primary school (350m) and secondary school (1200m).</p> <p>Conveniently located within 800m of town centre and other shopping and community facilities.</p> <p>The Landscape Sensitivity and Capacity Study⁵⁶ rated the site as high capacity and low sensitivity.</p> <p>Will provide 16 dwellings, including affordable housing.</p>	<p>Loss of informal open space for neighbouring housing, exacerbated by the development of the nearby football (HT4) which provides formal recreation provision.</p> <p>Greenfield site classified as grade 3 agricultural land.</p> <p>The site adjoins a residential area.</p> <p>Further than 400m from a regular bus route and further than 800m from the train station.</p> <p>Adjacent to designated area of archaeological interest.</p>
<p>HT6 –formerly H/r14</p> <p>Land at junction of Grays lane Crow Furlong, Hitchin</p>	<p>Site received second highest sustainability rating within the Edge of Settlement study.⁵⁷</p> <p>This site has a primary school within 500m walking distance and is about 1500m away from a secondary school.</p> <p>Conveniently located within 800m of town centre and other shopping and community facilities.</p> <p>Will provide 53 dwellings including affordable housing.</p>	<p>Moderate landscape sensitivity and moderate development capacity⁵⁸.</p> <p>Site is a designated area of archaeological interest.</p> <p>Greenfield site, classified as grade 3 agricultural land.</p> <p>The site is a major development and adjoins a residential area.</p> <p>A small part of the site is just within 400m of a regular bus service as the crow flies, but no part is within 400m of the bus stop via a walking route</p> <p>Further than 800m from the train station.</p>

⁵⁴ North Hertfordshire District Council November 2006

⁵⁵North Hertfordshire Edge of Settlement Study, Halcrow March 2003

⁵⁶ Landscape Sensitivity and Capacity Study for edge of settlement in North Hertfordshire, North Hertfordshire District Council November 2006

⁵⁷ North Hertfordshire Edge of Settlement Study, Halcrow March 2003

⁵⁸ Landscape Sensitivity and Capacity Study for edge of settlement in North Hertfordshire, North Hertfordshire District Council November 2006

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
	A footpath runs along the north of the site offering access to the countryside for informal recreation.	The proposed development would increase distance from existing housing to open space.
HT8 –formerly H/r52 Industrial area Cooks Way Hitchin	Brownfield site. Will provide 12 dwellings including affordable housing. There are bus stops with a regular service within 400m. Train station is within 800m of site. Potential to remediate contaminated land. The site is within 400m of local playing fields and footpaths. Within 800m of town centre.	Noise from the adjacent railway tracks may be an issue. Probable contamination from use as gas works. Loss of employment land. Potential surface water flooding issues onsite.
HT10 – Former B&Q	Site within 400m of bus stop with frequent service, and within 800m of train station. Within 800m of town centre. Brownfield site. Will provide 60 homes, including affordable housing.	Small part of site subject to surface water flooding. No current green spaces within 800m. Potential contamination.
HT11 – Churchgate, Hitchin	Accessible retail development in Hitchin town centre, which should contribute to competitiveness of the town centre. Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value. Not within 800m of the rail station. but within 400m of a bus stop with a regular bus service. Site not covered by NHDC landscape assessments but, as a town centre site is likely to be of low landscape sensitivity and high capacity. Should provide additional shops and services within the town centre.	Within a conservation area. Contains a listed building and potential impact on the setting of other listed buildings. Within a designated archaeological area. Site borders a watercourse. Site lies partially within flood zone 3. Significant surface water flood risk on-site. Site may include some residential uses, which will be within the town centre and therefore may be impacted by noise.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
HT12 – Paynes Park, Hitchin	<p>Accessible retail development in Hitchin town centre, which should contribute to competitiveness of the town centre</p> <p>Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value</p> <p>Not within 800m of the rail station but within 400m of a bus stop with a regular bus service</p> <p>Site not covered by NHDC landscape assessments but, as a town centre site is likely to be of low landscape sensitivity and high capacity</p> <p>Should provide additional shops and services within the town centre</p>	<p>Within a conservation area.</p> <p>Contains a listed building and potential impact on the setting of other listed buildings.</p> <p>Within a designated archaeological area.</p> <p>Possible contamination due to previous commercial/industrial uses.</p> <p>Some surface water flood risk on-site.</p> <p>Site may include some residential uses, which will be within the town centre and therefore may be impacted by noise.</p>
Ickleford		
<p>IC1 – formerly site 41</p> <p>Land off Duncots Close, Ickleford</p>	<p>Within 400m of a regular bus service.</p> <p>Access to green space.</p>	<p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Adjacent to a conservation area.</p> <p>Adjacent to a designated area of archaeological interest.</p> <p>Site borders a floodplain of a watercourse.</p> <p>Landscape impact of development is moderate.</p> <p>Potential surface water flooding issues onsite.</p>
<p>IC2 – formerly site 40</p> <p>Burford Grange Bedford Road, Ickleford</p>	<p>Provides 40 dwellings including affordable housing.</p> <p>Access to green space and public rights of way.</p> <p>Within 400m of a regular bus service.</p>	<p>Majority of site is greenfield, mostly classified as grade 3 agricultural land.</p> <p>Site contains mature trees and is adjacent to a wildlife site and a location where protected species have been identified.</p> <p>Site is close to a flood zone 3 and is subject to surface water flooding.</p> <p>Landscape impact of development is moderate.</p> <p>The site adjoins a residential area.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
IC3 - Land at Bedford Road	<p>Within 400m of a regular bus service.</p> <p>Access to green space.</p> <p>Will provide 150 homes, including affordable housing.</p>	<p>Site subject to surface water flooding.</p> <p>Greenfield site, classed as Grade 2 agricultural land</p> <p>Low to moderate landscape sensitivity.</p> <p>Site is adjacent to area of archaeological significance.</p> <p>The site is a major development and adjoins a residential area.</p>
Kimpton		
<p>KM3 – formerly K/r01</p> <p>Land north of High Street, Kimpton</p>	<p>Close to public footpath access to the countryside</p> <p>Will provide 13 dwellings, including affordable housing</p>	<p>Not within 400m of a regular bus service, nor within 800m of a railway station.</p> <p>Adjacent to conservation area.</p> <p>Grade 3 agricultural land.</p> <p>The site adjoins a residential area.</p> <p>Potential surface water flooding issues onsite and on surrounding access route.</p>
Kings Walden		
<p>KW1 –formerly site 51</p> <p>Allotments South West of The Heath, King’s Walden</p>	<p>Will provide 16 dwellings, including affordable housing.</p> <p>Access to green space.</p>	<p>Not within 400m of a regular bus service, nor within 800m of a railway station.</p> <p>Loss of allotment space for existing residents.</p> <p>Moderate impact on landscape.</p> <p>Site close to listed buildings.</p> <p>Small part of site within SPZ2.</p> <p>The site adjoins a residential area.</p> <p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Potential noise issues: within noise contours from London Luton Airport.</p>
Knebworth		
<p>KB1 –formerly site 52</p> <p>Land at Deards End, Knebworth</p>	<p>Will provide 200 dwellings, including affordable housing.</p> <p>No landscape designations.</p> <p>Majority of site within 800m of the village centre and railway station.</p>	<p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Adjoins conservation area.</p> <p>Site is in groundwater source protection zone 2.</p> <p>Uncertainty – possible reptile interest and grassland area requires Phase 1 survey to assess value, including pond.</p> <p>Site is located next to the A1(M) motorway.</p> <p>Potential surface water flooding issues onsite.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>No nearby access to greenspace within 800m, and restriction of existing residents' access to green space.</p> <p>The site is a major development in a residential area.</p>
<p>KB2 –formerly site 53 Land at Gipsy Lane, Knebworth</p>	<p>Will provide 184 dwellings, including affordable housing.</p> <p>Majority of site within 800m of the village centre and railway station.</p>	<p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Adjoins conservation area.</p> <p>Site is located next to the A1(M) motorway.</p> <p>Land is potentially contaminated from unknown fill areas on site.</p> <p>Potential surface water flooding issues onsite.</p> <p>No nearby access to greenspace within 800m and restriction of existing residents' access to green space.</p> <p>Landscape impact uncertain.</p> <p>The site is a major development in a residential area.</p>
<p>KB4 - Land east of Knebworth, Knebworth. Greenfield. Residential.</p>	<p>Within 400m of green spaces.</p> <p>Good access to public transport.</p> <p>As a site for approximately 200 dwellings, including affordable housing.</p>	<p>Approximately half of the site is grade 3 agricultural land.</p> <p>Landscape studies suggest that most of the site is of high-moderate sensitivity and low-moderate capacity.</p> <p>Part of the site is in Source Protection Zone 1.</p> <p>There are ribbons of surface water flood risk on the site.</p> <p>Potential noise/amenity impacts on adjacent housing.</p>
<p>Letchworth Garden City</p>		
<p>LG1 – formerly NL (Option 5 in Feb 2013 appraisal)</p>	<p>Will provide 900 dwellings, including opportunities for a high proportion of affordable housing.</p> <p>The development could provide new facilities for residents in the Grange, provided this is appropriately planned for.</p> <p>Greenspace is within 400m of the site.</p>	<p>The development is located on a greenfield site, which is grade 2 agricultural land. Site includes part of the Greenway. It is in a location on the edge of Letchworth that provides access to the countryside for existing residents.</p> <p>Site is over 1km from Letchworth station and is likely to exacerbate local traffic, as residents use private cars for commuting and accessing services.</p> <p>The 2013 Landscape Sensitivity Study assesses the capacity for development as a combination of moderate and moderate to high. It notes that the</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>site is exposed, and development could impact on existing expansive views.</p> <p>A corner of the site includes an Archaeological Area - West of Norton Bury.</p> <p>Development on this greenfield site will reduce tranquillity for those properties adjacent to the site. In the short term, the construction phase would be disruptive for adjacent local residents, but this will depend on whether site access is through the Grange.</p> <p>This large new housing development will increase pressure on the sewerage and water supply infrastructure.</p> <p>Impact on sustainable urban living is unclear; it depends on whether access is through the Grange which would ensure that the development relates to Letchworth. An additional access (onto Stotfold Road) would reduce traffic congestion in the Grange, but would mean the development faces away from the existing town, and could result in negative effects on this objective.</p>
<p>LG3 – formerly L/r13</p> <p>Land east of Talbot Way Letchworth</p>	<p>Majority of site situated within 400m of a bus stop with regular bus service.</p> <p>There are several bridges to enable cycling access to Letchworth and Baldock town centres and associated community, civic and health facilities.</p> <p>Will provide 120 dwellings, including affordable housing.</p> <p>There is potential for sustainable energy solutions due to the site's location adjacent to an employment site.</p>	<p>Loss of allotment and related negative effects on informal recreation and biodiversity.</p> <p>Greenfield site, classed as grade 3 agricultural land.</p> <p>The site is a major development in a residential area.</p> <p>The proximity to the motorway and the railway line indicate raised noise levels.</p> <p>In designated area of archaeological interest.</p> <p>Conservation area borders the site (north west).</p> <p>Potential surface water flooding issues on-site.</p>
<p>LG4 –formerly L/r 18</p> <p>Land north of former Norton School Letchworth</p>	<p>Will provide 45 dwellings including affordable housing.</p> <p>Situated within 400m of a regular bus service.</p> <p>Within 400m of green space.</p>	<p>Loss of a former playing field.</p> <p>Adjacent to conservation area.</p> <p>Potential surface water flooding issues onsite.</p> <p>The site adjoins a residential area.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
LG5 –formerly L/r16 Land at Birds Hill Letchworth	Brownfield site. Opportunity to remediate potentially contaminated land. Will provide 86 dwellings including affordable housing. Site located within 400m of regular bus service and 800m of station and 800m of the town centre. Within 400m of Howard Park.	Industrial area. Noise disruption from train lines. Former power station located next to site. Probable land contamination from former use as metal and plating works. Adjacent to conservation area. Surface water flooding issues immediately off-site.
LG6 –formerly L/r 24 Land off Radburn Way Letchworth	Central location, within 400m of a regular bus service. Will provide 35 dwellings, including affordable housing. Open spaces and footpaths in walking distance.	The site is a former orchard, identified in the Priority Habitat Inventory, which includes old trees, with a potential for reptiles and bats. Effect on biodiversity is uncertain and requires a survey and ecology management plan. Situated within Ground water protection zone 2. Further than 800m from the station and the town centre. Very small part of the site subject to surface water flooding. Development on this greenfield site will reduce tranquillity for those properties adjacent to the site.
LG8 formerly site 234 - Pixmore Centre, Letchworth	Brownfield site. Site close to green space. Site will provide 80 dwellings, including affordable housing. Promotes sustainable urban living as located within 400m of regular bus services and 800m of train station and town centre.	Loss of designated employment land. Residential properties in close proximity to employment use. Potential contamination. Site subject to surface water flooding. Adjoins conservation area.
LG9 –formerly L/o2 Lannock School Whiteway Letchworth	Within 400m of a green space recreation ground. The site is within 400m of a regular bus route. Will provide 45 dwellings, including affordable housing. Could contribute to local regeneration.	Possible loss of playing field. Loss of employment land (school). Site is in a Ground Water Source Protection Zone 2. Potential surface water flooding issues onsite.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
LG10 (formerly L/o7) Land off Croft Lane Letchworth	Would provide 37 dwellings including affordable housing. Within 400 m of bus stop with a regular service. Close to public rights of way leading to green space.	Possible loss of playing field / amenity space. Uncertainty - potential Great Crested Newt habitat, hedgerows/trees around perimeter and grassland requires survey. The site adjoins a residential area. Adjacent to conservation area. Site subject to surface water flooding.
LG13 - Glebe Road industrial estate, Letchworth. Brownfield. Residential.	Brownfield site with good access to green space, public transport and shops, services and facilities available in Letchworth town centre. As a site for approximately 10 dwellings, the development is likely to be required to include some affordable housing.	Sites lies wholly within a conservation area. Site is likely to be contaminated. Lies within employment area, which may generate amenity impacts for new residents.
LG15 - Garages, Ickniel Way, Letchworth. Brownfield. Residential.	Brownfield site with good access to green space, public transport and shops, services and facilities available in Letchworth town centre. Will provide 25 dwellings, including affordable housing.	Site likely to be contaminated. Surface water flood risk on and around site. Within 100m of railway line – noise impacts.
LG16 - Foundation House, Letchworth. Brownfield. Residential.	Brownfield site with good access to green space, public transport and the shops, services and facilities available in Letchworth town centre. Will provide 47 homes, including affordable housing.	Site immediately adjoins a conservation area. Site likely to be contaminated. Surface water flood risk on and around site. Site lies within employment area – amenity impacts on new residents.
LG18-Former Depot, Ickniel Way	Site within 400m of a bus stop with regular service. Brownfield site. Access to green space. Will provide 55 dwellings, including affordable housing	Site subject to surface water flooding. Potential contamination.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
LG19 – The Wynd	<p>Accessible retail development in Letchworth town centre, which should contribute to competitiveness of the town centre.</p> <p>Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value.</p> <p>Within 800m of rail station and within 400m of a bus stop with a regular bus service.</p> <p>Site not covered by NHDC landscape assessments but, as a town centre site is likely to be of low landscape sensitivity and high capacity.</p> <p>Should provide additional shops and services within the town centre.</p>	<p>Within a conservation area.</p> <p>Potential impact on the setting of listed buildings.</p> <p>Adjacent to a designated historic park/garden.</p> <p>Site partially within flood zone 3.</p> <p>Some surface water flood risk on site.</p> <p>Site may include some residential uses, which will be within the town centre and therefore may be impacted by noise. Site also lies within 100m of a railway line.</p>
LG20 – Gernon Road	<p>Accessible retail development in Letchworth town centre, which should contribute to competitiveness of the town centre.</p> <p>Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value.</p> <p>Within 800m of rail station and within 400m of a bus stop with a regular bus service.</p> <p>Site not covered by NHDC landscape assessments but, as a town centre site is likely to be of low landscape sensitivity and high capacity.</p> <p>Should provide additional shops and services within the town centre.</p>	<p>Within a conservation area.</p> <p>Contains a listed building and potential impact on the setting of other listed buildings.</p> <p>Adjacent to a designated historic park/garden.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
LG21 – Arena Parade	<p>Accessible retail development in Letchworth town centre, which should contribute to competitiveness of the town centre.</p> <p>Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value.</p> <p>Within 800m of rail station and within 400m of a bus stop with a regular bus service.</p> <p>Site not covered by NHDC landscape assessments but, as a town centre site, is likely to be of low landscape sensitivity and high capacity.</p> <p>Should provide additional shops and services within the town centre.</p>	<p>Within a conservation area.</p> <p>Potential impact on the setting of listed buildings.</p> <p>Adjacent to a designated historic park/garden.</p> <p>Some surface water flood risk on site.</p>
Luton (adjoining)		
EL1, EL2 and EL3	<p>Will provide up to 2,100 dwellings, a significant proportion of which will be affordable housing.</p>	<p>Large greenfield site grade 3 agricultural land, considered to have generally high landscape quality based on its proximity to the AONB.</p> <p>The area is well used and valued by local residents, and development would mean that access to the countryside would be further away for existing residents.</p> <p>The site is a long distance from the Luton town centre and the topography is undulating, which would be a discouragement to walking or cycling into the town. The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton. The local road network into North Hertfordshire is sub-standard, and development could reduce accessibility for existing residents.</p> <p>The site is adjacent to Stubbocks Wood wildlife site. The development would include Brickkiln Wood (not designated). Habitat creation is proposed as part of the Plan, but there is likely to be an initial negative impact in the short term.</p> <p>A site of this size and scale in this location is likely to have a significant visual impact on landscape, as well as on local villages. Cockernhoe would be particularly affected as, in combination with the EL3</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>development, it would be engulfed by the development and its character changed from a rural settlement to an enclave in an urban area.</p> <p>Site includes part of Mangrove Green and Cockernhoe archaeological area. Site also close to Putteridge Bury. Development on this greenfield site will have significant effects on the amenity of the residents in Cockernhoe, Mangrove Green, Tea Green and Wandon End. The site is very close to the Luton noise corridor.</p> <p>This large new housing development will increase pressure on the sewerage and water supply infrastructure.</p>
Preston		
PR1 – formerly site 215 - Land east of Butchers Lane	<p>Access to green space.</p> <p>Site will provide 21 dwellings, including affordable housing.</p>	<p>This is a greenfield site on agricultural Grade 3 land</p> <p>There is no regular bus service, nor a nearby railway station.</p> <p>Site is close to conservation area and designated archaeological area.</p> <p>The landscape capacity for developments is considered to be low, sensitivity moderate to high.</p> <p>The site adjoins a residential area.</p> <p>Public rights of way run through the site, development will reduce existing residents' access to open countryside to the west of the village.</p> <p>Site subject to surface water flooding.</p>
Reed		
RD1 – formerly RD/r1 Land at Blacksmiths Lane Reed	<p>Will provide 22 dwellings, including affordable housing</p> <p>Within walking distance of school and green space.</p>	<p>Greenfield site, grade 2 agricultural land</p> <p>The site is located adjacent to an area of archaeological interest and listed building</p> <p>There is no regular bus service, nor a nearby railway station.</p> <p>The site is located near to a conservation area</p> <p>Development could restrict existing residents' access to green space</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Royston		
RY4 –formerly R/r11 Land north of Lindsay Close, Royston	Will provide 100 dwellings including affordable housing. Close to school, surgery, supermarket and employment areas. Within 400m of a bus stop with a regular service. Within 400m of green space.	Greenfield land, grade 2 agricultural land. Majority of site adjacent to A505 (significant noise issue). Potential surface water flooding issues onsite. Not within 800m of a railway station. Moderate landscape sensitivity, moderate to high capacity. The site adjoins a residential area. Water treatment constraints in Royston.
RY7, formerly site 217 - Anglian Business Park, Orchard Rd	Brownfield site. Good levels of public transportation; station within 800m and bus with regular service within 400m. Close to open space. Site is within 800m of town centre. Will provide 60 dwellings, including affordable housing.	Site will mean loss of designated employment land. Located in Source Protection Zone 2. Site likely to be contaminated. Water treatment constraints in Royston. Amenity impact associated with residential in an employment area. Potential surface water flooding issues onsite.
RY9 – employment – formerly R/e01 Land north of York Way Royston	Will provide local employment. Just within 800m of train station.	Greenfield site – agricultural grade not specified. Public right of way through this site – developing it could lead to a reduction in amenity. More than 400m from a regular bus service and over 800m from the town. The very southernmost corner of the site is within Groundwater Source Protection Zone 2. Possible ecological interest. Potential surface water flooding issues onsite. Water treatment constraints in Royston. Out of town location may compete with town centre shops and services.
RY10 - Land south of Newmarket Road	Access to green space. Will provide 300 dwellings, including affordable housing. Within 800m of town centre.	It is not clear whether or not the site is served by a frequent bus service – this will need to be clarified. Site subject to surface water flooding. Greenfield site, classed as grade 3 agricultural land High landscape sensitivity. The site is a major development and adjoins a residential area. Water treatment constraints in Royston.
RY11 - Land at Barkway Road,	Will provide 18 dwellings, including affordable housing.	Poor access to public transport.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Royston. Beyond village boundary ex green belt. Residential.	Good access to green space. Limited and localised landscape impacts.	Potential noise/amenity impacts on adjacent housing. Water treatment constraints for sites in Royston.
RY12 – Town Hall Site, Royston (previously known as Civic Centre)	Accessible retail development in Royston town centre, which should contribute to competitiveness of the town centre. Brownfield site, which does not impact on land of high agricultural value, or of high amenity or ecological value. Within 800m of rail station and within 400m of a bus stop with a regular bus service. Site not covered by NHDC landscape assessments but, as a town centre site is likely to be of low landscape sensitivity and high capacity. Should provide additional shops and services within the town centre.	Within a conservation area. Partially within a designated archaeological area. Potential impact on the setting of listed buildings. Site considered likely to be contaminated due to previous underground petrol storage. Site within SPZ2. Significant surface water flood risk on site. Significant constraints on wastewater infrastructure in Royston.
St Ippolyts		
SI1 –formerly site 221 - Land south of Waterdell Lane	Site will provide 40 dwellings, including affordable housing. Within 400m of greenspace.	This is a greenfield site on agricultural Grade 3 The landscape capacity for incremental small-scale development is considered to be low to moderate; sensitivity is moderate. The site adjoins a residential area. No regular bus route within 400m nor railways station within 800m. Site subject to surface water flooding.
SI2 –formerly SI/r3 - Land south of Stevenage Road St Ippolyts	Will provide 12 dwellings, including affordable housing. Access to green space.	This is a greenfield site on agricultural Grade 3. The site is adjacent to a designated area of archaeological interest. Adjacent to a wildlife site. Possible ecological interest. No regular bus route within 400m nor railways station within 800m. Development may restrict access to green space for existing residents. Landscape assessment not available. The site adjoins a residential area.

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
Stevenage (adjoining)		
<p>GA1 – formerly NES3 - Land at Roundwood (part of option 9 in Feb 2013 options appraisal)</p>	<p>Two primary schools, retail outlets, parks and a doctors’ surgery are within 1 km of the site.</p> <p>Existing footpaths and cycleways abut the site, and there is access to greenspace within 400m.</p> <p>There is a possible link into Stevenage Greenway and existing Level 1 Green Links north and west.</p> <p>Development would provide up to 330 dwellings (including affordable housing).</p>	<p>This is a greenfield site, agricultural land grade 3.</p> <p>Not within 400m of a bus stop with a regular service</p> <p>The 2011 Landscape Study describes developments of greater than 5ha as not appropriate for this area (moderate capacity).</p> <p>There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions.</p> <p>Potential surface water flooding issues onsite</p> <p>Access to the countryside would be further away for existing residents.</p> <p>It is likely that a significant proportion of new residents would work outside Stevenage and travel by car, even if some employment was provided for in the development.</p> <p>Initial construction phase would be disruptive for surrounding local residential areas.</p> <p>Development of this large greenfield site will inevitably involve increased light, air and noise pollution.</p> <p>The site is a major development and adjoins a residential area.</p> <p>Water treatment constraints in Stevenage.</p> <p>May impact on secondary school provision for deprived areas in Stevenage.</p>
<p>GA2 –formerly site 226 - Land off Mendip Way (part of option 9 in Feb 2013 options appraisal)</p>	<p>A site of this size is likely to be able to provide some facilities within the development.</p> <p>The development would provide 500 dwellings in North Hertfordshire, including affordable housing.</p> <p>There is a possible link into Stevenage Greenway and existing Level 1 Green Links north and west.</p> <p>May be possible to fund improved bus services with a development of this size.</p>	<p>Greenfield site, classified as grade 3 agricultural land.</p> <p>No regular bus service within 400m, nor railway station within 800m.</p> <p>Potential impact on three wildlife sites (Tilkiln Wood, Brooches Wood, Claypitthills Spring Wood) which are adjacent to the site.</p> <p>There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
	<p>Potential for sustainable energy solutions given size of site.</p> <p>Access to green space.</p>	<p>the Rye Meads Water Cycle Study identifies potential solutions.</p> <p>Part of the site is in a landscape identified as having low capacity and moderate sensitivity for development. The site contributes to the setting of north east Stevenage and provides a green buffer between Stevenage and Warren's Green.</p> <p>Potential impact on setting of listed building at Tile Kiln Farm.</p> <p>Potential surface water flooding issues onsite.</p> <p>There are multiple rights of way through the site, which highlights its amenity value. Development will reduce accessibility of the open countryside to existing Great Ashby residents.</p> <p>Site borders a watercourse.</p> <p>Site possibly contaminated.</p> <p>The site is a major development and part of it adjoins a residential area.</p> <p>Scale of development will put pressure on water resources.</p> <p>May impact on secondary school provision for deprived areas in Stevenage.</p>
NS1 – North of Stevenage	<p>Development would provide 900 dwellings, which would include significant amounts of affordable housing.</p>	<p>Large greenfield site grade 3 agricultural land.</p> <p>Within 400m of existing greenspace, however, it would result in the loss of open countryside which is used for amenity purposes by residents to the south of Graveley. The site will incorporate some open space so the overall effect is therefore uncertain.</p> <p>Stevenage station is over 3km from the site. However, it is still likely that a significant proportion of new residents would work outside Stevenage and travel by car.</p> <p>A designated wildlife site, Ledgeside Plantation is about 300m from the site.</p> <p>A development of this size is likely to have significant impact. Development would be close to Graveley village, and is likely to have a significant impact on views from the village and its distinctiveness as a settlement without appropriate mitigation measures.</p> <p>Site is adjacent to Graveley Village area of archaeological interest. Whilst not within the Graveley Conservation Area, its setting will need to</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>be assessed and appropriate mitigations measures put in place, as not to harm this area. Manor Farm (grade II listed) and the Church of St Etheldreda (grade II* listed and a scheduled monument) are located to the north east of the north Stevenage area. The setting of these would need to be maintained in any development.</p> <p>Development of the north east part of the site has the potential to impact long views from The Grade 1 Rook's Nest and the setting of the St Nicholas/Rectory Lane Conservation Area which includes the Grade 1 St Nicholas Church. The wider landscape setting of both these sites is considered an intrinsic part of their significance.</p> <p>Initial construction phase could be disruptive for surrounding local residential areas in the short term. Development on this large greenfield site will result in a loss of tranquillity for the area closest to Graveley and have an impact on the amenity of the properties in Church Lane.</p> <p>There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions.</p> <p>May impact on secondary school provision for deprived areas in Stevenage.</p>
<p>WS1 – Stevenage West (safeguarded site, subject to a further Plan review before being allocated for development)</p>	<p>If developed, site would provide 1,700 - 3,100 houses in North Hertfordshire with a proportion being affordable.</p>	<p>Large greenfield site grade 3 agricultural land.</p> <p>The site is separated from Stevenage by the A1 (M) and even if connected via a tunnel or bridge, would be over 1km from the station at the closest point. It is still likely that a significant proportion of new residents would work outside Stevenage and travel by car.</p> <p>Site includes Lucas Wood Wildlife site and Upper Kitching Spring Wildlife Site and High Broomin Wood is adjacent to the southern edge. Knebworth Woods SSSI is located to the south.</p> <p>The capacity for large urban extensions or new settlements in the Almshoe Plateau is considered to be moderate. However, overall Almshoe Plateau is considered to be of low landscape value.</p>

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
		<p>Site contains a designated archaeological site and there is a Grade 1 Listed building at Almshoe Bury to the North West.</p> <p>Site adjacent to A1, there may need to be noise attenuation in some areas and development to be an appropriate distance in relation to air quality and noise.</p> <p>Part of the site is situated within source protection zone 2. There potential contamination from a former landfill on the site, but it is not known if this is within the SPZ2 area.</p> <p>There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions.</p> <p>May impact on secondary school provision for deprived areas in Stevenage</p>
Therfield		
TH1 – formerly site 119 - Land West of Police Row, Therfield	<p>Will provide 12 dwellings including affordable housing.</p> <p>Access to green space.</p>	<p>No bus stop with regular service within 400m, nor railway station within 800m.</p> <p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Site borders a conservation area.</p> <p>Site is within a designated area of archaeological interest.</p> <p>Site is located near listed buildings.</p> <p>Landscape impact uncertain.</p> <p>The site adjoins a residential area.</p>
Weston		
WE1 – formerly site 228 - Land North of the Snipe	<p>Site will provide 40 dwellings, including affordable housing.</p> <p>Site is close to green space.</p>	<p>No bus stop with regular service within 400m, nor railway station within 800m.</p> <p>Greenfield site, classified as grade 3 agricultural land.</p> <p>Landscape capacity for new development is moderate to low, and sensitivity is moderate to high.</p> <p>The site adjoins a residential area.</p> <p>Potential surface water flooding issues onsite.</p>
Wymondley		

Site/location/ type	Significant positive effects	Significant negative effects and uncertainties
<p>WY1- formerly site 232 (amended site 122) - Land south of Little Wymondley</p>	<p>Would provide 300 dwellings, including affordable housing.</p> <p>Adjacent to green space.</p> <p>Site is within 400m of a bus stop.</p>	<p>This site is a greenfield site, classified as grade 3 agricultural land.</p> <p>Site borders listed buildings.</p> <p>Part of site includes designated area of archaeological interest.</p> <p>Locally rich and significant resource of grasslands and hedgerows in village, offsetting required if lost. Hertfordshire Ecology notes that ecological sensitivity is locally moderate and comment that it requires Phase 1 survey to assess grasslands and hedgerows.</p> <p>Within a landscape area described as distinctively unusual; impact of development on landscape assessed as moderate.</p> <p>Parts of site in flood zone 2 and flood zone 3</p> <p>Land is potentially contaminated from adjacent landfill.</p> <p>Site borders A602 creating potential noise issues.</p> <p>Potential surface water flooding issues onsite.</p> <p>Development will reduce access to green space for existing residents.</p> <p>The site is a major development and adjoins a residential area.</p>

5.4 Mitigation of significant negative effects and uncertainties

Many of the significant negative effects and uncertainties identified in the site appraisals can be mitigated, and much of this mitigation is provided for in Plan policy. All of the significant negative effects and uncertainties were mapped against Plan policies in order to assess the extent to which they would be mitigated by those policies. The tables in appendices 8 and 9 show:

- All of the significant negative effects and uncertainties for the sites in the Plan;
- The policies in the Plan which address these effects and uncertainties;
- Any suggested further mitigation measures necessary; and
- Any remaining residual effects.

6 Appraisal of policies

6.1 Introduction

Strategic and detailed policies were appraised in July and August 2016. The detailed appraisal matrices for strategic policies (except for site specific strategic policies) can be found in Appendix 10 and for detailed policies in Appendix 11. A summary of the appraisal findings for the strategic policies is included in 6.3 below and for detailed policies in 6.4.

An appraisal of all site-specific policies was undertaken in 2018 and published in the first SA Report Addendum. The Addendum was produced to accompany modifications to the Submission version of the Plan as a result of the examination process. Appraisal matrices for the site-specific policies are shown in Appendix 14.

Appraisal matrices in Appendices 10, 11 and 14 address mitigation of the significant negative effects of individual policies. They also include recommendations for changes, and the response of the Council.

Changed and new policies that arose from the examination were appraised in the Report Addenda in 2018 and 2021. Details on this process are given below.

6.2 Assessment of modifications arising from the public examination

As a result of the public examination process, the Council published two sets of proposed modifications to the Submitted Local Plan, in 2018 and 2021. All the modifications went through a through a review process called screening, to assess whether they were likely to have significant sustainability effects.

The screening reviewed all the proposed modifications to the Plan to answer the following questions:

- Is the proposed modification a significant change which is likely to have significant effects?
- Does the proposed modification constitute new Plan content which has not been appraised previously?
- Do any of the proposed modifications in combination with each other, or with existing Plan content, result in cumulative, secondary or synergistic effects which are significant?

If the answer to any of these questions was yes, the modification was 'screened in' for further SA assessment. In this process a precautionary approach was taken, i.e. if there was uncertainty about the significance of the proposed modifications, they were screened in for further appraisal.

The results of this screening process for both sets of modifications, and the conclusions and recommendations from the testing can be found in Appendix 15 and 16 to this Report. It should be noted that a small number of these modifications published in 2018 and 2021 were not eventually

included in the adopted Plan. However, none of these excluded modifications were ‘screened in’ during the process described above.

The testing matrices for the screened-in modifications have been integrated with the appraisal matrices for all the policies in Appendix 10 and 11.

6.3 Summary of strategic policy appraisals

The results of the appraisals for the strategic policies are shown below. In earlier stages of the appraisal a number of specific opportunities to strengthen the policies were identified, and these are included in the matrices in Appendices 10 and 14.

Table 30: summary of strategic policy appraisals

Policy	Summary of appraisal findings
SP1: Sustainable development in North Hertfordshire	<p>The policy provides an overarching expression of what sustainable development would look like in North Hertfordshire. It is necessarily strategic in nature and covers sustainable development priorities in broad terms only. The effect of the policy will depend on how the policy is interpreted in practice and upon the nature of planning applications which come forward.</p> <p>No significant negative effects have been identified.</p>
SP2: Settlement hierarchy	<p>The policy seeks to focus new development within or adjoining existing settlements, which will have a range of positive effects. Potential negative effects mainly stem from:</p> <ul style="list-style-type: none"> • The interaction with existing residential areas, e.g. noise impacts and increasing distance to green space. • The fact that much development adjoining existing settlements will be on greenfield sites which may have agricultural, ecological or amenity value. <p>It will be possible to mitigate many of these impacts, particularly through design and layout considerations.</p>
SP3: Employment	<p>The policy provides strong support for employment growth and diversification in North Hertfordshire. The contribution of sectors other than B Class uses and offices, research and development and light industrial uses, including tourism, is recognised. This has been strengthened as a result of a previous SA recommendation to ensure that it is carried through in other policies in the Plan.</p>
SP4: Town and local centres	<p>The policy provides clear support for existing town and local centres and makes provision for growth in A-class uses in the district. This should have direct economic benefits and contribute to the achievement of sustainable patterns of land use.</p> <p>The policy includes protection against inappropriate development in existing centres. All growth has some negative environmental effects. Some of these can be mitigated but this will be best achieved through other policies in the Plan rather than through expanding the scope of this policy.</p>
SP5: Countryside and Green Belt	<p>The policy includes releasing green belt sites for housing and economic development, which should help to support economic growth in the District and will play an</p>

Policy	Summary of appraisal findings
	<p>important role in providing the necessary level of new housing, including affordable housing.</p> <p>Locating new development on the edges of existing settlements may constitute a sustainable approach but it highlights the particular importance of creating and enhancing links between the new developments and the existing settlements in order to promote sustainable travel patterns. This is best addressed through other policy in the Plan and in the masterplanning process for the strategic sites.</p> <p>Releasing green belt sites for new development obviously has a wide range of negative environmental effects, mitigation of which is addressed in other policies in the Plan. However, the Strategic Housing Land Availability Assessment made it clear that housing targets cannot be achieved without the use of such sites.</p>
SP6: Sustainable Transport	<p>The policy provides strong and clear support for sustainable patterns of development, supported by the early provision of sustainable travel infrastructure. This directly supports a number of sustainability appraisal objectives.</p>
SP7: Infrastructure Requirements and Developer Contributions	<p>This policy is critical in ensuring that the Plan delivers against a significant number of the sub-objectives in the Sustainability Appraisal framework, not only through ensuring the delivery of needed infrastructure but also through making provision for the mitigation of the adverse impacts of new development. The implementation and impacts of the policy will, however, need to be carefully monitored to ensure that it does not place an undue burden on developers and, thereby hinder the achievement of the necessary housing and economic growth.</p>
SP8: Housing	<p>The policy provides clarity about the scale and location of housing which will be delivered in the District up to 2031, and also identifies Strategic Housing Sites that will continue delivery beyond that period. It stipulates that 33% of the new homes will be Affordable Housing and the policy also makes provision for groups with specific needs, including Gypsies and Travellers and those requiring supported accommodation. As well as securing long-term housing supply, the policy should help to support economic growth in the District through increasing local demand and spend and creating jobs in construction and other development-related industry.</p> <p>The SHLAA made it clear that housing targets cannot be achieved without the use of greenfield sites.</p> <p>Mitigation of the negative environmental effects of this is addressed in other policies in the Plan.</p> <p>The policy seeks to maximise the use of previously developed land through setting a target of 20% of new homes being completed on such land over the Plan period. The reason for this target has been included in the supporting text, as a result of an earlier SA comment.</p> <p>Some short term effects (whether positive or negative) are uncertain, as they depend on the phasing of housing delivery on specific sites.</p>
SP9: Design and Sustainability	<p>The final version of this policy has been significantly strengthened from a sustainability perspective, and positively contributes to a large number of the SA Framework objectives. This is to be welcomed given the scale of new development proposed by the Plan. It includes adopting the Government's technical standards for water efficiency and this responds to one of the key sustainability issues identified by the Sustainability Appraisal. The changes address issues identified in an earlier</p>

Policy	Summary of appraisal findings
	version of the SA, including the importance of good design in crime reduction and community safety; and climate change mitigation issues.
SP10: Healthy communities	This policy is critical to delivery of a number of the social and environmental sub-objectives in the Sustainability Appraisal framework.
SP11: Natural resources and sustainability	This policy supports a number of sustainability appraisal framework objectives. A number of changes were made to strengthen the policy as a result of earlier SA recommendations.
SP12: Green infrastructure, biodiversity and landscape	As well as directly addressing the environmental protection objectives in the Sustainability Appraisal framework, this policy indirectly supports a number of other objectives including those relating to improving access by non-car means and improving access to open space. The policy also, importantly, recognises the need to provide environmental protection in the context of accommodating significant growth.
SP13: Historic Environment	This policy directly addresses the Sustainability Appraisal framework objectives relating to the protection, conservation and enhancement of heritage assets and landscapes. It may also indirectly support the retention and re-use of derelict buildings (objective 2(a)). It was strengthened as a result of an earlier SA recommendation.
SP14: Site BA1 – North of Baldock	Site BA1 is the largest single development site in the Plan and will contribute approximately 2,500 homes towards the housing target during the Plan period. This will include a very significant level of Affordable Housing and range of service provision. The policy provides mitigation for the significant negative effects identified in the site appraisals summarised above, including on biodiversity and landscape. The policy was strengthened as a result of earlier SA recommendations.
SP15: Site LG1 – North of Letchworth Garden City	This site, with an allocation of 900 homes, represents an extension of the world's first garden city, and therefore requires an approach which respects the historic and cultural significance of the area. This is clearly addressed in the policy. The policy provides mitigation of the significant negative effects identified in the site appraisals summarised above, including on biodiversity, historic environment and landscape. The policy was strengthened as a result of earlier SA recommendations.
SP16: Site NS1 – North of Stevenage	Site NS1 is a greenfield site, on which 900 homes are proposed as an extension of Stevenage to the north. The policy provides mitigation for the significant negative effects identified in the site appraisals summarised above, including on landscape and heritage impacts, and also waste water treatment issues. The policy was strengthened as a result of earlier SA recommendations.
SP17: Site HT1 – Highover Farm, Hitchin	Site HT1 is allocated for 700 homes. The policy provides mitigation for the significant negative effects identified in the site appraisals summarised above, including on biodiversity, landscape, flooding and heritage impacts. The policy was strengthened as a result of earlier SA recommendations.

Policy	Summary of appraisal findings
SP18: Site GA2 – Land off Mendip Way	Site GA2 is allocated for 600 homes. The policy provides mitigation for the significant negative effects identified in the site appraisals summarised above, including on landscape, flooding and heritage impacts, and also waste water treatment issues. The policy was strengthened as a result of earlier SA recommendations.
SP19: Sites EL1, EL2 & EL3 – East of Luton	Sites EL1, EL2 and EL3 form a very large development site in the Plan and will contribute approximately 2,100 homes towards housing targets in Luton and N Herts during the Plan period. This will include a very significant level of Affordable Housing and range of service provision. The policy provides mitigation for the significant negative effects identified in the site appraisals summarised above, including on biodiversity, historic environment and landscape. The policy was strengthened as a result of an earlier SA recommendation.

6.4 Summary of other policy appraisals

Table 31: summary of other policy appraisals

Policy	Summary of appraisal findings
	Employment
ETC1 Appropriate uses in Employment Areas	By supporting employment uses, this policy is likely to have a significant positive impact on the quality of local employment. This policy deals with the uses allowed on the employment sites. Since they are mainly in the edge of towns, the presumption against retail should help avoid additional car use.
ETC2 Employment development outside Employment Areas	This is a positively worded policy which should play an important role in facilitating economic development in the borough. The requirement for sustainable locations should support town centres.
ETC3 New retail, leisure and other main town centre development	The policy focuses new retail, leisure and other town centre development in existing centres, which are the most sustainable locations for such uses.
ETC4 Primary shopping frontages ETC5 Secondary shopping frontages	The main purpose of the policies is economic and it performs significantly well in a number of areas. Their key role is to protect the primary retail function of towns and to promote balanced and sustainable economic growth in order to maintain and enhance the vibrancy and vitality of town centres. Implementation of the policy should also assist in maintaining local distinctiveness, with primary and secondary frontages being retained for retail use only.
ETC6 Local centres	The policy recognises the importance of preserving and enhancing the existing functions of local centres. This will have positive effects in terms of minimising the need to travel for those who live in rural area. It will restrict the development of other uses in local centres.

Policy	Summary of appraisal findings
ETC7 Local community shops and services in towns and villages	The maintenance of shops and other services and facilities is an important element of the overall sustainability of communities, and the Policy seeks to protect such facilities.
ETC8 Tourism	This policy should have a positive effect on promoting sustainable tourism, sustainable location patterns and the vitality of town centres.
	Countryside and Green Belt
CGB1 Rural areas beyond the green belt	The policy provides further detail as to the types of new development which will be permitted in rural areas beyond the green belt. It may result in some environmental damage. However, it will make an important contribution to the provision of the new homes, services and facilities needed in the District.
CGB2a Exception sites for affordable housing in the green belt CGB2b Community facilities, services, and affordable housing in the rural area beyond the green belt	These policies will play a key role in focusing new development in existing larger settlements, whilst clearly outlining the exceptional circumstances in which new development will be permitted in rural areas.
CGB3 Rural workers' dwellings	The policy makes provision for essential housing for those working in established rural businesses. It is restrictively worded, meaning that negative environmental impacts should be minimal.
CGB4 Existing buildings in the rural area beyond the green belt	The policy allows the replacement or extension of rural buildings under certain circumstances. It requires buildings to be in keeping with the surroundings and of an appropriate scale.
CGB5 Urban open land	The policy affords protection to urban open land on the fringes of existing settlements. Whilst this may restrict opportunities for housing and economic development away from the allocated sites, the policy supports a number of sustainability objectives, including protecting green space, protecting biodiversity and landscapes and promoting access to services and facilities for all.
	Transport
T1 Assessment of transport matters	This policy provides strong support for the provision of safe and sustainable transport facilities with new development. An earlier SA recommendation resulted in a strengthening of this provision.
T2 Parking	The intention of the policy is to manage all (including sustainable) vehicle parking in line with the standards set out in the relevant SPD and appropriate to the scale of development.
	Housing
HS1 Local housing allocations	This policy was not appraised separately as it simply affirms the importance of (a) the site allocations, which have each been appraised, and (b) the remainder of the policy requirements in this chapter of the Plan, which are appraised separately, and summarised below.

Policy	Summary of appraisal findings
HS2 Affordable housing	Affordable housing is clearly a major issue for North Herts, one that impacts significantly on the less affluent and which leads to less sustainable communities. This policy is likely to make an effective contribution to addressing this issue. It seeks to gain the right balance between encouraging affordable housing and not deterring developers from providing new housing in North Herts, and it is considered that the percentage requirement for different sizes of development is helpful in this regard.
HS3 Housing mix	This policy makes a positive statement in favour of housing development in North Herts and should help to improve housing supply. This could increase pressure on sensitive sites, although protection is offered in other national and local policy. The policy makes it clear that new housing development needs to be appropriate in terms of its density, scale and character.
HS4 Supported, sheltered and older persons' housing	This policy should help to improve the supply of housing for those who require sheltered or supported housing arrangements. This could increase pressure on sensitive sites, although protection is offered in other national and local policy. The policy makes it clear that new housing development needs to be appropriate in terms of its density, scale and character, and that it must be well served by local services, facilities and public transport.
HS5 Accessible and adaptable housing	This policy recognises the specific needs of older people, those with mobility issues and some wheelchair users. Alongside other housing policies, this policy represents a positively stated approach to housing development in North Herts
HS6 Relatives' and dependents' accommodation	The policy is clear in its aims and clearly outlines the circumstances in which the development of relatives' and dependants' accommodation will be permitted.
HS7 Gypsies, Travellers and Travelling Show People	The policy helps ensure that the needs of Gypsies, Travellers and Travelling Showpeople are considered. The policy imposes criteria that ensure that sites are only placed in appropriate locations.
	Design
D1 Sustainable design	This is a broad policy which positively supports a range of sustainability appraisal objectives, including economic, environmental and social objectives.
D2 House extensions, replacement dwellings and outbuildings	This policy should help to protect local character and distinctiveness.
D3 Protecting living conditions	This policy should have significant positive impacts on reducing the excessive use of motor vehicles, protecting the quality of the housing stock and avoiding development which might undermine community cohesion.
D4 Air quality	This policy provides clear and detailed requirements for new developments in relation to air quality impacts, and indirectly supports a number of SA objectives, including those relating to sustainable transport and health.
	Healthy communities
HC1 Community facilities	The policy deals directly with the retention of community, leisure, recreation and cultural facilities, which could have a positive benefit in terms of social inequalities, improving community cohesion and providing access to services and facilities for all.

Policy	Summary of appraisal findings
	Natural environment
NE1 Strategic Green Infrastructure	This policy makes an important contribution to a significant number of SA objectives relating to the natural environment, health and the provision of open space but also includes some flexibility to avoid acting as an undue impediment to growth.
NE2 Landscape	This policy primarily addresses the sustainability objective of protecting and enhancing landscapes. Whilst such a policy could act as hindrance to growth, it is positively worded, i.e. planning permission will be granted subject to certain criteria being met, and there may be positive effects in terms of tourism in the District.
NE3: The Chilterns Area of Outstanding Natural Beauty	The policy offers protection to the Chilterns AONB, contributing to a number of the environmental SA objectives. There are also likely to be indirect benefits in terms of the promotion of the tourism, cultural, leisure and recreational value of the AONB.
NE4: Biodiversity and geological sites	This growing pressure on locally significant species and habitats has been identified as a key sustainability issue for the District, which highlights the importance of this policy. The policy seeks to protect and enhance biodiversity on designated sites. In addition, as recommended by a previous iteration of the SA, it now provides protection for non-designated sites with important habitats and species.
NE5 Protecting open spaces	The policy offers protection to existing levels of provision of open space. This supports the SA objective of providing access to green spaces and will have indirect benefits in terms of protecting biodiversity, promoting healthy lifestyles and maintaining and improving recreational facilities.
NE6 New and improved open space	The policy provides strong support for the provision of new open space and clearly recognises its multi-faceted role.
NE7 Reducing flood risk	The policy resists development in areas of flood risk, which will be important in delivering against a number of SA objectives, particularly adaptation to climate change.
NE8 Sustainable drainage systems	The policy requires the use of sustainable drainage systems in all development, which will be important in delivering against a number of SA objectives, particularly adaptation to climate change.
NE9 Water quality and environment	This policy contributes to the SA objectives relating to climate change adaptation, biodiversity and reducing pollution.
NE10 Water conservation and wastewater infrastructure	The policy makes essential provisions for the protection of water quality and ensuring adequate water and wastewater infrastructure. With regard to the latter, the focus is on securing additional supply rather than on reducing demand from new development.
NE11 Contaminated land	The policy provides important safeguards relating to the development of contaminated land, ensuring that contamination is investigated and addressed. This contributes to a number of SA objectives, including those relating to biodiversity, pollution and health.
NE12 Renewable and low carbon energy	This is a positively worded policy which should facilitate the development of some forms of renewable energy schemes in District, subject to certain constraints. Specific opportunities or opportunity areas for large scale standalone renewable schemes are not identified, which may limit the potential for such schemes.
	Historic environment
HE1 Designated heritage assets	The policy supports the conservation and enhancement of designated heritage assets. In line with national policy, it includes a degree of flexibility which gives weight to demonstrable public benefits from proposals which might otherwise be considered unacceptable. This should allow the policy to deliver a wider range of positive effects.

Policy	Summary of appraisal findings
HE2 Heritage at risk	The policy supports the restoration and enhancement of heritage assets at risk. The policy includes a degree of flexibility which allows the potential benefits of a proposal to be weighed against the harm to the asset. This should enable the policy to deliver a wider range of positive effects than one which sought simply to preserve the assets.
HE3 Non-designated heritage assets	The policy allows, with safeguards, the replacement of buildings which have some local heritage interest. This should help to facilitate the redevelopment of sites within built-up areas of the District, which should deliver benefits in terms of economic growth and in promoting sustainable urban living.
HE4 Archaeology	Large parts of the District are designated for archaeological significance but, providing that proposals meet the criteria listed in the policy, it should not significantly limit economic development in the borough, whilst also offering protection the archaeological assets in the District.
	Communities
	This section of the Plan provides more information about the communities in the District. For those where new development is proposed, it includes site-specific criteria for each allocation (apart from strategic sites which are addressed in policies SP14-19). These criteria mainly provide mitigation for the negative effects identified in the site appraisals. summarised in 5.3 above. This mitigation is included in the mitigation table in Appendix 9 and matrices for each of these policies are contained in Appendix 14.
	Implementation, Monitoring and Review
IMR1 Five-year housing land supply	<p>The policy provides clarity about the scale and location of housing which will be delivered in the District up to 2031. As well as securing long-term housing supply, the policy should help to support economic growth in the District through increasing local demand and spend and creating jobs in construction and other development-related industry.</p> <p>The Strategic Housing Land Availability Assessment made it clear that housing targets cannot be achieved without the use of greenfield sites. Mitigation of the negative environmental effects of this is addressed in other policies in the Plan. Some short-term effects (whether positive or negative) are uncertain, as they depend on the phasing of housing delivery on specific sites.</p>
IMR2 Local Plan early review	The policy provides for a Local Plan review by the end of 2023, in recognition of many uncertainties, including possible changes to the planning system, and changes to the way we live, work or spend leisure time. It is noted that this may result in a comprehensive update of the Plan. The overall intention is to ensure the continued delivery of appropriate levels of housing, and retail, leisure, office and other town centres uses. Many of the effects are uncertain, since a review may result in different levels or location of development provision.

7 Cumulative effects assessment

7.1 Introduction

Cumulative effects generally arise where several individual insignificant effects have a combined significant effect. Synergistic effects interact to produce a total effect greater than the sum of the individual effects. For simplicity, all cumulative and synergistic effects have been called 'cumulative effects'.

The appraisal of cumulative effects assists in the identification of the total direct and indirect effects on receptors. Often, effects may result from the accumulation of multiple small and often indirect effects rather than few large obvious ones. Cumulative effects can be both negative and positive.

The approach to the cumulative effects assessment is set out below. The assessment has considered potential cumulative effects on three levels; 'localised', 'strategic plan-wide' and 'strategic inter-plan'.

7.2 Localised cumulative effects

Potential localised cumulative effects have been identified based on identified clusters of development proposed. The clusters have been identified as:

A – Royston

B – North of Letchworth Garden City

C – North of Baldock

D – Hitchin

E – North of Stevenage

F – Codicote

G – Knebworth

They are shown in the maps below.

Figure 7.1: Cluster A - Royston

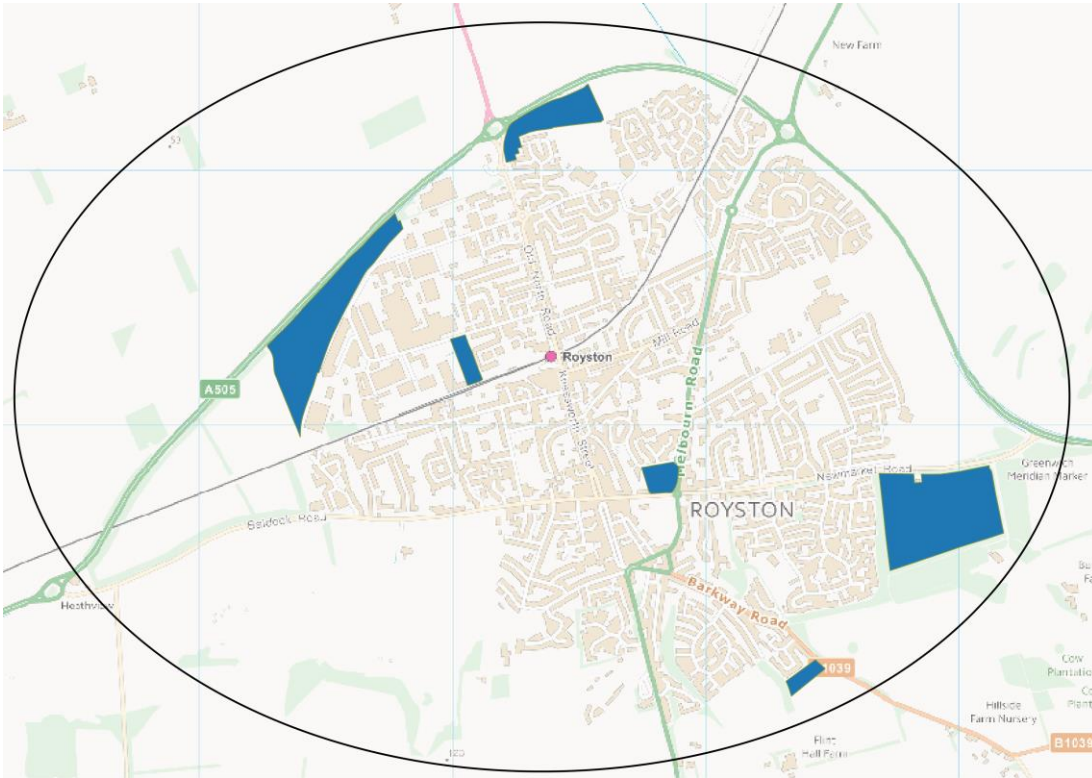


Figure 7.2: Cluster B - North of Letchworth Garden City



Figure 7.3: Cluster C - North of Baldock

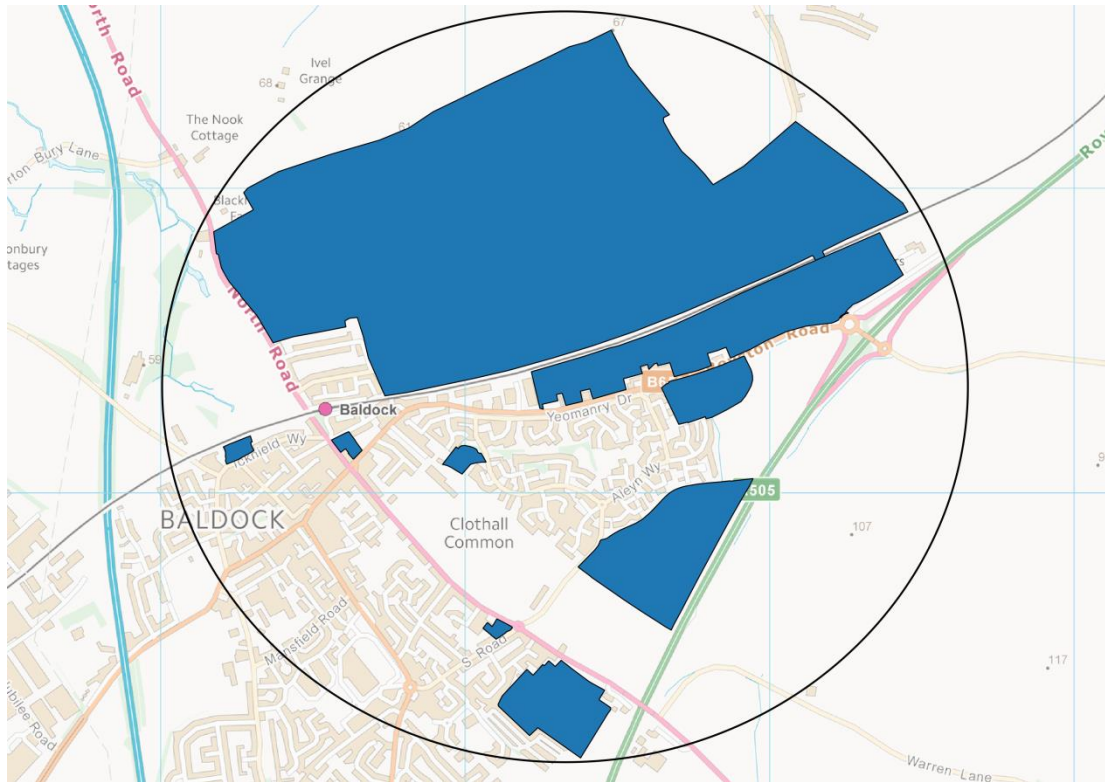


Figure 7.4: Cluster D - Hitchin

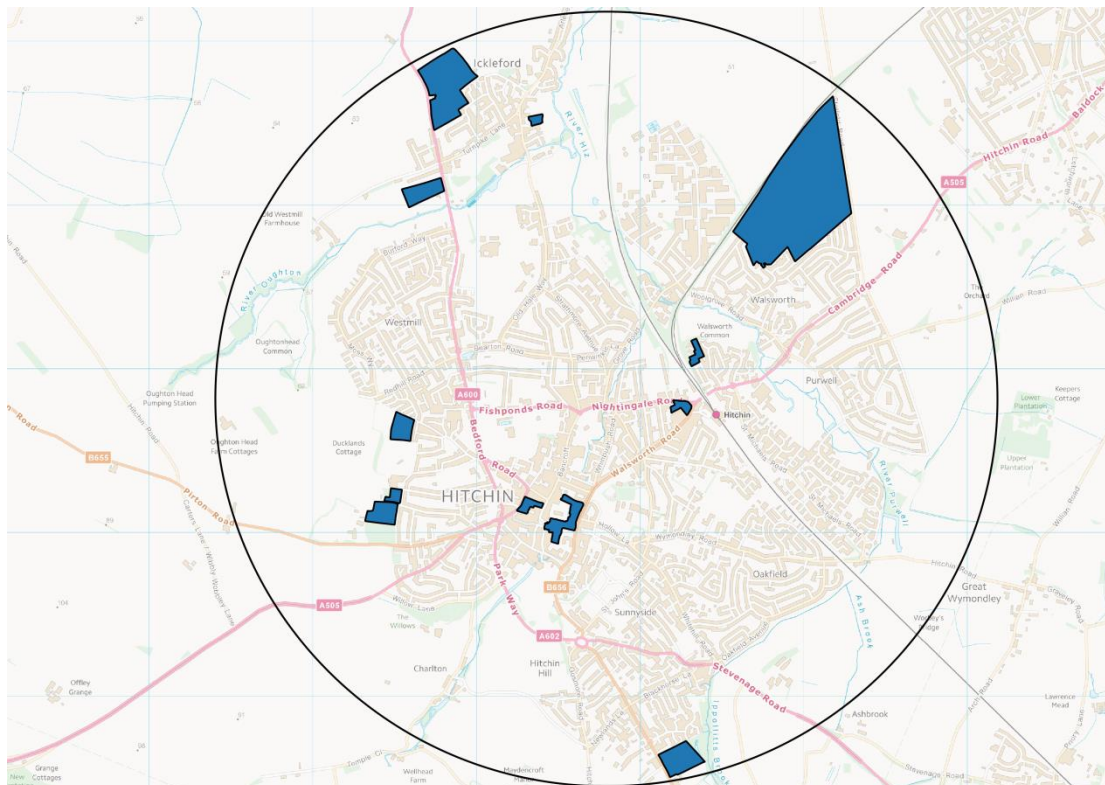


Figure 7.5: Cluster E – North of Stevenage

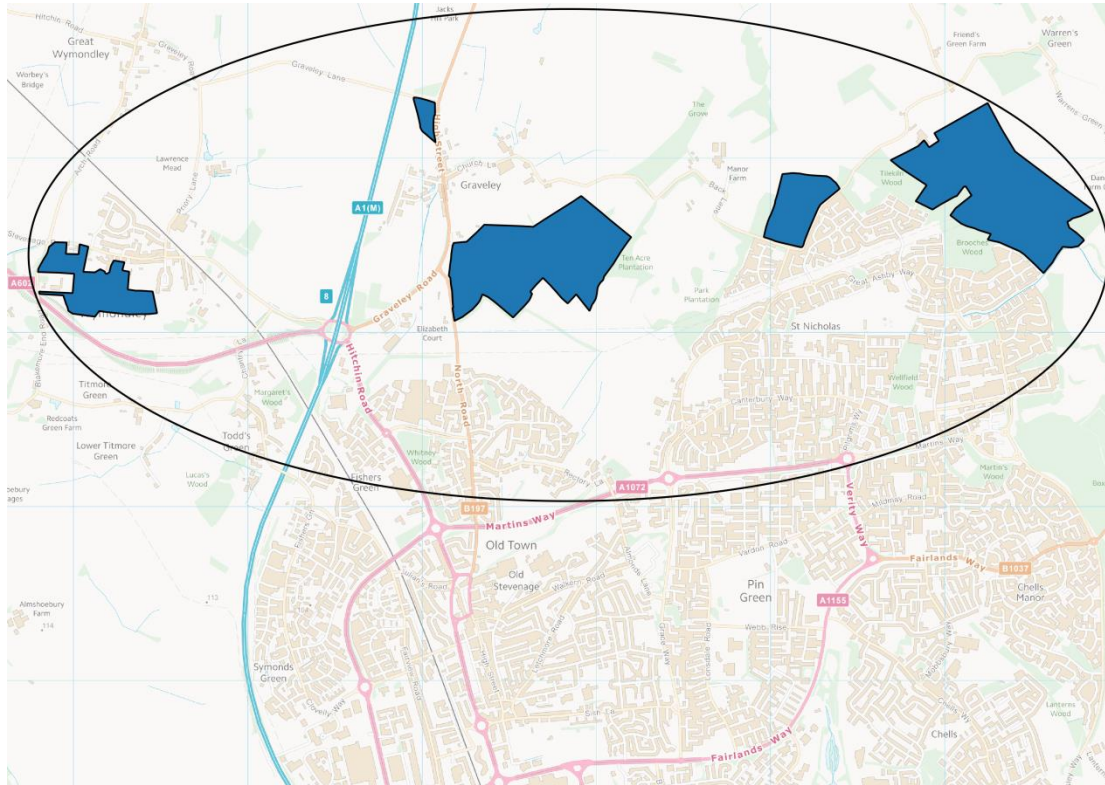


Figure 7.6: Cluster F – Codicote

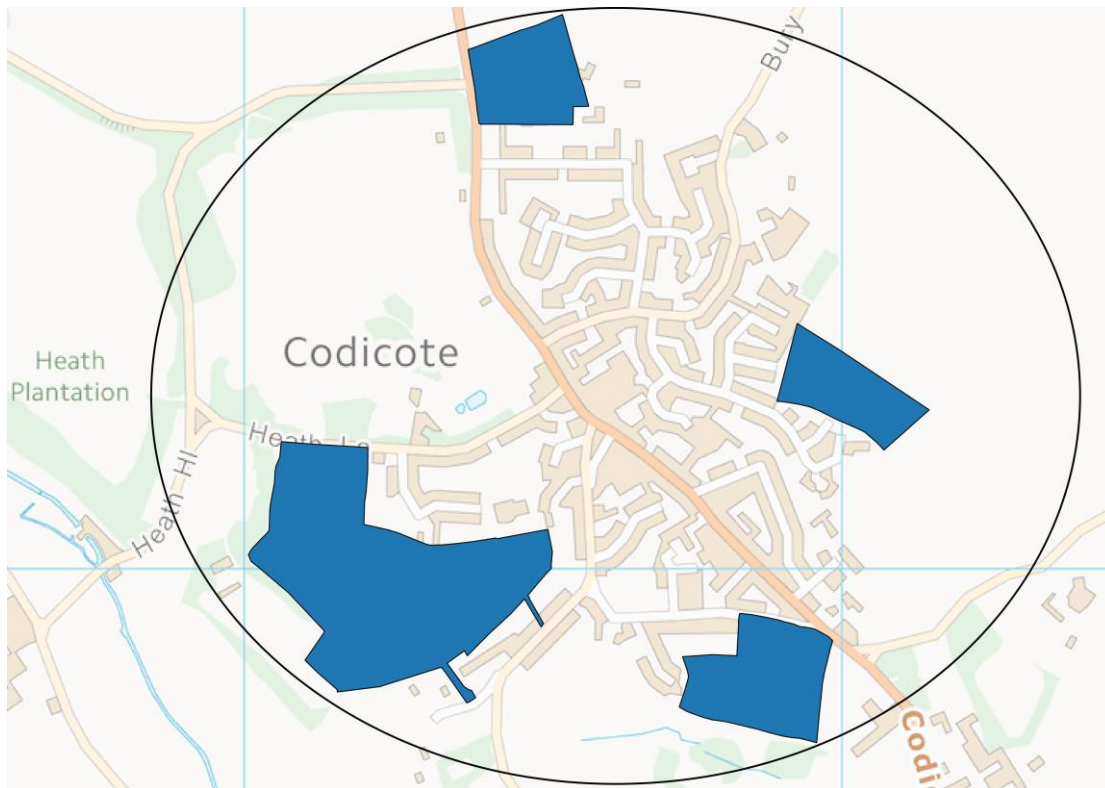


Figure 7.7: Cluster G - Knebworth

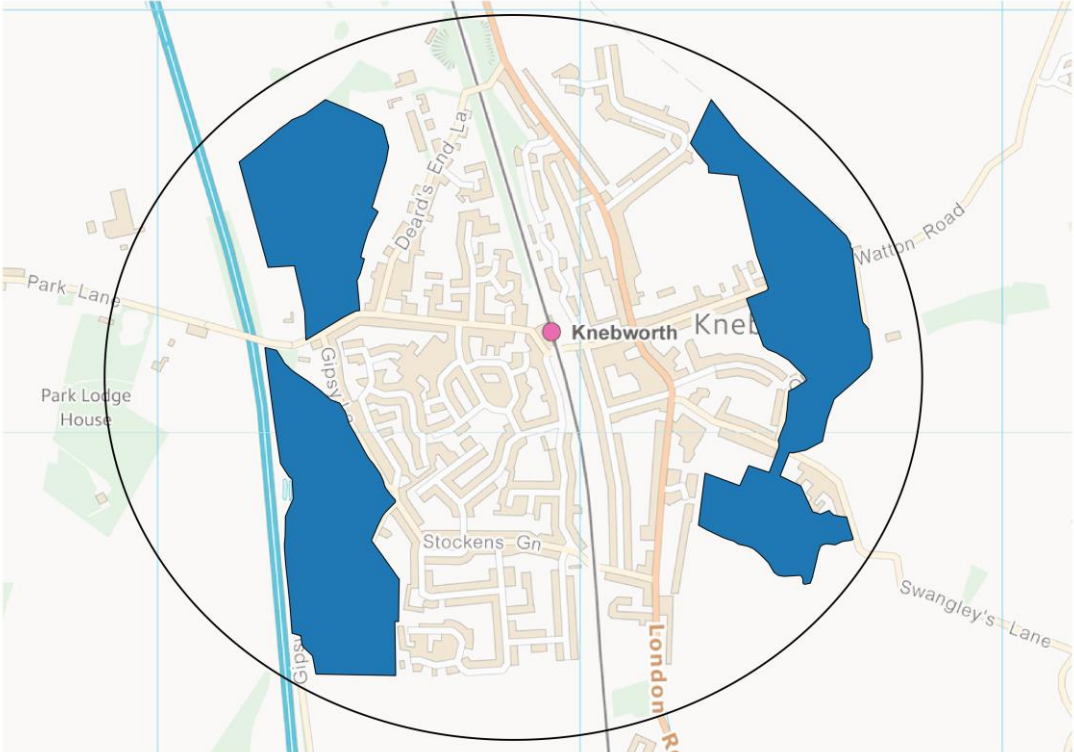
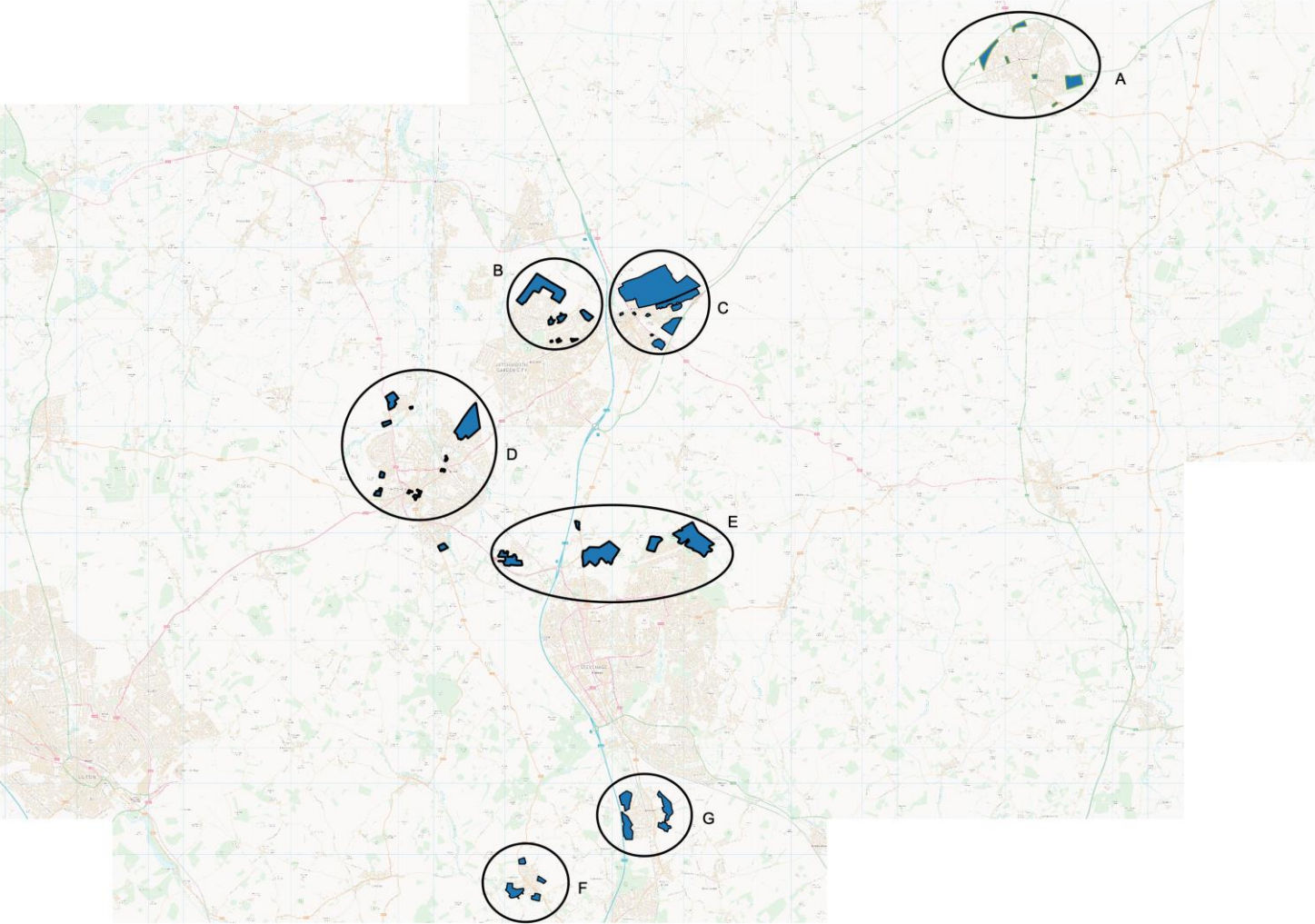


Figure 7.8: All clusters



The assessment of potential localised cumulative effects involves identifying receptors, e.g. wildlife sites, watercourses or particular towns. Based on the SA framework, categories of potential receptors have been identified, from which individual receptors were then identified. The receptor categories are shown in the table below, along with the data source which was used to identify individual receptors within these categories.

Table 32: Receptor categories and data sources

Receptor category	Data source
Towns and villages (amenity impacts – noise, nuisance, access to open countryside)	OS base map
Town centres (mixed uses, sustainable urban living)	OS base map
Heritage assets	Listed buildings GIS layer
	Conservation areas GIS layer
	Scheduled Ancient Monuments GIS layer
	Historic parks/gardens GIS layer
Habitats	Wildlife sites GIS layer
	SSSIs GIS layer
Groundwater	Source Protection Zone 1 GIS layer
	Source Protection Zone 2 GIS layer
Landscape	AONB GIS layer
	NHDC landscape assessments
Flood risk areas	Flood zone 2 GIS layer
	Flood zone 3 GIS layer
	Surface water flood risk GIS layers
Watercourses	Watercourse GIS layer
Air quality	NHDC air quality monitoring
Deprived communities	Indices of Multiple Deprivation mapping ⁵⁹

All identified effects are considered to be significant, therefore the potential for a cumulative effect on the receptor has been recorded as either significant positive or a significant negative. The assessment has involved a review of the effects of the individual allocation sites in each

⁵⁹http://dclgapps.communities.gov.uk/imd/iod_index.html#

cluster in order to identify the potential for cumulative impacts. The findings are presented in the table below.

Mitigation measures have been put forward for the potential cumulative effects identified. In some cases, these are cross-references to policies within the Local Plan which will provide mitigation. Note that the SA objectives referenced are those used for site assessment, as outlined in Appendix 5.

Table 33: Localised cumulative effects

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
Access to open countryside	Royston	RY9, RY4, RY10, RY11 – together they infill much of the remaining open countryside on the western, northern and eastern edges of the town inside the A505	2(b) Provide access to green spaces	Maintain existing rights of way. Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development. Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards.	Increased distance to open countryside from existing housing
Landscape character	Royston	RY9, RY4, RY10, RY11 – all lie in areas of high or moderate sensitivity on the edge of the town	3(b) Protect and enhance landscapes	Consider an area-wide landscape assessment for this area.	Likely to be some residual landscape impact
Impact on Therfield Heath SSSI	Royston	RY4, RY9, RY7, RY5, RY10, RY11 – all have potential to add recreational pressure to SSSI	3(a) Potential impact on sites designated for their ecological value or features of ecological interest	Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards. Onsite open space should provide a more localised option for recreation. It is recommended that a Mitigation Strategy be developed in consultation with Natural England to ensure that developers of these sites contribute towards appropriate measures to protect the SSSI from recreational pressures. The mitigation strategy should include appropriate monitoring.	Uncertain

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
Noise pollution	North of Letchworth Garden City	LG1, LG3, LG4, LG10 – all lie close together and adjacent to residential properties in the northern part of the town	5(c) Improve conditions and services that engender good health and reduce health inequalities	Policy D3 provides specific guidance on what may cause unacceptable harm. An assessment of whether the cumulative effects of development on these sites meet these policy requirements. In addition to the mitigation for individual sites, ensure the coordination of individual site construction management plans.	Likely to be some residual noise pollution
Historic character	Conservation areas and listed buildings in the north east corner of Letchworth Garden City	LG3, LG4, LG10, LG13, LG16, LG18	3(c) Conserve and, where appropriate, enhance the historic environment	Policy HE1 requires proposals to conserve and enhance designated heritage assets, and includes a number of related requirements, including production of a heritage assessment. Consideration should be given to an area-wide assessment which takes account of cumulative effects.	None
Access to open countryside	Baldock	BA1, BA10, BA4, BA3, BA2 – all lie in open countryside on the northern and eastern edge of the town	2(b) Provide access to green spaces	Maintain existing rights of way. Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development. Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards.	Increased distance to open countryside from existing housing

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
Landscape character	Baldock	BA1, BA10, BA4, BA3, BA2 – all lie in areas of high or moderate sensitivity on the northern and eastern edge of the town	3(b) Protect and enhance landscapes	Consider an area-wide landscape assessment for this area.	Likely to be some residual landscape impact
Surface water flooding	North and East of Baldock	BA1, BA10, BA4, BA3 – all sites lie within a linked area of high surface water flood risk	4(a) Reduce greenhouse gas emissions and improve the District's ability to adapt to climate change	Policy SP11 requires the use of SUDS and other appropriate measures where necessary. Policy NE8 stipulates that the most sustainable drainage solutions will be sought for each development to reduce the risk of surface water flooding and that sites should aim to mimic the drainage of an undeveloped greenfield site.	Some residual risk to property will inevitably remain, particularly when taking into account potential climate change impacts
Air pollution	Air quality in Hitchin	EL1, EL2, EL3, NS1, GA1, GA2, WY1	5(c) Improve conditions and services that engender good health and reduce health inequalities	Policy D4 (supported by the North Herts Air Quality Planning Guidance Document) requires developments to propose mitigation measures to minimise (the effects of) emissions; and carry out air pollution impact assessments. Policy SP6 requires the early implementation of sustainable transport infrastructure on strategic housing sites.	Uncertain
Town centre competitiveness	Hitchin town centre	HT11, H12 – retail/mixed-use sites in close proximity to	7 Promote sustainable urban living	None necessary – positive cumulative effect.	N/A

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
		each other in Hitchin town centre			
Historic character	Conservation area and listed buildings in Hitchin town centre	HT11, HT12	3(c) Conserve and, where appropriate, enhance the historic environment	Policy HE1 requires proposals to conserve and enhance designated heritage assets, and includes a number of related requirements, including production of a heritage assessment. Consideration should be given to an area-wide assessment which takes account of cumulative effects.	None
Access to open countryside	Great Ashby	GA1, GA2 – the sites lie in close proximity on the edge of Great Ashby	2(b) Provide access to green spaces	Maintain existing rights of way. Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development. Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards.	Increased distance to open countryside from existing housing
Landscape character	North of Stevenage	NS1, GA1, GA2 – lie on the northern edge of Stevenage Development will result in the erosion of a significant portion of the green buffer between Stevenage	3(b) Protect and enhance landscapes	Consider an area-wide landscape assessment for this area.	Likely to be some residual landscape impact

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
		and smaller settlements to the north			
Access to open countryside	Knebworth	KB1, KB2, KB4 – development will result in the loss of much of the open countryside on the eastern and western boundaries of the town	2(b) Provide access to green spaces	Maintain existing rights of way. Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development. Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards.	Increased distance to open countryside from existing housing
Landscape and townscape character	Knebworth	KB1, KB2, KB4 – development along most of the western and eastern boundaries of the town will have a significant impact on the scale, setting and character of the town	3(b) Protect and enhance landscapes	Consider an area-wide landscape assessment for this area.	Likely to be some residual landscape/ townscape impact
Potential impact on groundwater	Source Protection Zone 1 and 2	KB4 lies in the SPZ1, whilst KB1 lies in the linked SPZ2.	3(d) Reduce pollution from any source	Policy SP11 includes general support for the principles of the Water Framework Directive and seeks improvements to the water environment. Policy NE10 stipulates that new development should not result in the deterioration of any	None

Cumulative effect	Affected receptor	Sites contributing to the cumulative effect	SA objectives affected	Recommendations / mitigation	Residual effects
				watercourse in accordance with the Water Framework Directive. Given the potential cumulative effects from the development of the four sites, the Environment Agency should be consulted regarding the need for site-specific risk assessments.	
Landscape and townscape character	Codicote	CD1, CD2, CD3, CD5 – development would represent a significant extension of the village and will have an impact on the scale, setting and character of the village	3(b) Protect and enhance landscapes	Consider an area-wide landscape assessment for this area.	Likely to be some residual landscape/ townscape impact
Potential impact on groundwater	Source Protection Zone 2	CD1, CD2, CD3, CD5 - lie in the same SPZ2	3(d) Reduce pollution from any source	Policy SP11 includes general support for the principles of the Water Framework Directive and seeks improvements to the water environment. Policy NE10 stipulates that new development should not result in the deterioration of any watercourse in accordance with the Water Framework Directive. Given the potential cumulative effects from the development of the four sites, the Environment Agency should be consulted regarding the need for site-specific risk assessments.	None

7.3 Strategic cumulative effects – plan-wide

Cumulative effects of the Plan policies are considered in this part of the assessment. In order to identify strategic Plan-wide cumulative effects, the effects of the Plan as a whole have been reviewed and potential cumulative effects identified.

The potential receptors considered include all of those utilised in the assessment of localized effects, since multiple localised cumulative effects may become more significant on a Plan-wide scale.

Additional potential receptors are also included. These are receptors which are less significant at the localised level but remain significant at the Plan-wide scale. They are as follows:

Table 34: Additional potential receptors

Receptor category	Data source
Agricultural land	Agricultural land classification GIS layer
Water supply and wastewater infrastructure	Infrastructure Delivery Plan
Brownfield land	NHDC site info
Employment land	NHDC site info
Affordable housing	NHDC site info
Greenfield land / green space	OS base map
Rural facilities/service provision	OS base map
The world (GHG emissions and climate change impacts)	N/A

The potential plan-wide cumulative effects are presented in the table below. These are effects which occur over multiple clusters and outside the cluster and which, therefore, are multiplied in significance at the Plan-wide scale. This includes landscape character, access to open countryside and impacts on groundwater.

These also note inter-relationships between effects where relevant. As in the previous table, the SA objectives referenced are those used for site assessment, as outlined in Appendix 5.

Table 35: Plan-wide cumulative effects

Cumulative effect	Links to other effects	Affected receptor	Causes	SA objectives directly affected	Recommendations/ mitigation and residual effects
Potential reduction in water quality	Negative effects on biodiversity and wildlife habitats	Groundwater Source Protection Zones Rivers included in Rye Meads Study catchment and their habitats - the Lee, Mimram, Beane, Rib, Ash and Stort. Whaddon Brook (in the case of Royston STW)	Development within Groundwater Source Protection Zones Expansion of sewerage capacity at Rye Meads STW due to growth in this part of the region Increased water abstraction due to increased growth Possible pressures on sewerage infrastructure at Royston STW	3(d) Reduce pollution from any source 6(a) use natural resources efficiently; reuse, use recycled where possible	SP9 expects masterplans and planning applications for significant development to ensure effective use of SuDs and sustainable water management. Policy SP11 includes general support for the principles of the Water Framework Directive and seeks improvements to the water environment. Policy NE10 stipulates that new development should not result in the deterioration of any watercourse in accordance with the Water Framework Directive. Consultation with the Environment Agency will be needed for developments within any SPZ1 and for clusters of development within any SPZ, as outlined in table 21. Further measures are outlined in the Rye Meads Water Cycle Study, including the promotion of water efficiency. The Study specifically includes measures to protect the sites of European importance. Development of large sites in Royston and Stevenage should not proceed until specific solutions to STW capacity issues are determined and agreed by Anglian Water and the Environment Agency.

Cumulative effect	Links to other effects	Affected receptor	Causes	SA objectives directly affected	Recommendations/ mitigation and residual effects
					There are likely to be some residual effects on water quality in the District but the extent of these will be determined by the extent to which the above measures are enforced.
Reduction in landscape quality	Negative effects on biodiversity and wildlife habitats	Landscape	Development of greenfield sites for housing at edge of towns and villages	3(b) Protect and enhance landscapes	<p>SP9 expects masterplans and planning applications for significant development to respond to landscape and townscape.</p> <p>Policy SP12 requires development to consider landscape character and respect locally sensitive features. Policy NE1 includes a range of landscape criteria that proposals must meet.</p> <p>Landscape assessments should be required for all strategic sites in areas of moderate or high sensitivity, and for clusters of sites in such areas (see table 21).</p> <p>Given the scale of development proposed in the Local Plan, even with sensitive scheme designs and appropriate mitigation measures, there will still be residual effects on landscape and townscape character.</p>
Climate change	Negative effect on human health, e.g. from air pollution, and biodiversity	Worldwide	Greenhouse gas emissions from increases in traffic from current and new housing and from energy use in new housing	4(a) Reduce greenhouse gas emissions and improve the District's ability to adapt to climate change	<p>Policy SP9 expects masterplans and planning applications for significant development to create a green infrastructure network that supports climate change mitigation and adaptation. It also expects strategic masterplans to identify opportunities for low and zero carbon.</p> <p>Policy SP11 supports proposals for renewable and low carbon energy development in appropriate locations. Policy NE12 states that proposals for renewable and low carbon</p>

Cumulative effect	Links to other effects	Affected receptor	Causes	SA objectives directly affected	Recommendations/ mitigation and residual effects
					<p>energy development which would contribute towards reducing greenhouse gas emissions will be permitted subject to certain criteria. It goes on to state that in assessing renewable and low carbon energy proposals against the criteria the Council will give significant weight to their local and wider benefits, particularly the potential to reduce greenhouse gas and other harmful emissions. The policy also provides support for proposals for decentralised energy schemes associated with development of the strategic sites allocated in the Plan.</p> <p>Even with the positive policy framework outlined above, the limited opportunity for large scale renewable and low carbon energy development in the District means there will inevitably be a net increase in greenhouse gas emissions from the development proposed in the Plan.</p>
Increased use of rural shops, services and other businesses		Local businesses and economy	Increased population and local employment in the larger villages	1 Achieve sustainable levels of prosperity and economic growth	None required, as the overall effect is likely to be positive.
Improved provision of community facilities, including open	Positive effects on human health	Community facilities and open space	Through developer contributions from new developments	2(b) Provide access to green spaces	None required as the overall effect is likely to be positive.

Cumulative effect	Links to other effects	Affected receptor	Causes	SA objectives directly affected	Recommendations/ mitigation and residual effects
space and recreational facilities					
Reduced access to open countryside	Potential negative effects on human health	A number of settlements, particularly Royston, Baldock, Great Ashby and Knebworth	New development on greenfield land on the edge of existing settlements	2(b) Provide access to green spaces	<p>Maintain existing rights of way.</p> <p>Policy SP9 expects masterplans and planning applications for significant development to create a green infrastructure network.</p> <p>Policy D1 requires proposals to maximise accessibility, legibility and connectivity, which should help to ensure that through-routes are incorporated in new development.</p> <p>Policy NE5 requires the provision of open space in new development in accordance with the Council's open space standards.</p> <p>Even with the above mitigation, new development will result in increased distance to open countryside for some existing residents.</p>
Reduction in community cohesion	Potential negative effects on human health	Local communities	Large new developments on the edge of towns and coalescence with smaller villages	5(a) Share benefits of prosperity fairly and promote community cohesion	<p>Policy SP9 expects masterplans and planning applications for significant development to ensure high quality public spaces and public realm that is safe, attractive and supports social interaction for all age groups.</p> <p>Policy SP7 requires development proposals to make provision for infrastructure that is necessary in order to accommodate additional demands resulting from the development. This includes provision of facilities and</p>

Cumulative effect	Links to other effects	Affected receptor	Causes	SA objectives directly affected	Recommendations/ mitigation and residual effects
					<p>infrastructure for new residents, addressing cumulative impacts that might arise across multiple developments and avoiding placing unreasonable additional burdens on the existing community or existing infrastructure. Achieving such aims could be advanced by engaging existing residents in the design of new developments.</p> <p>Effective enforcement of policy SP7 should ensure limited residual effects in terms of community cohesion.</p>
Significant loss of agricultural land and land of high environmental and amenity value	Effects on access to green spaces	Agricultural land and other high value land	Large developments on the edge of towns	2(a) Minimise the development of greenfield land and land of high environmental and amenity value	<p>Policy SP12 seeks to protect, enhance and manage the green infrastructure network and biodiversity networks and seeks opportunities to create new green infrastructure and biodiversity networks. Policy NE5 ensures that any loss of publicly open space will be compensated for, whilst policy NE6 seeks the provision of new open spaces. Policy NE4 offers protection for designated biodiversity sites.</p> <p>There are likely to be residual effects on biodiversity, particularly on non-designated sites, but this may be compensated for by improvements elsewhere.</p> <p>The loss of agricultural land is permanent and irreversible.</p>
Provision of affordable housing		Local communities	Requirement to provide affordable housing in major developments	5(d) Increase access to decent and affordable housing	None required as the overall effect is likely to be positive.

7.4 Strategic cumulative effects – inter-plan

Potential cumulative effects arising from interactions between the North Hertfordshire Local Plan and other plans and projects in surrounding areas have been considered. In considering the effects of the North Hertfordshire Local Plan with other plans and projects, priority has been given to key documents that affect planning and development within the District and its neighbouring authorities. The objective of this analysis of inter-plan effects is to identify how other plans and key projects may affect the sustainability of North Hertfordshire. The table below summarises key inter-plan cumulative effects.

Table 36: Inter-plan cumulative effects

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
Stevenage Borough Local Plan (Adopted 22/5/19)	<p>In conjunction with the North Hertfordshire Local Plan, this Plan could have a cumulative impact on the A1(M) and the local road network. Specifically, there could be significant impacts around Graveley, where development sites north of Stevenage will be accessed, and south of Stevenage linking with Knebworth. Traffic modelling carried out as part of the evidence-base for the Local Plan indicates some of the transport schemes which will be necessary to accommodate the growth in traffic. Each of the upper tier local authorities in the area, including Hertfordshire County Council, have Local Transport Plans which will address the issues associated with traffic growth. Although the Highways England Road Investment Strategy includes improvements to the A1(M), including the upgrading of junction 6 (Welwyn North) to junction 8 (Hitchin) to a 'Smart Motorway', there is now significant uncertainty about whether this will proceed. Other improvements to the A1(M) will stem from the A1(M) Transport Package, which forms part of Hertfordshire's Growth Deal (see below). Even with such improvements, there are likely to be residual effects in terms of traffic congestion and associated pollution.</p> <p>The Plan will increase pressure on wastewater treatment infrastructure in the Stevenage area. Upgrades to this infrastructure will be needed prior to development in the area taking place. These issues are addressed in the Rye Meads Water Cycle Study and the Infrastructure Delivery Plan.</p> <p>There is an identified undersupply of employment land in the Plan and a reliance on neighbouring boroughs, including North Hertfordshire, to meet identified requirements. The Plan includes specific reference to the strategic employment allocation at Royston Road, Baldock, which is included in the North Herts Local Plan. This could have a positive effect on North Herts in that it could increase</p>

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
	<p>the self-containment of the District. The levels of out-commuting to Stevenage from North Herts are currently high.</p> <p>The development of the NS1 site and the adjacent site across the border in Stevenage is likely to have a cumulative effect on the historic landscape including the setting of the Gravely Conservation Area and the St Nicholas/Rectory Land Conservation Area (the latter within Stevenage Borough, and containing the Grade 1 Rooks Nest and Grade 1 Church of St Nicholas).</p>
Stevenage education provision	<p>Policy SP10 (e) says that the Council will work with Hertfordshire County Council and education providers to ensure the planning system contributes to the provision of sufficient school places and facilitates the provision of new or expanded schools in appropriate and accessible locations. This will include monitoring of projected future demand to inform the review of this plan in relation to secondary education provision for the Stevenage area.</p>
Luton Local Plan (Adopted 7/11/17)	<p>The large East of Luton sites included in the North Herts Local Plan will exacerbate the impact of the proposed growth in the Luton Local Plan on the M1 and the local road network. Traffic modelling conducted as part of the evidence-base for the Luton Local Plan indicates some of the transport schemes which will be necessary to accommodate the growth in traffic. Both Luton and North Hertfordshire's Local Transport Plans will mitigate these impacts to some degree but there are likely to be residual effects in terms of increased traffic congestion and associated pollution.</p> <p>The Luton Local Plan is reliant on neighbouring Local Plans in order to secure the identified need for new housing in Luton. North Herts Local Plan includes provision for 1,950 homes towards the unmet need of 11,100 homes in the Luton Local Plan. It is now clear that this need will now be met through the cumulative effect of the plans of Luton, Central Bedfordshire and North Herts.</p>
Central Bedfordshire Council Local Plan (adopted 22/7/21)	<p>The Central Bedfordshire Local Plan makes specific provision for the major housing need of Luton, principally through urban extensions from the Luton, Dunstable and Houghton Regis conurbation boundary and also using opportunities to increase the capacity of sites identified within the conurbation by increasing their density. This will be crucial to delivering a strategic approach to the issue, in tandem with the Luton and North Hertfordshire Local Plans.</p> <p>The Plan also proposes significant development in the south-east of the District. Accommodating significant growth and focusing this growth on major transport routes is likely to lead to cumulative effects on traffic on the A1(M) in particular. This could be countered, to some extent, by the Local Plan's emphasis on improving services, facilities and employment opportunities in existing communities in</p>

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
	<p>order to reduce travelling and outflows. Each of the upper-tier local authorities in the area, including Hertfordshire County Council and Central Bedfordshire Council, have Local Transport Plans which will address the issues associated with traffic growth. Other improvements to the A1(M) will stem from the A1(M) Transport Package, which forms part of Hertfordshire's Growth Deal (see below). Even with such improvements, there are likely to be residual effects in terms of traffic congestion and associated pollution.</p>
<p>East Hertfordshire DC Local Plan (adopted 23/10/18)</p>	<p>Much of the proposed housing and economic growth proposed for East Hertfordshire will occur in the southern part of the district, away from the boundary with North Hertfordshire. However, development in the district may have a cumulative effect on traffic growth in the wider area, including on the A1(M). Each of the upper-tier local authorities in the area, including Hertfordshire County Council, have Local Transport Plans which will address the issues associated with traffic growth. In addition, there are planned but uncertain improvements to the A1(M), including the upgrading of junction 6 (Welwyn North) to junction 8 (Hitchin) to a 'Smart Motorway'. Other improvements to the A1(M) will stem from the A1(M) Transport Package, which forms part of Hertfordshire's Growth Deal (see below). Even with such improvements, there are likely to be residual effects in terms of traffic congestion and associated pollution.</p> <p>Rye Meads Wastewater Treatment Works serves Stevenage, as well as much of East Hertfordshire and has known capacity issues. Development in East Hertfordshire will therefore increase pressure on wastewater infrastructure. These issues are addressed in the Rye Meads Water Cycle Study and the Infrastructure Delivery Plan.</p>
<p>St Albans Local Plan (call for sites Jan- Mar 2021)</p>	<p>After the withdrawal of the draft Local Plan 2018, the Council issued a call for sites in early 2021. If there is significant housing growth included in the new Local Plan, this could have cumulative effects on traffic growth, including the A1(M), M1 and the local road network.</p> <p>Along with Dacorum, Hertsmere Borough Council, Three Rivers District Council and Watford Borough Council, the Council has begun work on a Joint Strategic Plan (JSP) for the South West Hertfordshire area. A key aim will be to ensure that infrastructure – such as transport, schools, health, and utilities (for example, water and sewerage) – are properly co-ordinated and delivered.</p> <p>Currently each of the upper-tier local authorities in the area, including Hertfordshire County Council, have Local Transport Plans which will address the issues associated with traffic growth. In addition, there are planned by uncertain improvements to the A1(M), including the upgrading of junction 6 (Welwyn North) to junction 8 (Hitchin) to a 'Smart Motorway'. Other improvements to the A1(M) will stem from</p>

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
	the A1(M) Transport Package, which forms part of Hertfordshire's Growth Deal (see below). Even with such improvements, there are likely to be residual effects in terms of traffic congestion and associated pollution.
Welwyn Hatfield Local Plan (Submitted in May 2017 and hearings were held in Feb and March 2021)	<p>The Plan would accommodate 12,000 new homes in the Plan period. Welwyn Hatfield lies immediately to the south of North Hertfordshire in the A1(M) corridor. The principal cumulative effect is likely, therefore, to be in terms of traffic impacts on the A1(M) and local road network, especially around Knebworth and Codicote where significant growth is proposed in the North Herts Local Plan. Traffic modelling carried out as part of the evidence base for the Local Plan indicates some of the transport schemes which will be necessary to accommodate the growth in traffic.</p> <p>Each of the upper tier local authorities in the area, including Hertfordshire County Council, have Local Transport Plans which will address the issues associated with traffic growth. In addition, there are planned but uncertain improvements to the A1(M), including the upgrading of junction 6 (Welwyn North) to junction 8 (Hitchin) to a 'Smart Motorway'. Other improvements to the A1(M) will stem from the A1(M) Transport Package, which forms part of Hertfordshire's Growth Deal (see below). Even with such improvements, there are likely to be residual effects in terms of traffic congestion and associated pollution.</p> <p>Rye Meads Wastewater Treatment Works serves Stevenage, as well as large parts of Welwyn Hatfield and has known capacity issues. Development in Welwyn Hatfield will therefore increase pressure on wastewater infrastructure. These issues are addressed in the Rye Meads Water Cycle Study and the Infrastructure Delivery Plan.</p>
South Cambridgeshire Local Plan (Adopted 27/9/18) New Greater Cambs Plan (S Cambs and Cambridge) – Reg. 18 consultation closed December 2021	No cumulative effects have been identified.
Uttlesford Local Plan (Call for sites undertaken in early 2021)	No cumulative effects have been identified.
Hertfordshire Waste Local Plan: Waste Site Allocations 2011-2026 (adopted July 2014) and Waste Core Strategy and Development	The Site Allocations document safeguards existing waste sites and identifies waste allocations and Employment Land Areas of Search in North Hertfordshire. Within these areas, the county council will grant planning permission for waste management facilities providing that they meet specified criteria.

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
<p>Management Policies Document (adopted November 2012). Currently under review</p>	<p>Some of these areas are in relatively close proximity to allocated sites in the Local Plan. The Waste Site Allocations document recognises that any future residential developments in the area will need to be considered in combination with any potential waste facility and states that “Depending upon the proposed type of facility and where it would be located on the site, a detailed assessment of the potential impact on any future housing development may be required.”</p> <p>More generally, the cumulative effects will be largely positive since the Waste Local Plan should help to facilitate the delivery of the housing and economic growth in the Local Plan in a way which limits some of the negative effects of this growth, through its emphasis on health and environmental protection, waste minimisation and recovery.</p>
<p>Hertfordshire County Council's Local Transport Plan (LTP) 2011 – 2031</p>	<p>This sets out a 20-year strategy for development of transport in the county. One of the specific goals of the strategy is to support planned economic development and dwelling growth. The focus of the strategy is on making better use of the existing network and promoting intelligent transport systems.</p> <p>Its aims are underpinned by a suite of supporting strategies:</p> <ul style="list-style-type: none"> • Active Travel Strategy: Encouraging walking and cycling trips to improve health, the environment, congestion and the economy • Bus Strategy: The county council's strategy for ensuring viable and sustainable bus services throughout Hertfordshire • Intalink Strategy: A strategy for the Intalink partnership • Intelligent Transport Systems (ITS) Strategy: Intelligent Transport Systems and Variable Message Signs for efficient transport network management • Inter-Urban Route Strategy: Improvements to inter-urban corridors between Hertfordshire's towns • Rail Strategy: Plans for rail services through the county • Rights of Way Improvement Plan: Hertfordshire's Rights of Way Improvement Plan (RoWIP) 2011/12-2015/16 • Road Safety Strategy: How the county council intend to improve safety on Hertfordshire's road network • Rural Transport Strategy: Improvements to transport in rural areas of the county • Speed Management Strategy: Speed management of traffic on Hertfordshire's roads <p>Cumulative effects will be positive since the LTP and supporting strategies should help to facilitate the delivery of the housing and economic growth in the Local Plan in a way which limits some of the</p>

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
	negative effects of this growth, e.g. in terms of traffic congestion, carbon emissions, noise and air quality.
London Plan 2021 (formally published 2/3/21)	<p>The London Plan aims to accommodate the majority of London's growth within its boundaries. Nevertheless, continued significant planned growth of London is likely to drive continued high levels of commuting flows from North Hertfordshire and increased housing growth pressures on the District. The multiplier effect from continued growth in London's economic activity generates opportunity for the North Hertfordshire economy.</p> <p>The London Plan commits to strategic coordination across the wider South East (policy SD2), including working with partners to find solutions to strategic concerns. Policy SD3 commits the Mayor to working with partners across the South East to coordinate investment in strategic infrastructure to support housing and business development to meet need and secure mutual benefits.</p>
Hertfordshire Growth Deal (agreed July 2014 and expanded January 2015)	<p>The Growth Deal brings together local, national and private funding to 'transform the economy and establish the area as a centre for global business excellence through focused investment in the area's infrastructure and ensuring businesses have the supply of skilled workers and support to grow'.</p> <p>Of particular significance to the North Herts Local Plan, the Growth Deal incorporates:</p> <ul style="list-style-type: none"> • The A1(M) Growth Area Forum/Stevenage. This is focused on accelerating housing delivery in the growth area. • The A1(M) Transport Package – a series of transport schemes including the A1 Sustainable Transport Package, A602 local congestion measures and Bus Link 2016. • North Herts College Design and Innovation Centre - to support the development of a state-of-the-art engineering design and innovation centre based in Stevenage. <p>The cumulative effects should be largely positive, with the Growth Fund helping to accelerate delivery of the growth envisaged in the Local Plan and ameliorating some of the potential negative transport effects.</p>
Luton Airport Expansion	<p>In 2014, Luton Airport was granted permission to significantly increase passenger numbers. An additional million passengers were permitted through a variation of the conditions in 2021. The ongoing growth which this permission facilitated creates significant additional traffic to the airport, including in an east-west direction through North Hertfordshire. This will add to the pressure on transport infrastructure created by the housing and economic growth envisaged in the Local Plan. The various Local Transport Plans in the</p>

Plans, programmes or projects	Summary of cumulative effects of North Hertfordshire Local Plan with other plans, programmes or projects
	area, as well as proposed improvements to the A1(M) will play a key role in addressing such impacts. In 2022, the airport opened a new statutory consultation on its long-term proposals to expand the airport.
Stansted Airport Expansion	The airport was given permission to expand in 2021. Unlike the Luton expansion, this is unlikely to result in increased traffic through North Hertfordshire. Other impacts are uncertain.
Pirton Neighbourhood Plan	The Plan was 'made' in 2018. It is mostly concerned with issues such as design and so doesn't pose any sustainability concerns.
Wymondley Neighbourhood Plan	The Plan was 'made' in 2019. The Plan includes environmental and design policies and does not pose any sustainability concerns.
Preston Neighbourhood Plan	The Plan was 'made' in 2020. The Plan acknowledges the proposed allocation for development and includes design and environmental policies. It does not pose any sustainability concerns.
Baldock, Bygrave and Clothall Neighbourhood Plan	The Plan was 'made' in 2021. It recognises the proposed allocations in the Local Plan and includes policies which will help to frame the design of the proposed developments within the local context. It does not pose any sustainability concerns.
Ashwell Neighbourhood Plan	The Plan was 'made' in 2022. The Plan seeks to guide the location, design and type of development within the village boundary. It does not pose any sustainability concerns.
Knebworth Neighbourhood Plan	The Plan was 'made' in 2022. The Plan acknowledges the sites allocated in the Local Plan and includes policies which will be used in the consideration of any submitted planning application. There are also a number of policies which focus on the community facilities in the village. It does not pose any sustainability concerns.

8 Effects of the Plan after mitigation

As the Plan objectives make clear, the role of the Local Plan is to provide for homes and jobs and associated services, development and infrastructure, while minimising environmental impacts and identifying opportunities for environmental improvement.

In assessing the effects of site allocations, we have identified ways of mitigating these effects through policies and noted any residual effects which cannot be mitigated. In a similar way, the assessments of the policies identified ways of mitigating negative effects and noted any residual effects. In the previous section we also identified cumulative effects that are not likely to have been identified by individual assessments, and suggested mitigation measures, and identified residual effects. The table below summarises the combined significant negative residual effects of the sites and policies, after all the identified mitigation measures have been applied.

The table also includes residual effects which are uncertain because they could be significant, for example because it is not clear what the impacts of suggested mitigation will be. As in the earlier tables for cumulative effects, the SA objectives referenced are those used for site assessment, as outlined in Appendix 5.

Table 37: Residual significant negative sustainability effects of the Plan

Residual effect	Cause	Relevant SA objective	Nature of the effect
Significant loss of agricultural land and land of high environmental and amenity value	Large developments on the edge of towns	2(a) Minimise the development of greenfield land and land of high environmental and amenity value	The loss of agricultural land is a negative cumulative effect across the Plan area, of high probability, permanent and irreversible. Individual sites are listed in Appendices 8 and 9.
Reduced access to open countryside	New development on greenfield land on the edge of existing settlements, particularly Royston, Baldock, Great Ashby and Knebworth	2(b) Provide access to green spaces	The reduction in access is a negative cumulative effect across the Plan area, and in the clusters of Royston, Baldock, Great Ashby and Knebworth. It is of high probability, permanent and irreversible. Details of clusters affected are noted in section 7.2. Individual sites are listed in Appendices 8 and 9.

Residual effect	Cause	Relevant SA objective	Nature of the effect
Provision of new housing without access to greenspace	Housing further than 800 metres from green space in Hitchin and Knebworth (HT10, KB1)	2(b) Provide access to green spaces	The effect is negative, of medium probability (depending on the development of the specific sites) and could be reversed or reduced if new local greenspace was provided.
Traffic congestion and associated pollution	Combined effects of planned development in Central Bedfordshire, St Albans and North Hertfordshire In North Hertfordshire the effects of development in villages without regular public transport provision	2(c) Deliver more sustainable location patterns, and reduce the use of motor vehicles	The effect is trans-boundary, impacting on neighbouring areas, and is a negative cumulative effect of Plans in Central Bedfordshire, St Albans and North Hertfordshire. It is of medium probability as it depends on a number of factors including the actual amount of development and the effectiveness of mitigation, e.g. improvements in public transport.
Potential impacts on Therfield Heath SSSI	Recreational use from new development in Royston	3(a) Protect and enhance biodiversity	The effect is uncertain because it is not clear whether the proposed mitigation will fully mitigate the potentially significant effect.
Reduction in quality of landscape and townscape character	Development of greenfield sites for housing at edge of towns and villages, and particularly on the edges of Royston, Baldock, north Stevenage, Knebworth and Codicote	3(b) Protect and enhance landscapes	The reduction in access is a negative cumulative effect across the Plan area, and in the clusters of Royston, Baldock, north Stevenage, Knebworth and Codicote. It is of high probability, permanent and irreversible. Details of clusters affected are noted in section 7.2. Individual sites are listed in Appendices 8 and 9.
Impact on setting of heritage assets	Development affecting the setting of conservation areas, listed buildings and Scheduled Ancient Monuments	3(c) Conserve and, where appropriate, enhance the historic environment	The effect is negative, of medium probability (depending on the design and layout of the development) and some of the effects are cumulative within a local area, as detailed in section

Residual effect	Cause	Relevant SA objective	Nature of the effect
			7.2. Mitigation is provided for in Local Plan policy but some effects cannot be fully mitigated, e.g. impacts on the setting of Conservation Areas (including cross-boundary impacts) relating to site NS1.
Surface water flooding	Development across the District and particularly in the north and east of Baldock (BA1, BA10, BA4, BA3) – all sites lie within a linked area of high surface water flood risk	4(a) Reduce greenhouse gas emissions and improve the District’s ability to adapt to climate change	The effect is negative, of medium probability (depending on the development of the specific sites) and could be reduced depending on the effectiveness of mitigation. Details of the Baldock cluster are noted in section 7.2. Individual sites are listed in Appendices 8 and 9.
Climate change	Greenhouse gas emissions from increases in traffic from current and new housing and from energy use in new housing	4(a) Reduce greenhouse gas emissions and improve the District’s ability to adapt to climate change	This is the negative cumulative effect of the Plan, of high probability and of course is worldwide in its impact.
Reduction in water quality	Development within Groundwater Source Protection Zones Expansion of sewerage capacity at Rye Meads STW due to growth in this part of the region Increased water abstraction due to increased growth Possible pressures on sewerage infrastructure at Royston STW	3(d) Reduce pollution from any source 6(a) use natural resources efficiently; reuse, use recycled where possible	This is an uncertain negative cumulative effect across the Plan area, which could impact on: Groundwater Source Protection Zones; rivers included in Rye Meads Study catchment and their habitats- the Lee, Mimram, Beane, Rib, Ash; and Stort; and Whaddon Brook (in the case of Royston STW). The likelihood and magnitude of the effect depends on the extent to which the necessary mitigation measures are enforced.
Increased pressure on water resources	Large quantity of new housing In an area with significant constraints on water, particularly	6(a) Use natural resources efficiently; reuse,	The effect is negative, of high probability and irreversible once new housing has been built. It is also trans-boundary

Residual effect	Cause	Relevant SA objective	Nature of the effect
	around Stevenage and Royston	use recycled where possible	as it will affect neighbouring authorities.
Noise pollution	Development north of Letchworth Garden City (LG1, LG3, LG4, LG10) – all lie close together and adjacent to residential properties in the northern part of the town. Development of other individual sites particularly in Hitchin, Knebworth and Royston	5(c) Improve conditions and services that engender good health and reduce health inequalities	There is a negative cumulative effect to the north of Letchworth, as well as effects on individual sites, particularly in Hitchin, Knebworth and Royston. The magnitude of the effect is likely to be greater in the short term, during the construction phase. Details of the Baldock cluster are noted in section 7.2. Individual sites are listed in Appendices 8 and 9.
Impacts on amenity and reduction in tranquility for existing residents	Development of large strategic housing sites, specifically BA1, LG1, GA2 and EL1, 2, 3	5(c) Improve conditions and services that engender good health and reduce health inequalities	The effect is negative. The impacts on amenity and tranquility are permanent and irreversible. As noted above the magnitude of the noise pollution element is likely to be greater in the short term, during the construction phase. Effects on individual sites are described in Appendix 8.
Potential impacts on air quality in Hitchin	Development of large strategic housing sites, potentially impacting on AQMAs in Hitchin This applies specifically to EL1, EL2, EL3, NS1, GA1, GA2, and WY1	5(c) Improve conditions and services that engender good health and reduce health inequalities	The impact is uncertain, as it depends on the amount of traffic passing through Hitchin as a result of the developments.
Potential negative effects on Letchworth town centre	Development of strategic site LG1	7 Promote sustainable urban living	The effect is uncertain; it depends on whether access is through the Grange which would ensure that the development relates to Letchworth. An additional access (onto Stotfold Road) would reduce traffic congestion in the Grange, but would mean the development faces away from the existing town, and

Residual effect	Cause	Relevant SA objective	Nature of the effect
			could result in negative effects on this objective.

The table below summarises the combined significant positive effects of the sites and policies.

Table 38: Likely significant positive sustainability effects of the Plan

Effect	Causes	Relevant SA objective	Nature of the effect
Increased use of rural shops, services and other businesses	Increased population and local employment in the larger villages	1 Achieve sustainable levels of prosperity and economic growth	The effect is a positive cumulative effect of the new development, of medium probability, and likely in the short and medium term. Long-term effects are uncertain.
Improved provision of community facilities, including open space and recreational facilities	Through developer contributions from new developments	2(b) Provide access to green spaces	The effect is a positive cumulative effect of the new development, of high probability, and likely to be long-term.
Provision of affordable housing	Requirement to provide affordable housing in major developments	5(d) Increase access to decent and affordable housing	The effect is a positive cumulative effect of the new development, of high probability, and likely to be long-term.

9 Monitoring and next steps

9.1 Purpose of monitoring

Task B6 is to propose measures to monitor the significant effects of implementing the Local Plan. This is an important part of the appraisal and plan development process. The Practical Guide⁶⁰ notes that it has a number of benefits:

- It allows the actual significant effects of the implementation of the Strategy and Policies be tested against those predicted in the SA;
- It helps to ensure that issues that arise, including unexpected problems, can be identified and tackled;
- It helps further predictions to be made more accurately; and
- It can contribute to baseline information for future plans.

9.2 Monitoring indicators

For the sake of efficiency and integration, North Hertfordshire District Council will include significant sustainability effects in future Annual Monitoring Reports. Where necessary, the Reports will also propose measures for addressing adverse effects, including unexpected problems. The significant sustainability effects indicators have been drawn from the indicators in the baseline data of this Sustainability Appraisal (which are linked to the sustainability objectives used in the appraisal). They aim to:

- Concentrate on the residual significant effects (after mitigation measures) identified in the appraisal;
- Provide information to identify when problems, including unexpected ones, arise;
- Contribute to addressing deficiencies in data availability identified in this appraisal.

The following indicators have been identified:

⁶⁰ Para 3.3.22

Table 39: Indicators of residual significant effects

Residual significant effect	Monitoring indicator	Data source
Loss of land with high agricultural value	High grade (1-3 ⁶¹) agricultural land lost to new development	Agricultural land classification data is held by NHDC
Loss of greenfield land and reduction in access to open countryside	Greenfield land (ha.) lost to new development	Data from planning permissions
Provision of new housing without access to greenspace	Number of dwellings granted permission on sites without access to greenspace within 800m.	Data from planning permissions
Traffic congestion and associated pollution	Average annual vehicle speeds (flow-weighted) during the weekday morning peak on locally managed 'A' roads	Data collected by the Department for Transport
	Local air quality monitoring data	Data collected by NHDC Environmental Health
Potential impacts on Therfield Heath SSSI	To be determined by Mitigation Strategy	To be determined by Mitigation Strategy
Landscape and townscape impacts	Number of planning applications granted on sites of moderate or high landscape sensitivity: Number of applications refused within landscapes of moderate or high sensitivity	Data on the classification of sites is contained in the Landscape Sensitivity Reports which form part of the evidence base for the Local Plan
Impacts on heritage assets	Number of planning applications granted contrary to the advice of Historic England Number of applications refused in line with Historic England recommendations.	Data from planning permissions

⁶¹ The best and most versatile agricultural land does not include land graded 3b. However, the data held by NHDC does not distinguish between 3a and 3b. If such data becomes available in future, the indicator should be changed to only include grades 1-3a.

Residual significant effect	Monitoring indicator	Data source
Reduction in water quality	The number of applications granted contrary to the advice of the EA on water quality grounds.	The indicator is already included in the North Herts Annual Monitoring Report (AMR)
Development in flood risk areas	Number of planning applications granted contrary to the advice of the Environment Agency on flood defence grounds	The indicator is already included in the North Herts AMR
Surface water flooding	Percentage of new developments with adopted SUDS schemes	Data from planning permissions
Climate change	Local authority carbon dioxide emissions estimates for domestic and transport	Data collected by the Department for Business, Energy and Industrial Strategy
Amenity impacts on existing residents	Number of noise complaints divided by type	Data collected by NHDC Environmental Health
Water usage	Percentage of new dwellings achieving the optional Building Regulations requirement of 110 litres per person per day	Data from planning permissions
Potential negative effects on Letchworth town centre	Vacancy rates in Letchworth	The indicator is already included in the North Herts AMR

9.3 Next steps

As outlined in policy IMR2, the Council has committed to an early, whole Plan review to start by the end of 2023. As outlined in the policy, this will determine whether the Plan needs to be updated in whole or in part. The policy also notes that:

The review will also serve to build upon existing strong, working relationships with adjoining and nearby authorities and may result in the preparation of a joint plan or policies based upon wider functional geographies.

Any updated or new Plan would be subject to a new SA process.



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