

Strategic and Detailed Local Plan Technical Report

Infrastructure Delivery Plan

July 2016

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1.0 Introduction

- 1.1. The purpose of the Infrastructure Delivery Plan (IDP) is to provide a detailed understanding of the future infrastructure needs of the District to support planned growth up to the 2031. The National Planning Policy Framework (NPPF) requires the council to plan for future infrastructure needs as part of the Local Plan preparation process. The IDP provides information on the position of current infrastructure, drawing together collaborative research to set out the existing issues and consider the additional provision required to support the growth set out in the Strategic Local Plan (SLP).
- 1.2. The IDP draws together collaborative research and modelling in cooperation with a wide range of service providers including Hertfordshire County Council (HCC) and District Council services and the public / private infrastructure providers outside of local government. The IDP focuses on the key infrastructure needs derived from plans and strategies of each of these bodies, as well as estimates based on proposed growth levels. On-going dialogue with infrastructure providers is essential to plan for infrastructure needs. This relationship is reciprocal and the IDP, alongside the Local Plan, informs the business plans and strategies service providers and partners in turn.
- 1.3. The IDP supports the SLP and the Infrastructure Delivery Schedule (IDS). The IDP provides an evidence base for the SLP and IDS, detailing the infrastructure required to support the policies and commitments in the Local Plan. This forms the foundation from which further detailed infrastructure planning can be undertaken through the Detailed Local Plan (DLP) and through site specific master planning exercises.
- 1.4. The IDP is not a policy document and information contained within it does not override or supersede the objectives and policies contained within the Local Plan. The IDP provides a robust basis on which the Council will seek to influence public, private and agency funding and priorities and investment programmes. The IDP also serves as the basis for establishing the St Albans Community Infrastructure Levy (CIL) that will be used to help fund the infrastructure needed to support the Local Plan.
- 1.5. The IDP acknowledges the role of Town and Parish Councils in the delivery of infrastructure. Town and Parish Councils play an increasingly important role in infrastructure provision at the neighbourhood level. Over recent years there has been a devolvement of local assets and responsibilities to the local level consistent with national priorities. It is likely the future iterations of the IDP will cover the role of Town and Parish Councils in greater details as their involvement increases, particularly in line with the development CIL charging schedule.
- 1.6. The IDP is a living document and progress against delivery will be reported annually in the Authority's Monitoring Report. The IDP is intended to be updated on a regular basis to reflect reviews of the Local Plan and the IDS. Infrastructure requirements are likely to evolve over the Plan

period, public sector policies and priorities, technological developments and the impacts of the planned growth as it occurs. Subsequent versions will also take account of any further updates to the various plans and strategies of service providers. One particular area that will be developed and further explained as the IDP evolves is scheme definition / design and costings; particularly of key items of public, non-commercial, provider infrastructure. This is currently a topic being explored through early collaborative master planning work with landowner / developer interests on the Broad Locations. The IDP evidences this through illustrative background material incorporated in appendices.

2.0 Policy Background

- 2.1. Local infrastructure provision is a key element of making development sustainable as outlined in National Planning Policy Framework (NPPF)¹. The Local Plan will play a key role in coordinating the level of infrastructure and services in the District to ensure that it meets current and future demands.
- 2.2. Paragraph 162 of the NPPF states that in preparing the evidence base for a Local Plan, Local Planning Authorities must work with other authorities and providers to:

assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.

- 2.3. In order to achieve this, Local Planning Authorities (LPAs) are required to assess the quality and capacity of infrastructure in their areas and its ability to meet forecast demands. However, this should not be a 'wish list' of infrastructure provision that does not have a reasonable chance of being delivered. The infrastructure planning process needs to identify not only the infrastructure that is required but also take account of the likely cost of delivery, potential funding gaps, the phasing of delivery, funding sources, and who is responsible for delivery.

Planning Obligations / CIL

- 2.4. Under the 2008 Planning Act, the Government introduced the Community Infrastructure Levy (CIL). The aim of CIL is to encourage development to contribute to the provision of strategic and local infrastructure. Section 106 (S106) contributions provide only a partial and variable response to funding infrastructure. It is intended that CIL will operate alongside S106 obligations, which should be 'scaled back' and be limited to site specific requirements and affordable housing.

- 2.5. Currently St Albans City & District Council (SADC) seeks various contributions in respect of large scale development. The contributions normally sought on new developments are payable to SADC and Hertfordshire County Council (HCC). Contributions sought by HCC are set out in the Hertfordshire Planning Obligations Toolkit (see Source A for further information).
- 2.6. Strategic Local Plan policy SLP30 Delivery of Infrastructure sets out how both CIL and planning obligations will be used to mitigate the impacts of development and provide necessary infrastructure.
- 2.7. In due course the District Council will be preparing a CIL charging schedule. It is anticipated that this will be adopted in 2018. The IDP and IDS will be a key part of the evidence towards developing a CIL charging schedule. They will help determine the level and costs of infrastructure required to support development in the District.

3.0 Methodology

- 3.1. There is no formal guidance about how infrastructure planning should be undertaken as part of the Local Plan process. However, Planning Policy Guidance (PPG) issued by National Government on Local Plans states that early discussion with infrastructure and service providers is particularly important to help understand their investment plans and critical dependencies¹. Paragraph 18 of the PPG on Preparing a Local Plan states plans:

should make clear, for at least the first five years, what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development. This may help in reviewing the plan and in development management decisions. For the later stages of the plan period less detail may be provided as the position regarding the provision of infrastructure is likely to be less certain.

- 3.2. In 2009 the Planning Advisory Service (PAS) published a “steps approach” to infrastructure planning to support local authorities and their partners². This document sets out an approach to infrastructure planning that emphasises service provider involvement and looks to ensure an adequate level of infrastructure delivery. The document suggests a method and a series of suggested activities as appropriate to local circumstances and is not a set procedure.
- 3.3. The PPG and PAS guidance was used as the basis of the methodology for the IDP. The following process was adopted:
 - Local Plan context: A review of the priorities, policies and growth strategy of the SLP were undertaken. This set the basis on which the IDP was formulated.

- Review of infrastructure plans and strategies: This involved an analysis of the plans and strategy documents from infrastructure service providers in the District. A thorough review was undertaken of information provided directly by providers, and of documentation and business plans available on partner's websites.
- Provider engagement: Infrastructure providers were engaged to establish existing infrastructure capacity as well as future requirements to accommodate the level of growth being proposed. Engagement was primarily in the form of meeting, emails and telephone conversations. Details of the planned growth strategy were provided. Providers were also asked how future provision is planned, delivered and what standards are used to assess future needs. Relevant reference documents were identified.
- Consultation responses: The Infrastructure Delivery Schedule (IDS) was compiled as a concise summary of the infrastructure requirements based on the information provided. The IDS formed part of the appendices of the SLP. Infrastructure providers were invited to comment on the draft SLP and IDS as part of the Regulation 18 and 19 consultations.
- Drafting and review: The IDS formed the basis of the IDP. The information was detailed using the consultation responses and additional evidence from infrastructure providers. Draft chapters of the IDP were sent to the relevant infrastructure providers for comment and appropriate amendments were made on the basis of feedback received.

3.4. It is important to note that although the IDP seeks to identify the key infrastructure items which are required to meet existing needs and deficiencies and accommodate the growth set out in the Local Plan, it does not capture every project being planned by each service provider. The IDP recognises many plans and strategies exist for individual aspects of infrastructure and that they provide more detail on delivery of specific services.

4.0 Limitations

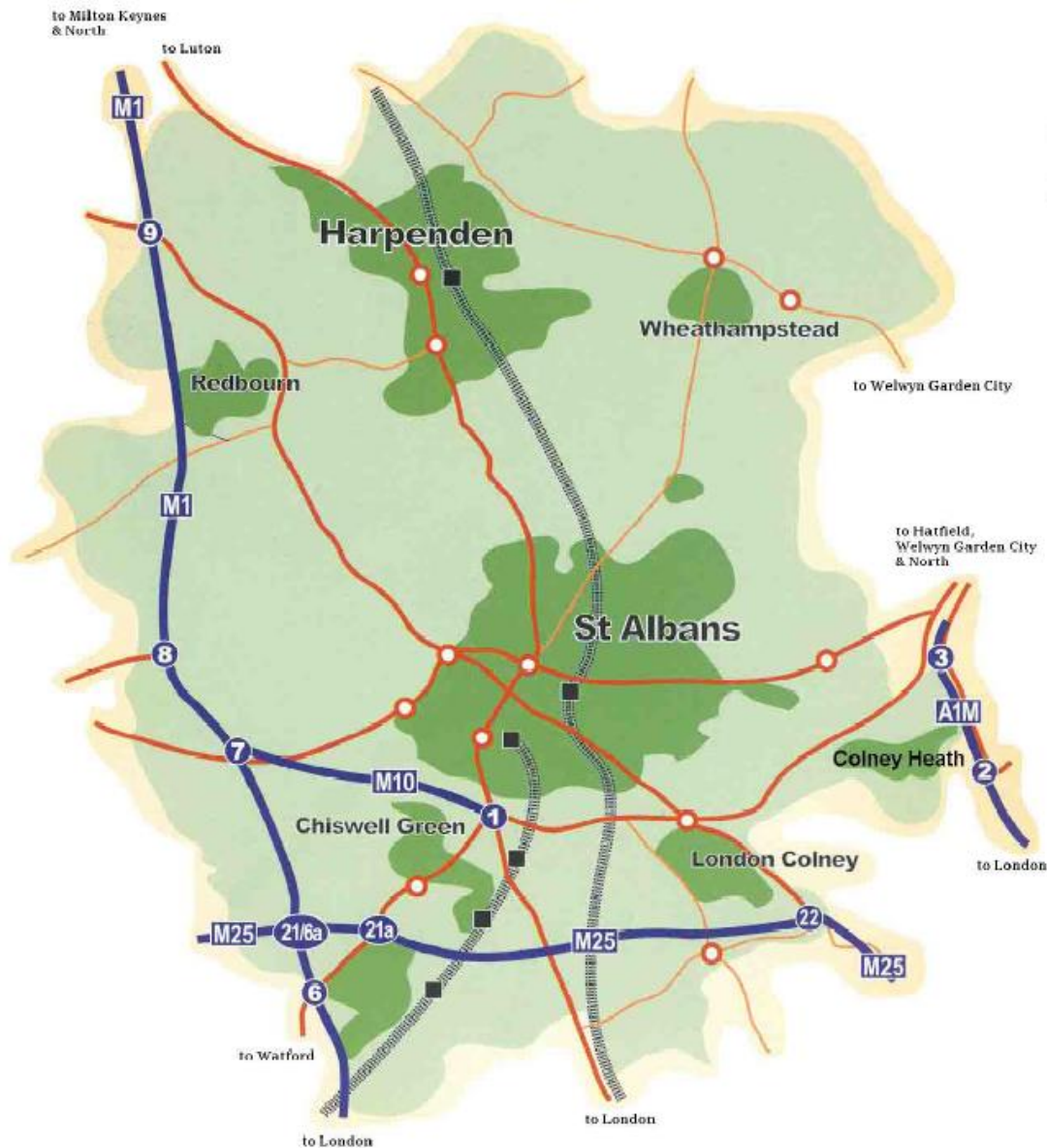
- 4.1. A number of infrastructure service providers plan using a shorter time frames than that used in the SLP, such as on a 3-5 year cycle. Others, such as some of the utility providers, tend to adopt a reactive approach to growth, preferring to respond to specific, detailed proposals at the planning application stage. This has obvious limitations in terms of planning ahead within the Local Plan timeframe of 2031.
- 4.2. Emphasis has therefore been on ensuring a detailed understanding of infrastructure requirements for early phases of plan delivery and the further work needed to inform requirements for later phases. In addition the IDP has a role in encouraging and facilitating longer term planning,

sometimes through joint studies and master planning work with the landowners / developers and the providers. This is in line with the PPG as stated previously. Future updates of the IDP and IDS will be needed to inform the requirements for later phases. The IDP is intended to be updated on an as necessary / regular basis to respond to changes in circumstances and understanding.

5.0 St Albans in Context

- 5.1. Population growth, socio-economic profile and the economy are important factors which shape the approach to infrastructure planning. It is recognised that these factors can change over time. Further contextual information can be found in the annual Authority's Monitoring Report (AMR) (see Source B for further information).

Figure 1: St Albans City & District



6.0 Strategy for Growth

- 6.1. In accordance with the NPPF the Council has made an objective assessment of development needs locally to inform appropriate SLP growth targets.
- 6.2. The SLP sets a Spatial Strategy that determines the general distribution of development. Under this Strategy the urban areas of St Albans, Harpenden and London Colney will be the main foci for new development. This is because they provide access to a wide range of services, facilities and employment opportunities and also the best transport options.
- 6.3. Four Broad Locations for green-field Green Belt development have been identified in the Spatial Strategy for large scale development with

associated infrastructure. The Broad Locations are set out in table 1 below. Policy SLP 13 provides details of the developments proposed. The revised Green Belt boundaries and any further detailed site development requirements will be set out in the DLP and its Policies Map.

Table 1: Broad Locations Taken Forward in the Strategic Local Plan

Location	Approx. Capacity	
East Hemel Hempstead (North)	1,500 dwellings	Mixed use, with leisure space, education and community infrastructure land
East Hemel Hempstead (South)	1,000 dwellings 55 Ha employment provision	Mixed use, with employment / leisure space, education and community infrastructure land
North West Harpenden	500 dwellings	Principally housing with related infrastructure
East St Albans (Oaklands)	1,000 dwellings	Principally housing with related infrastructure

7.0 Strategic Planning and Partnerships

The Hertfordshire Infrastructure and Planning Partnership (HIPP)

- 7.1. The Hertfordshire Infrastructure and Planning Partnership (HIPP) provides a forum to discuss and develop a shared view and agree joint work programmes on infrastructure and strategic planning issues of common concern. A key objective is to work co-operatively within Hertfordshire and across the County borders according to the principles of localism and the duty to co-operate (see Source C for further information).
- 7.2. The Partnership works with Hertfordshire Local Enterprise Partnership, the Local Transport Body for Hertfordshire, the Local Nature Partnership and other appropriate organisations in areas of shared interest. The Partnership is not a formal decision making-body and does not therefore restrict the decision making processes of individual authorities. If individual authorities come to a different view from any collective Hertfordshire position they will ensure that all the other authorities are duly notified. The HIPP is supported by the Hertfordshire Planning Group (HPG) at the officer level.
- 7.3. HIPP prepared a County level infrastructure planning document, the 'Hertfordshire Infrastructure and Investment Strategy', which examined

the strategic infrastructure that would be required to accommodate growth in the County³. This is an important reference source for the IDP, albeit the latest version of the Plan was published in 2009. It therefore predates the current, NPPF led, cycle of Local Plans. It is still useful in that it refers to overall infrastructure needs and deficiencies and includes some indicative costing information. This document has been partly superseded for more immediate infrastructure investment planning by the LEP Strategic Economic Plan (SEP) and Local Transport Body (LTB) and associated Government growth funding initiatives (see Source D to F for further information).

St Albans and District Strategic Partnership

- 7.4. The St Albans and District Strategic Partnership (SP) is a group of key local public, private, voluntary and community sector organisations working together to improve the quality of life in the District. The Local Strategic Partnership has a leadership role in identifying an overall direction and vision of infrastructure for the District and supporting the Council and its partners on delivery.
- 7.5. The SP prepares a Sustainable Community Strategy (SCS) in the context of the Hertfordshire wide SCS⁴. The SLP notes the influence of the SCS documents on SLP strategy. These strategies cover general vision and aspiration in respect of infrastructure issues and deficiencies.
- 7.6. The SP comprises a group of core members that make up the Executive group, which is responsible for setting the strategic direction and articulating the shared vision of the Partnership. Further engagement is undertaken with wider public, private and voluntary sectors through the Stakeholder and Community Conferences and through representation on the themed partnerships groups.
- 7.7. Current members of the Executive include representatives from St Albans City & District Council, Hertfordshire County Council, NHS Hertfordshire/Clinical Commissioning Group, Hertfordshire Constabulary, St Albans District Centre for Voluntary Service and St Albans District Chamber of Commerce, and thus include some local infrastructure providers.
- 7.8. To assist in the delivery of the SP priorities, four themed partnership groups have been established:
 - Community Safety Partnership
 - Economic Sustainability Partnership
 - Inclusion & Equalities Partnership
 - Health & Well-Being Partnership
- 7.9. The four themed partnerships, which are supported by a series of flexible task and finish groups, help deliver the SP priorities and wider objectives, as well as a variety of projects and initiatives.

- 7.10. The general agenda of this Partnership has been taken into account in preparing the IDP (see Source G for further information).

8.0 Assessment of Infrastructure Capacity

Table 2 Infrastructure to be assessed in the IDP

Infrastructure Category	Sector	Infrastructure Type
Social & Community Infrastructure	Health Infrastructure	<ul style="list-style-type: none"> • GPs • Hospitals & Acute Provision
	Health and Community Services	<ul style="list-style-type: none"> • Adult Care Services • Mental Care Provision
	Education Infrastructure	<ul style="list-style-type: none"> • Primary Education • Secondary Education • Further Education • Early Education & Child Care Provision
	Emergency Services	<ul style="list-style-type: none"> • Police Services • Fire & Rescue Services
	Leisure and Cultural Facilities	<ul style="list-style-type: none"> • Sports & Leisure Facilities • Cultural Services & Public Realm • Libraries • Cemeteries • Youth Provision
Green Infrastructure	Strategic Green Infrastructure	<ul style="list-style-type: none"> • Forests • Country Parks • River Corridors
	Local Green Infrastructure	<ul style="list-style-type: none"> • Allotments • Amenity Space • Natural & Semi-natural Space • Parks & Gardens • Play Pitches • Children's Play Areas • Teenage Provision
Physical Infrastructure	Strategic & Local Transport	<ul style="list-style-type: none"> • Road Network • Public Transport • Walking & Cycling Infrastructure
Utilities	Water Infrastructure	<ul style="list-style-type: none"> • Water Supply • Water Drainage & Sewerage
	Energy Distribution	<ul style="list-style-type: none"> • Electricity Distribution • Gas Transmission & Distribution • Onsite Energy Provision
	Digital Infrastructure	<ul style="list-style-type: none"> • Internet Access
	Waste Infrastructure	<ul style="list-style-type: none"> • Waste & Recycling

9.0 Social & Community Infrastructure

Health Infrastructure

- 9.1. The Herts Valleys Clinical Commissioning Group are currently working with Hertfordshire County Council and local NHS organisations to consider the effective delivery of current and future health and social care provision. The review, entitled 'Your Care, Your Future', looks to expand local health and social care services and rationalises acute hospital provisions in the County⁵. The vision document for the review was published in 2015 and following key themes have been set out as priorities for the review process:
- support for the need to change local services
 - the need for a greater focus on preventing ill health
 - better coordination to join up different elements of local services to improve the experience that patients and service users experience
 - reducing unnecessary journeys to hospital by providing more care closer to people's homes.
- 9.2. Work is on-going and further detailed analysis and option testing is expected to continue into 2016. Outcomes of this review will be considered upon the release of the final report.

General Practitioners (GPs)

- 9.3. The Health and Social Care Act 2012 saw the cessation of Primary Care Trusts (PCTs) on 31st March 2013. The commissioning and service provision responsibilities have been separated out. NHS England is responsible for commissioning all primary care services. This includes general medical services (GMS) delivered by GPs, dental, pharmacy and ophthalmology services.
- 9.4. Clinical Commissioning Groups (CCG) are responsible for commissioning community and secondary patient services. There is an intention to increasingly move the delivery of these services out of hospitals and into the community, often alongside GP services or community based health clinics. NHS England and CCGs are developing co-commissioning of services, providing an integrated approach towards the planning and delivery of health provision and developing a five year primary care strategy⁶.
- 9.5. Patients are at liberty to choose which GP practice to register with and NHS England cannot prescribe which surgery patients should attend. 'Constrained' means a practice working to patient over-capacity for the size of their premises and the clinical space available to provide the required services to their patients. A practice in this situation would

usually need to be extended or even relocated to absorb a significant number of new registrations.

- 9.6. There is an overall clinical space deficit for current patient registrations in the east and north east of Hemel Hempstead, Wheathampstead, St Albans, Harpenden, Redbourn, London Colney and Bricket Wood as a whole. Some GP practices with capacity for additional patients and others are constrained or severely constrained. Currently there is constraint in almost all areas identified above; the exceptions with capacity being the surgery in Redbourn and one surgery in London Colney.
- 9.7. Feasibility assessments are currently on-going of Lattimore Surgery in St Albans, which has some capacity but the premises are not really fit for purpose, and its branch surgery Helmsford House, London Colney, which is significantly constrained. The assessment is looking at possibly relocating both surgeries together into a more suitable premise.
- 9.8. It is important to note that despite premises constraints GP Practices are not allowed to close their lists to new registrations without consultation with, and permission from, the Commissioning Team of NHS England. Even when surgeries are significantly constrained NHS England would not wish an individual patient to be denied access to their nearest GP surgery. Patient lists are therefore only closed in exceptional circumstances and NHS England has to take into account patients' freedom of choice when capacity planning for the impact of large residential developments.

Impact of Planned Growth

- 9.9. Using the calculation for patient registration of one GP per 2000 residents and standard household size projections, it is estimated that SLP housing growth will require up to an additional 10 full time GPs and 1,868m² of GP surgery floor space across the district. A large proportion of this growth will be spread in smaller developments across the district and some of the increased demand can be met through existing provisions and potential expansion of facilities. The need for new or expanded GP facilities across the District will be kept under review and will be influenced by the location of major development and the capacity of nearby facilities.
- 9.10. NHS England has provided an updated indication of the provision required at the Broad Locations. Based on this information, it is proposed that the following Broad Locations will be required to make the following onsite provision:

East Hemel Hempstead (North and South combined):

NHS England estimate that development at East Hemel Hempstead could create an additional 6,000 GP registrations in the area, resulting in the need for 3 additional full time GPs and 600m² of General Medical Services (GMS) floor space.

It should be noted the closest surgeries to East Hemel Broad Location are located in the east and north east of Hemel Hempstead where there is already premises constraint. The approach currently being explored in conjunction with the developers to health provision is that new health facilities could be made available at both the north and south sites in multi-use buildings housing doctors, dentists and associated health professionals as well as community facilities.

East St Albans:

The East St Albans development is estimated to create an additional 2,400 GP registrations in the area, resulting in the need for up to two additional full time GPs and 240m² of General Medical Services (GMS) floor space. The development at the East St Albans site is likely to require health care provision on site, including GP facilities, to meet this increase in demand.

North West Harpenden:

It is estimated that an additional 1,200 GP registrations will be created from this Broad Location development, resulting in the potential need for an additional full time GPs and associated 120m² of General Medical Services (GMS) floor space.

Harpenden is currently served by three GP practices. One is significantly constrained while two have some capacity for additional patient registrations. The additional demand may be able to be met at these existing practices. However, the need to expand or improve these facilities will be monitored.

- 9.11. It is acknowledged that final assessment of new development provision will need to take account of changing needs / demand within the existing population – due for instance to falling household size and changing age profiles. This will be assessed in detail through DLP work and master planning for the Broad Locations as they evolve.
- 9.12. It should be noted that the current information has been provided by NHS England. Infrastructure in relation to secondary, community care and mental health provision is provided by Clinical Commissioning Groups (CCGs) and is covered in a later section of the infrastructure delivery plan.

General Practitioners (GPs)	
Lead Agencies	<ul style="list-style-type: none"> • NHS England • Herts Valley CCG • Public Health
Evidence Base	<ul style="list-style-type: none"> • NHS Hertfordshire Strategic Plan 2009/2010 – 2013/2014 • 'Your Care, Your Future': A new vision for the future 2015 • Liaison with NHS England

Existing Provision	13 GP Practices operating across 19 sites.
Gaps in Provision	At present there are no significant geographical gaps in provision within the District. However, many GP practices are over capacity and cannot accommodate patient growth resulting in an overall current deficit of surgery space.
Planned Provision	Feasibility study on-going for relocation of Lattimore Surgery in St Albans and its branch surgery Helmsford House in London Colney into a shared premise.
Impact of Development Proposals	<p>Housing development proposals are, over a period of time, likely to result in the need for an estimated ten additional full time GPs and 1,868m² of additional surgery space for GMS use. This will be influenced by the opportunities arising in Broad Locations for development as noted above.</p> <p>Broad Locations are likely to require:</p> <p>East Hemel Hempstead (North and South combined):</p> <ul style="list-style-type: none"> • Health facilities at both the north and south sites, potentially in multi-use buildings housing doctors, dentists and associated health professionals as well as community facilities. <p>East St Albans:</p> <ul style="list-style-type: none"> • Health care provision on site, including GP facilities <p>Final assessment of new development provision will need to take account of changing needs / demand within the existing population. This will be assessed in detail through DLP work and master planning for the Broad Locations as they evolve.</p>
Potential for Delivery	Specific provisions for GP premises in the Broad Locations indicated and a charge for health services in the CIL
Delivery Mechanisms in the Local Plan	<p>Policy SLP7 Community, Sport and Recreational Facilities sets out the support for additional GP facilities for sustainable growth.</p> <p>SLP30 Delivery of Infrastructure</p>

Hospitals & Acute Health Provision

- 9.13. There are currently two major acute hospitals in Hertfordshire. These are in Stevenage and Watford. Whilst these provide over 60% of acute care for the population, residents can also access services at several other acute hospitals outside Hertfordshire. Nearly 98% of Hertfordshire residents, based on modelled travel times, live within 30 minutes by car from an acute hospital.
- 9.14. Within the District there are two hospitals. St Albans City Hospital (SACH) provides a wide range of elective care and a wide range of outpatient and diagnostic services with an excess of 100,000 outpatient appointments. It has 40 beds, six theatres and a minor injuries unit. Harpenden Memorial Hospital is a small community hospital providing outpatient services.
- 9.15. Harpenden Hospital estate is managed by Hertfordshire Community NHS Trust (HCT). HCT is developing an Estates strategy to improve healthcare through the provision of buildings where they are best located, cost-effective and fit for purpose. Redevelopment of Harpenden Memorial Hospital is part of the planned strategy and feasibility studies to redevelop the site are on-going.
- 9.16. West Hertfordshire Hospitals NHS Trust (WHHT) provides acute healthcare services St Albans, Watford and Hemel Hempstead Hospitals, as well as manages some services at Harpenden Memorial Hospital.
- 9.17. Over the last few years the Trust has undertaken a significant programme of service and estate reconfiguration. This included the development of St Albans City Hospital into a dedicated centre for elective surgery, the move of A&E and in-patient services from Hemel Hempstead to Watford and the development of a new Acute Admissions Unit at Watford. However, the WHHT Annual Plan highlights that further work is still required, particular to the physical estates at Watford, Hemel Hempstead and St Albans Hospitals which are not wholly adequate for modern healthcare provision⁷.
- 9.18. Further change is planned in light of the 'Your Care, Your Future' strategic review being undertaken by health and social care providers across West Hertfordshire⁵. The vision document for the review was published in 2015 and looks to initiate a shift of services out of hospital and into the community, with a proposed reduction of 40% in hospital trips by 2024.
- 9.19. In light of this shift, the WHHT intends to centralise and rationalise service provision in the three principal hospitals (St Albans, Watford and Hemel Hempstead) where appropriate. The review has shortlisted three different options for the future of acute hospital services provided by WHHT. These are:
- Consolidate acute, emergency and specialised care at Watford General Hospital (WGH) and deliver the majority of planned care and complex diagnostics at St Albans City Hospital.
 - Consolidate all acute care at Watford General Hospital.

- Consolidate all acute care at a new site (location to be determined).

9.20. The review also plans to develop 'Hubs' across West Hertfordshire to support the shift to community provision, looking at four initial sites in Elstree, South Oxhey, Hemel Hempstead and Harpenden. The hubs will create a network of services and will contain a range of health and social care teams. Services may include some testing and acute care services as well as health promotion and prevention services, and some GP, pharmacy, optometry and dentistry services.

Impact of Planned Growth

9.21. Residential growth over the plan in the District and across Hertfordshire is likely to see increasing pressure being placed on strategic health services. Over the period to 2025 there is likely to be a reduction in acute infrastructure through the active management of patients in the community. This will place additional impacts on community provision. Outcomes of the "Your Care, Your Future" Strategic Review will be considered upon the release of the final report. Work is on-going and further detailed analysis and option testing is expected to continue into 2016.

Hospitals & Acute Health Provision	
Lead Agencies	<ul style="list-style-type: none"> • NHS England • West Hertfordshire Hospitals Trust • East & North Herts NHS Trust • Herts Valley CCG • Hertfordshire Partnership Foundation Trust • Hertfordshire Community NHS Trust
Evidence Base	<ul style="list-style-type: none"> • 'Your Care, Your Future': A new vision for the future 2015 • WHHT Annual Plan 2015/16 • Liaison with Herts Valley CCG
Existing Provision	<ul style="list-style-type: none"> • St Albans City Hospital • Harpenden Memorial Hospital <p>Acute hospitals in Hertfordshire: Stevenage and Watford</p>
Gaps in Provision	Potential need for redevelopment / improvement works Watford, St Albans and Harpenden Memorial Hospitals- Pending outcome of strategic review
Planned Provision	<ul style="list-style-type: none"> • Rationalisation of acute provision in West Herts • Creation of 'Hub' in Harpenden & Hemel Hempstead <p>Further changes to provision will be set out upon complete of the strategic review</p>
Impact of Development	Growth in residential development in the District and

Proposals	<p>across Hertfordshire will see increasing pressure being placed on strategic health services. Over the period to 2025 there is likely to be a reduction in acute infrastructure through the active management of patients in the community. This will place additional impacts on community provision.</p> <p>Further analysis required pending outcomes of Your Care, Your Future' Strategic Review.</p>
Potential for Delivery	<p>Main funding provided by NHS.</p> <p>Hospitals and acute provision could receive developer contributions through planning obligations or CIL funding as there is a direct link between growth and increased need.</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP7 Community, Sport and Recreational Facilities sets out the support for additional GP facilities for sustainable growth.</p> <p>SLP30 Delivery of Infrastructure</p>

This section focuses on local health facilities and provision for Hertfordshire. However, it is important to note that the north of the District is also served by Luton and Dunstable Hospital.

Health and Community Services

- 9.22. Health and Community Services (HCS), as part of HCC, covers needs of older people, people with disabilities and people with mental health problems who require assistance, either to live independently, or to live in some form of residential care. HCS provide for special needs housing, including housing for older people (residential, nursing and flexicare), for learning disability (residential, nursing and supported living) and physical disability (residential and nursing). It works in partnership with private and public sector organisations to secure provision.
- 9.23. HCS report a significant rise in demand for health and social care services over recent years. This challenge has been met by focusing further on integration between health and social care commissioners to deliver services with support from the national Better Care Funds. There has also been a focus on providing levels of care for people in their own homes rather than moving people into residential and nursing homes through assisted living programmes⁸.
- 9.24. HCS sets out the approach taken to developing the social care market in these areas through Market Position Statements (MPSs)⁹. HCC are currently working on an updated Accommodation Strategy as a background to the MPSs in order to address and understand adult care housing supply and demand. Outcomes of this strategy review will be considered upon the release of the final report in autumn 2016.

Care for Older People

- 9.25. HCS published the MPS for Older People in 2016⁹. The MPS outlines the HCS plans to finance 'out of hospital services' for older people, and fund programmes to ensure greater co-ordination in the planning and commissioning of services. The Better Care Fund is also used to trial new initiatives and services to improve service provision.
- 9.26. HCS identifies nursing home provision and flexicare housing as the principal area demand is likely to increase. HCS is looking to address this through improved access to existing provision and new models of care.
- 9.27. Flexicare housing is where residents live in their own apartment but with communal areas and access to on-site care provision, providing more support than sheltered housing and more independence than residential care. Thus it can reduce the need for new care homes. There are currently two flexicare schemes in St Albans. Currently, Betty Entwistle House in Holyrood Crescent is due to be sold for the development of a mixed-age, flexi-care scheme.

Mental Health Care

- 9.28. The MPS for Adults with Mental Health Conditions examines future market opportunities and commissioning intentions for HCS⁹. The latest publication released in 2016 reiterates the HCS to reduce the use of traditional residential care and group home settings and increase alternative housing and support options. Further work is pending the outcome the accommodation strategy review in autumn 2016.
- 9.29. In terms of recent development in hospital provision, a new mental health facility at Kingsley Green was opened in June 2014. The Hertfordshire Partnership Foundation Trust (HPFT) manages Kingsley Green, based on the former Harperbury Hospital site. The mental health facility Kingfisher Court at Kingsley Green containing 86 bedrooms on five wards. It specialises in adult mental health and learning disabilities.

Impact of Planned Growth

- 9.30. Although there is a focus on providing levels of care for people in their own homes rather than moving people into residential and nursing homes, there is still an increased level of provision required of residential care places over the plan period.
- 9.31. This is particularly the case with provision for Older People. With the planned growth and the predicted demographic projections, the District is likely to need an estimated additional 3,756 general needs and specialised dwelling units for older people, including care home places, extra care housing and sheltered housing¹⁰.

Table 3: population projections for older people in the District 2011- 2031

Age band	2011	2016	2021	2026	2031
65- 74	11,108	12,810	13,222	13,435	15,121
75- 84	7,584	7,929	8,830	10,386	10,816
85+	3,239	4,071	4,911	5,743	6,989

*source: Edge Analytics

- 9.32. HCS identifies nursing home provision as the principal area where future capacity shortage over the next five years, particularly for health and social care funded placements. HCS is works to address this through improving access to existing provision and exploring new models of care with providers.
- 9.33. There has also been a significant increase in demand for flexicare housing. HCC is committed to developing more flexible housing options as it has the potential to reduce demand for residential care places. HCS is planning to work with partners in the future to identify new build schemes and support bids for capital funding where needed.

Hospitals & Acute Health Provision	
Lead Agencies	<ul style="list-style-type: none"> HCC – Health & Community Services
Evidence Base	<ul style="list-style-type: none"> Health and Community Services Plan 2015-2019 HCS Market Position Statement: Adults with Mental Health Conditions 2016 HCS Market Position Statement: Older People 2016 HCS Market Position Statement: Adults with Learning Disabilities 2016 Independent Assessment of Housing Needs and Strategic Housing Market Assessment Update October 2015
Existing Provision	<p>Range of special needs housing across district, including housing for older people (residential, nursing and flexicare), for learning disability (residential, nursing and supported living) and physical disability (residential and nursing).</p> <p>Kingsley Green mental health facility</p>
Gaps in Provision	<p>No significant geographical gaps indicated. However, HCC are currently working on an Accommodation Strategy in order to address and understand adult care housing supply and demand. Outcomes of this strategy review will be considered upon the release of the final report in 2016.</p>
Planned Provision	<p>No planned HCC funded homes in St Albans. Private</p>

	flexicare proposals are likely to come forward. Betty Entwistle House due to be sold for the development of a mixed-age, flexi-care scheme.
Impact of Development Proposals	Additional dwellings will lead to a rise in population which, through ageing, may eventually be in need of care provision. Estimated additional 3,756 general needs and specialised dwelling units for older people
Potential for Delivery	Scope exists to incorporate provision of specialist elderly or over 55 housing units in larger residential developments.
Delivery Mechanisms in the Local Plan	Policy SLP 10 Housing Size, Type and Mix states that sheltered and extra care housing will be encouraged on sites close to suitable services. SLP30 Delivery of Infrastructure

Education Infrastructure

- 9.34. Hertfordshire County Council (HCC) is the Local Education Authority and has statutory responsibility for the provision of education services. It has a duty to ensure that there are sufficient school places in its area. This provision includes nursery, primary, secondary and sixth-form education and special needs services and facilities. The HCC also has a duty to secure sufficient Free Early Education and Childcare places across the county.
- 9.35. Forecasting school place demand is a complex task. Where children go to school involves a range of different factors such as housing growth, inward and outward migration and parental preference. School organisation needs to respond to factors including: local needs; raising standards and promoting diversity; responding to government policy; responding to external and internal findings on the quality of schools and the need to ensure that scarce resources are used efficiently.
- 9.36. HCC has a duty to secure sufficient school places in its area, ensuring that every child has access to a school place. HCC fulfils these planning responsibilities by forecasting the demand for school places in order to identify an appropriate balance between supply and demand. It negotiates the right number of places on an annual basis, whilst in parallel undertaking longer term strategic planning.
- 9.37. Hertfordshire has experienced a significant rise in the demand for primary places across the County in recent years in line with the picture nationally. The rise is not consistent across the county, with some areas experiencing substantial increases in the primary aged population, whilst in some more rural areas demand is less pressing or currently remains fairly static. More information on the rising demand is available through HCC's strategy

document 'Meeting the Rising Demand for School Places' (see Source H for further information).

Forecasting

- 9.38. HCC produces pupil forecasts every six months for both Reception and Year 7 demand. At a primary level, HCC publish forecast four years ahead and secondary forecasts stretch to 10 years in the future.
- 9.39. These forecasts are based on actual data of 0-5 year olds in an area, historic pupil movement as well as an assumed pupil yield from new housing developments. The forecasts have taken account of an assumed housing growth trajectory for the longer term, as provided by Hertfordshire's District and Borough Councils.
- 9.40. Latest forecasts are provided below. These project demand for admissions into Reception and Year 7 and do not include any margin. It should be noted that for Local Plan purposes, HCC would normally plan a surplus of 5% across an area to allow for fluctuations in forecast demand.

New Schools

- 9.41. The way in which new schools are set up has undergone significant change in recent years. HCC's role as a commissioner of places is such that where it considered there is a basic need for a new school it must:
- Seek proposals to establish an academy/free school; or (if unsuccessful)
 - Hold a statutory competition to seek / determine a suitable proposal; or (if unsuccessful)
 - Publish its own proposals for a new maintained school
- 9.42. HCC remains responsible for providing the site and meeting all associated capital and pre/post-opening costs in instances where the new school provision is meeting basic need. Therefore HCC continues to hold the key role in negotiating developer contributions for, and the provision of, all school infrastructure.

Forms of Entry

- 9.43. School provision is often described in terms of 'forms of entry'. 1 form of entry (FE) equals 30 places per year group.
- 9.44. Primary schools have seven year groups from Reception through to Year 6. HCC has a preference for primary schools of 2FE or more, as this larger size provides improved opportunities for delivery of a broad education curriculum and staff development, as well as offering the ability to better manage fluctuations in demand. A 2FE primary school will have 7 year groups of 60 pupils (420 in total), plus a Nursery class where offered.

- 9.45. Secondary schools have five year groups, from Year 7 through to Year 11, and Sixth Forms with lower and upper year groups. HCC has a preference for secondary schools of 6 to 10FE as this offers improved opportunities for the delivery of a broad education curriculum. A 6FE school will have 5 year groups of 180 pupils (1080 in total) plus a Sixth Form

Developer Contributions

- 9.46. When undertaking high level school place planning related to new residential development, HCC determines child yield based on a ratio of 1FE per 500 dwellings to be 97.5% confident of not underestimating yield. When considering actual proposals or planning applications, HCCI uses specific development forecasting models to ascertain more tailored demographic profiles, including pupil yields.
- 9.47. HCC is currently reviewing its Planning Obligations Toolkit to support the funding of infrastructure provision through Section 106 (S106) contributions and encourages Districts to implement CIL at the earliest opportunity. The cumulative impact of smaller sites can create additional demands and burdens on existing infrastructure which must be addressed through developer contributions. Since April 2015, the ability to pool S106 planning obligations is restricted and it is increasingly difficult to fund projects which mitigate the impact of smaller developments. The implementation of a CIL is currently the most viable option of supporting the development of these sites and the provision of infrastructure, particularly strategic infrastructure such as secondary schools.

Primary Schools

- 9.48. Whilst there are currently sufficient primary school places available across the City and District, there continues to be a concentration of demand in and around St Albans city centre. The number of children in this area fluctuates, but has consistently exceeded the number of places available.
- 9.49. In response to the rising demand of school places HCC has already created an additional 9FE of permanent capacity across St Albans through expansion of existing schools as well as opening new primary schools, of which one was in the city centre.
- 9.50. However, there is currently no identified permanent expansion capacity at schools in the centre of St Albans, and so the strategy has been, of necessity, to provide additional permanent places in the wider area. However, those schools immediately adjacent to the city centre are now also at capacity.
- 9.51. Given the limitations on existing school sites, further growth in pupil numbers is likely to need to be supported through the provision of new schools. Therefore there is a need for a new school in the city centre early in the plan period.

- 9.52. In the interim period until a new school in the city centre can be brought forward, the strategy to manage this concentration of demand is through temporary expansion and as such, Maple School, in the city centre, has been temporarily expanded by 1FE for the September 2016 intake.

Impact of Planned Growth

- 9.53. Using the pupil yield calculation of 1FE per 500 dwellings it is estimated that SLP housing growth will require up to an additional 16FE to be delivered over the plan period. As outlined in the SLP the Council supports the expansion of existing schools in principle as they can be provided relatively quickly, are cost effective, can serve existing communities and reduce the need for new schools in Green Belt Locations.
- 9.54. HCC has provided an updated indication of the provision required at the Broad Locations. It is important to note that predicting future demand for school provision is challenging: forecasts are subject to change and HCC regularly update their projections. As such, the information provided here reflects the latest information provided.
- 9.55. Based on this information, it is proposed that the following Broad Locations will be required to make the following onsite provision:

East Hemel Hempstead (North and South combined):

- 1x 3FE primary school
- 1x 2FE primary school on a 3FE capacity site

Initial studies undertaken by the developer suggest that the schools will be located onsite in the both north and south sites.

North West Harpenden :

- 1x 2FE primary school

Although the development of this site would only generate the need for a 1FE school, HCC have suggested that a 2FE school would be desirable as a cost effective and efficient measure to accommodate future growth in the surrounding area. However, the development on the North West Harpenden Broad Location is likely to only be required to contribute to a 1FE provision, with the additional funding acquired from contributions from new development in surrounding areas and from other HCC funding sources.

Initial design work undertaken in conjunction with the developer suggests that a primary school will be provided on site and has the potential to incorporate sports pitches.

East St Albans:

- 1x 2FE primary school

Initial design work undertaken in conjunction with the developer suggests the provision of an onsite school with links to the neighbouring college.

Further details on initial design work undertaken by the developer are shown in the appendices.

9.56. The cumulative need from new development in urban areas could be met in part by the expansion of some existing primary schools¹¹. Need from new development could be met by the expansion of some primary schools in:

- St Albans City
- Chiswell Green or Park Street
- Bricket Wood
- Wheathampstead
- Harpenden
- Redbourn

9.57. HCC has indicated that sites for new primary schools may be required in the settlements listed below:

- St Albans City (2 schools)
- Harpenden
- London Colney

Where new schools are required, the potential exists for new schools sites to be identified in the DLP. Additional detached playing field space to support existing schools may assist future provision, including expansion of built provision on site. Potential exists for this to be addressed within SLP policies and the Detailed Local Plan.

Further details of can be seen in the appendices) which provides some additional information on work currently underway on detailed planning for this provision

Primary Education	
Lead Agencies	<ul style="list-style-type: none"> • HCC • Hertfordshire Education Authority
Evidence Base	<ul style="list-style-type: none"> • Meeting the Rising Demand – HCC • Liaison with HCC • HCC services representations on Strategic Local Plan– 2014/2015/2016
Existing Provision	Primary schools across the District.
Gaps in Provision	Some capacity issues in St Albans and Colney Heath. Whilst there are also capacity issues elsewhere in the District, these are not as significant and can be managed through local arrangements.
Planned Provision	Growth in the next five years will predominately be accommodated in existing schools however there is likely to be a need early in the plan period of a new

	school to serve central St Albans.
Impact of development proposals	<p>New housing will contribute to the increase in the number of children and young people and the need for school places. It is currently estimated that this will result in the need for up to an additional 16 FE.</p> <p>Need from new development could be met by the expansion of some primary schools in St Albans City, Chiswell Green or Park Street, Bricket Wood, Wheathampstead, Harpenden and Redbourn.</p> <p>Broad Locations will require:</p> <p>East Hemel Hempstead (North and South combined)</p> <ul style="list-style-type: none"> • 1x 3FE primary school • 1x 2FE primary school on a 3FE capacity site <p>East St Albans</p> <ul style="list-style-type: none"> • 1 x2FE primary school <p>North West Harpenden</p> <ul style="list-style-type: none"> • 1x 2FE primary school <p>New primary school site will be required in St Albans City early in the plan period. Sites for possible new primary schools may be required in Harpenden and London Colney.</p>
Potential for Delivery	<p>Planning obligation funding has traditionally been sought to meet the requirements of demand for additional school places resulting from new housing development. Following the introduction of the CIL Regulations 2010 this approach may be replaced with a combination of CIL and/or planning obligations (depending on local circumstances). Additionally, Free Schools can secure funding from the Department of Education.</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP6 Educational Facilities identifies need for primary school expansion in various settlements throughout the District and the possible need for reserve sites for new primary schools in St Albans, Harpenden and London Colney.</p> <p>Further site suitability will be examined in the preparation of the Detailed Local Plan. In the interim, the Council is working with HCC to identify potential sites. Developer contributions currently contribute to the funding of child places</p> <p>Policy SLP 30 Delivery of Infrastructure</p>

Secondary Education

- 9.58. Secondary school places are forecast using education planning areas. In St Albans District this includes the St Albans and Harpenden planning areas (and also includes some settlements from other districts including Dacorum, North Herts and Hertsmere).
- 9.59. The rising demand for primary school places over recent years has inevitably translated into increased demand in secondary school places. The most recent forecast indicates a future deficit in both Harpenden and St Alban planning areas to meet the rising demand for places.
- 9.60. HCC has identified a need to provide additional secondary school places in Harpenden. The most recent forecast for the Harpenden area projects a deficit of secondary school places from 2015/16 of 2.8FE at Year 7, increasing to 8.3FE from 2019/20. Between 2020/21 and 2022/23 this deficit is on average 7.6FE without any surplus capacity. The need is amplified by the identification of a strategic site for the delivery of 500 houses at north west Harpenden.
- 9.61. The Harpenden Secondary Education Trust gained approval from the Department of Education to establish a new secondary school in Harpenden from September 2017. Following detailed feasibility assessments HCC identified the most suitable site for the new school as Land at Lower Luton Road and exchanged contracts with the owners for its purchase on the 15th January 2016. The new school will be built by the Education Funding Authority (EFA) once further studies have been carried out on the site.
- 9.62. Although the St Albans planning area currently has a small surplus of places, student projections indicate a shortage of places by 2019/20. The proposed Harperbury Free School in the St Albans planning area was originally approved by the Department for Education (DfE) to open in September 2014, but has been cancelled by the DfE due to issues around need and the available site. There may be some potential to expand existing schools in St Albans, but that there are constraints relating to most school sites which mean that this is by no means certain. Feasibility work is underway to establish both the scale of the additional capacity required and potential options for meeting future need across the area.
- 9.63. The DLP facilitates provision of school sites in Harpenden and in St Albans if required. It may be appropriate to specifically identify a site or sites.

Impact of Planned Growth

- 9.64. It is projected that up to an additional 16 FE are required from pupil projections arising from the current housing stock and from sites identified in the current housing trajectory. HCC regularly update their projections. As such, the information provided here reflects the latest information provided and updates the information contained within the IDS.

- 9.65. In terms of the Broad Location sites, a minimum of one secondary school is required as part of East Hemel Hempstead (North and South combined). Initial feasibility work undertaken in conjunction with the developer suggests an 8FE Secondary School located in the north area. Further work will be carried out alongside the DLP.
- 9.66. Further details of can be seen in the appendices which provide some additional information on work currently underway on detailed planning for this provision

Secondary Education	
Lead Agencies	<ul style="list-style-type: none"> • HCC
Evidence Base	<ul style="list-style-type: none"> • Meeting the Rising Demand -HCC • HCC services representations on Strategic Local Plan dated – 2014/2015/2016 • Liaison with HCC
Existing Provision	11 Secondary schools in St Albans and Harpenden.
Gaps in Provision	HCC has identified a need to provide additional secondary school places in Harpenden.
Planned Provision	<p>Any growth in the next five years will be accommodated in existing schools and in temporary buildings.</p> <p>A new secondary school will be delivered in Harpenden (planned from September 2017).</p>
Impact of Development Proposals	<p>New housing will contribute to the increase in the number of children and young people and the need for school places.</p> <p>It is projected that up to an additional 16 FE are required from pupil projections arising from the current housing stock and from sites identified in the current housing trajectory. There is some potential to expand some existing secondary schools in the District.</p> <p>A minimum of one secondary school is required as part of East Hemel Hempstead (North and South combined) and it is proposed that the DLP will facilitate provision of school sites in Harpenden and in St Albans if required.</p>
Potential for Delivery	<p>Planning obligation funding has traditionally been sought to meet the requirements of demand for additional school places resulting from new housing development. Following the introduction of the CIL Regulations 2010 this approach may be replaced with a combination of CIL and/or planning obligations (depending on local circumstances). Additionally, Free Schools can secure funding from</p>

	the Department of Education.
Delivery Mechanisms in the Local Plan	<p>Policy SLP6 Education Facilities identifies the need for additional secondary school capacity in St Albans and Harpenden.</p> <p>The Detailed Local Plan and master-planning work for the Broad Locations will consider the details of suitable sites for new secondary schools. In the interim, the Council is working with County Council to identify potential sites.</p> <p>Policy SLP30 Delivery of Infrastructure</p>

Further Education - Oaklands College

- 9.67. Oaklands College is the main provider of further education in St Albans. The College is based in Smallford (known as the St Albans Campus). Programmes offered include adult and community learning, art, business, construction, engineering, health and social care, hospitality and catering, IT, media and performing arts, science and maths, sport and specialist programmes for learners with learning difficulties and disabilities¹². The College also has 14-19 and 16-19 year old consortium arrangements with local secondary schools.
- 9.68. In recent years the College has been implementing a plan to rationalise its various sites and buildings by establishing a main campus at the St Albans Campus. Some relocation of facilities and redevelopment has occurred and the College is now one of the country's largest further education colleges, with over 800 staff and 3,000 full time and 8,000 part time learners, the majority of which are based at the modernised Smallford Campus.
- 9.69. However, many of the pre-existing facilities are not fit for purpose. The Council gave planning permission for a new bespoke College Hub which was intended to be in place by 2012. The College Hub was unable to be delivered following the loss of substantial grant funding from the Learning and Skills Council in 2009.
- 9.70. The College is now planning a £51m redevelopment of the St Albans Campus¹³. The master-plan includes dedicated provision for the various curriculum areas which meet current needs and requirements, as well as being flexible to cater for future developments in teaching and our provision. Once initiated, the project will take about five years to deliver.

Impact of Planned Growth

- 9.71. The planned residential growth is likely to result in for further higher and further education floor space and facilities. Some of this increased demand may be met through the redevelopment of the Oaklands College St Albans Campus. The funding of the re-development is dependent on

the progression of residential development as part of the East St Albans Broad Location. It should be noted that the College are currently promoting a partial housing development intended to fund a start on the hub project. This is not supported by the LPA as it is premature in terms of the SLP process and does not represent a comprehensive approach to master-planning the SLP Broad Location.

Further Education - Oaklands College	
Lead Agency	<ul style="list-style-type: none"> • HCC • Oaklands College
Evidence Base	<ul style="list-style-type: none"> • Oaklands College Strategy • Oaklands College St Albans Campus Masterplan
Existing Provision	Oaklands College Smallford Campus
Gaps in Provision	Need for bespoke College Hub
Planned Provision	Expansion of Oaklands College through enabling development of residential development as part of the East St Albans Broad Location. All proceeds from the development are expected to be available for this purpose.
Impact of Development Proposals	Development proposals will result in need for further higher and further education floor space and facilities.
Potential for Delivery	Through a combination of enabling development and traditional central funding.
Delivery Mechanisms in the Local Plan	<p>Policy SLP13d East St Albans Broad Location seeks which will help the College deliver a step change in facilities.</p> <p>Further detail will be set out in the Detailed Local Plan with potential for a Planning Brief or Master plan.</p>

Early Education and Child Care Provision

- 9.72. HCC has a duty to secure sufficient free early education and childcare places. Annually HCC publishes a Childcare Sufficiency Report which details where places are required across the county¹⁴. HCC works with the private voluntary and independent (PVI) sector and schools to ensure adequate places. It also assists and enables the provision of day nurseries, play schemes and after school clubs, making sure there are sufficient places for parents to access across the County.
- 9.73. The Childcare Act 2006 places a duty on all local authorities to secure sufficient childcare for children aged 0-14 (19 for children with special educational needs and disability) of working parents or of parents who are studying or training for employment. HCC has a statutory responsibility to provide universal Free Early Education (FEE) for 3 and 4 year olds. Since

September 2013 HCC also has a statutory responsibility to provide 15hrs free early education (FEE) to eligible vulnerable 2 year old children across Hertfordshire.

- 9.74. In September 2017 a new extended entitlement of an additional 15 hours free childcare will be introduced for working parents in Hertfordshire. HCC is currently working on the likely demand across Hertfordshire linked to the number of places available. Consequently demand for these services is forecast to increase, in addition to the increasing population of young children in the County. Provision for this new entitlement will be within schools preschools and day nurseries and child-minders.
- 9.75. In addition to free early education places, HCC has a duty to ensure there are sufficient childcare places for 0 -14 years children (19 for children with special educational needs and disability) in pre-schools, day nurseries and out of school clubs which can run either from school or other community facilities.
- 9.76. HCC has a duty to provide Children's Centres in every community, for children under 5 and their families. Children's centres work in partnership with a number of partners including schools, midwives, health visitors and GPs. They offer services to support child development outreach and family support, parenting support, access to training and work opportunities and child and family health services. There 82 Children's Centres in Hertfordshire clustered in 29 geographical groups.
- 9.77. There are 10 such centres in St Albans which serve a defined geographical area. The Children's Centre Areas are numbered SA1 to SA10 and their geography is used for the purpose of planning early year's provision
- 9.78. HCC currently rates the sufficiency levels of Free Early Education places in all Children's Centre Areas for children aged 2, 3, and 4 years old. The latest information held by HCC for children's centres in the District is shown in the table below:

Table 4: Free Early Education in Children's Centre Community

Children's Centre	Free Early Education for 2, 3 & 4 yrs old places required 2016 / 2017
SA1 Wheathampstead & Kimpton	+53 GREEN
SA2 Harpenden & Batford	+209 GREEN
SA3 Harpenden & Southdown	+154 GREEN
SA 4 Redbourn Rural	+269 GREEN
SA 5 Marshalwick *	+1 GREEN

SA 6 Batchwood & St Peters	+86 GREEN
SA7 Sopwell & Verulam	+109 GREEN
SA8 Ashley & Colney Heath *	-30 GREEN
SA9 Park Street *	Even GREEN
SA 10 London Colney	+44 GREEN

Green = Sufficient Places Available (provision largely matches families needs)

* Data suggests that there are insufficient places in the given area – however local knowledge from stakeholders and parents indicate that parents do not have a problem finding places in this area.

- 9.79. The table show that sufficient places exist in the District at present. However, the rating for any area can quickly change: for example, if a preschool or nursery were to reduce the number of children it could accommodate or if a preschool or nursery were to close. Future requirements will depend on a number of factors, including changes in birth rate, level of provision and changes in regulations and new Government initiatives relating to the sector.

Impact of Planned Growth

- 9.80. HCC consider that the number of working households in the District is significantly higher than other areas of the county. The demand for the new extended childcare entitlement will be high and additional childcare provision will be required in those areas identified as insufficient or near to sufficient to support this new demand. If more housing is developed than the demand for these places will increase further.
- 9.81. Where new primary school sites are identified, early education in the form of nursery provision is usually sought as on-site. As such, initial master-planning being undertaken indicates that nursery provision is likely at all four of the Broad Location Sites.
- 9.82. Increasing demand for Children Centre space may arise from residential development in an area. The ten children's centres areas have currently enough free early education places to meet the proposed demand from the planned growth. However, Childhood Support Services will work with School Planning and the Strategic Estates Team to identify where increases in provision may be required and will look to maximise available space in order to meet predicted demand.

Early Education and Child Care Provision	
Lead Agencies	<ul style="list-style-type: none"> • HCC • Hertfordshire Education Authority
Evidence Base	<ul style="list-style-type: none"> • Hertfordshire Childcare Sufficiency Annual Report May 2016 • Liaison with Hertfordshire County Council
Existing Provision	Ten Children's Centre, and a range of nursery classes and schools, playgroups, and after school clubs (Private, Voluntary and Independent)
Gaps in Provision	No indicated gaps in provision currently. However, HCC is currently undergoing review of accommodation available.
Planned Provision	None as yet, undergoing review of accommodation available and profile the needs of community.
Impact of development proposals	<p>New housing will contribute to the increase in the number of children entitled to access free early years education.</p> <p>Nursery provision is usually sought as onsite in new primary school developments. Thus nursery provision will be possible in new primary schools at all four of the Broad Location Sites.</p>
Potential for Delivery	Planning obligation funding has traditionally been sought to meet the requirements of demand for additional school places resulting from new housing development. Following the introduction of the CIL Regulations 2010 this approach may be replaced with a combination of CIL and/ or planning obligations (depending on local circumstances).
Delivery Mechanisms in the Local Plan	<p>Policy SLP6 Educational Facilities identifies need for primary school expansion in various settlements throughout the District. Nursery provision is likely to be delivered through these.</p> <p>Further opportunities will be considered as part of primary school expansion planning facilitated by the DLP. In the interim, the Council is working with HCC to identify potential sites. Developer contributions currently contribute to the funding of child places</p> <p>Policy SLP 30 Delivery of Infrastructure</p>

Emergency Services

Police Services

- 9.83. The Hertfordshire Constabulary is responsible for policing the District and the Hertfordshire Police and Crime Commissioner (HPCC) ensures that it delivers efficient and effective policing. Hertfordshire Constabulary is concentrating on improving intervention team services and providing safer neighbourhoods¹⁵.
- 9.84. The structure of police service provision in the country has changed in line with wider societal change. The increasing accessibility of technology has meant that few police stations require public facing facilities as a significant proportion reporting of incidents and issues is now done online or over the phone. Whilst it is still important to maintain a public facing service, the number of police stations in the County has been reduced and public facing services and custody facilities have been rationalised and centralised.
- 9.85. Hertfordshire has adopted a local policing command structure that has a dedicated command team based at Hatfield police station. The Constabulary's headquarters is based in Welwyn Garden City and provides a support and administrative function to the Local Policing Command (LPC). There are locally based Safer Neighbourhood Teams (SNT) that work at Ward and District level, helping to tackle anti-social behaviour as well as criminality. Until recently there have been two police stations in the District, one in St Albans and one in Harpenden, and a police office in London Colney.
- 9.86. In 2015 the St Albans dedicated police station building was closed and the Safer Neighbourhood and Intervention Teams were relocated to facilities within St Albans Civic Centre shared with St Albans City and District Council. The facility in St Albans now has no customer facing facilities but has a free outside public telephone to the police control room. The Harpenden station has the same level of functions as St Albans with a Safer Neighbourhood Team and an Intervention Team.
- 9.87. There is no custody provision in St Albans District. The nearest custodial facilities are in Hatfield and this serves St Albans. The Hatfield police station building was opened in 2008 and incorporates a 40 cell custody suite. There are two additional custody facilities at Watford and Stevenage.

Impact of Planned Growth

- 9.88. Additional housing provision in the District has implications for police services. The number of staff and facilities needed to police an area is based on criminality rather than population. This is influenced by the type of housing, population density and whether there is a stable population. It

is therefore difficult to assess future demand for policing services as a result of housing growth.

- 9.89. The factors described above will determine whether additional police service will be required. It is likely that any additional premises provision required would be located outside of the District. Additional custody provision may be required in the future in line with the predicted population growth in the County.
- 9.90. In terms of the Broad Location sites set out in the SLP, the expanding employment area of East Hemel Hempstead site could have implications for police service because of its close proximity to M1. There is a police station located in Hemel Hempstead, containing similar facilities to the St Albans station (no custodial facilities, nearest facilities are in Watford). Facilities in Hemel Hempstead are considered adequate to deal with this area but this conclusion will be reviewed in the DLP and master- planning work. Both the Harpenden and St Albans Broad location sites could be served within existing provisions.

Police Services	
Lead Agency	<ul style="list-style-type: none"> • Hertfordshire Police & Crime Commissioner • Hertfordshire Constabulary
Evidence Base	<ul style="list-style-type: none"> • Everybody's Business: The Police and Crime Plan for Hertfordshire- 2015-2020 • Liaison with the Hertfordshire Constabulary
Existing Provision	<p>There are currently two stations within the District located in Harpenden and St. Albans, and an additional police office in London Colney. There is also a station in Hemel Hempstead.</p> <p>There are Safer Neighbourhood Teams and Intervention Teams based at both the St Albans and Harpenden stations.</p>
Gaps in Provision	There are currently no gaps in provision but additional custody suites may be required in the future.
Planned Provision	There are no current plans for further provision.
Impact of development proposals	<p>Police requirements are based on criminality rather than housing growth.</p> <p>Specific provision may be required as part of the developments at East Hemel Hempstead. Hemel Hempstead has provision to support growth at east Hemel Hempstead but review needed.</p>
Potential for Delivery	<p>Hertfordshire Constabulary will identify the most cost effective method of supplying any necessary infrastructure should it be required.</p> <p>Police will seek custody provision via CIL from the local authorities it serves</p>

Delivery Mechanisms in the Local Plan	Policy SLP4 Urban Design seeks development to create safe and accessible environments which address community safety and crime prevention issues. SLP30 Delivery of Infrastructure.
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Fire and Rescue Services

- 9.91. Hertfordshire Fire and Rescue Services (HFRS) are responsible for providing the fire and rescue service in St Albans¹⁶. The HFRS is split into five areas, each of which has a District Plan. St Albans is covered by the Dacorum and St Albans District Plan¹⁷.
- 9.92. Fire services plan using a local risk management approach rather than one based on population and general response times. Services are provided in a way that best manages risk. Greater attention is now paid to reducing the incidence of fire and accidents rather than the reactive fire and rescue services¹⁸.
- 9.93. There are four fire stations in St Albans City and District. St Albans Fire Station is permanently crewed 24 hours a day (known as a 'wholetime' station), whilst the remaining stations, Redbourn, Harpenden and Wheathampstead, are crewed by a retained duty system. There is also a wholetime fire station in Hemel Hempstead.

Impact of Planned Growth

- 9.94. Fire & Rescue services are not based on population levels but on risk. An increase in housing and other development may not attach a greater risk level in itself, this will depend on the type of housing and where it is located. In addition, new housing is more likely to be safer than older properties. The HFRS identify pockets of inequalities where there are high levels of response and prevention activity.
- 9.95. No specific problems are anticipated in serving the developments proposed in the SLP. However it is noted that the Broad Locations at Hemel Hempstead will be served mainly from facilities and services within the Town.

Fire Services	
Lead Agency	<ul style="list-style-type: none"> Hertfordshire County Council Fire Authority Hertfordshire Fire and Rescue Service
Evidence Base	<ul style="list-style-type: none"> HCC Community Directorate Corporate Plan 2013 – 2018 HFRS Integrated Risk Management Plan 2014 – 2018 HFRS Dacorum and St Albans District Plan 2014/15 & 2015/16
Existing Provision	Four Fire Stations St Albans, Wheathampstead,

	Harpenden and Redbourn. St Albans Station is crewed 24 hours; the others are crewed on a retained duty system. A crewed 24 hours fire station in Hemel Hempstead
Gaps in Provision	No indicated gaps in provision
Planned Provision	No additional services are planned for the District
Impact of development proposals	Fire & Rescue services are not based on population levels but on risk. An increase in housing may not attach a greater risk level in itself, this will depend on the type of housing and where it is located. In addition, new housing is more likely to be safer than older properties.
Potential for Delivery	It is anticipated that the Fire and Rescue service will identify the most cost effective method of supplying any necessary infrastructure.
Delivery Mechanisms in the Local Plan	SLP30 Delivery of Infrastructure.

Leisure and Cultural Facilities

The information below focuses on St Albans City and District. It is noted that in respect of planning higher order, Town level, facility needs for the east Hemel Hempstead Broad Locations, existing provision in Hemel Hempstead is very relevant. Detailed planning for these areas to be undertaken through the Detailed Local Plan, which will have reference the views of Dacorum Borough Council. Anticipated gaps include a possible improved sports stadium.

Sports and Leisure Facilities

9.96. A 2005 review of the Council's leisure centres found the many of the existing facilities were ageing and no longer fit for purpose¹⁹. Additionally, the facilities at Batchwood were destroyed by fire in August 2011. However three new leisure centres have opened in the District since 2012:

- Westminster Lodge:
The purpose built leisure centre was opened in November 2012. The facilities include two swimming pools, a 4 court sports hall, a 200 station gym and a separate youth gym, group exercise studios, an indoor climbing wall, children's soft play area, café and crèche. The redevelopment of the athletics track at Westminster Lodge was not part of the new leisure centre. However, it has been identified as a priority and feasibility studies into its redevelopment will be undertaken.
- Batchwood Sports Centre:
The facility at Batchwood was destroyed by fire in August 2011. The new Batchwood Sports Centre and a Lawn Tennis Association High Performance Tennis Centre were opened in May 2014. The centre

contains six indoor and three outdoor tennis courts, a judo dojo, a 48-station gym, squash courts and a strength and conditioning suite. A golf course and bowls green are also on site.

- Cotlandswick Leisure Centre:

The new leisure centre at London Colney was opened in June 2015. Facilities include nine artificial grass football pitches, a sports hall, a 60-station gym, an exercise studio and children's play area.

- 9.97. The leisure centre improvement scheme may be extended to further facilities. The redevelopment of Harpenden Pool and Sports Centre is a current priority for the council as set out in the SADC Corporate Plan²⁰.

Sports Pavilions

- 9.98. Sports pavilions are essential facilities to encourage sport and the use of playing fields and outdoor sports facilities. They can also include social facilities and meeting rooms for use by community organisations and to hold indoor groups and classes. They are a range of sports pavilions across the District of varying size and function, many of which are managed by the District Council or by Town and Parish Councils.

- 9.99. The St Albans City and District Playing Pitch Strategy²¹ identifies eight sports pavilions owned by the District Council which are in need of significant improvement works or replacement:

- St Michaels at Verulamium Park
- Cricket Pavilion at Verulamium Park
- Orchard Pavilion at Rothamsted Park
- Amenbury Lane at Rothamsted Park
- Marlborough Club
- Cunningham Hill
- William Bird Pavilion
- Clarence Park Pavilion

- 9.100. These pavilions are in various conditions but are all reaching the point in their lifespan where they will be in need of redevelopment or refurbishment. Further details are set out in the Green Space Management Plan and the supporting actions plans produced for each open space in the Districts. Further surveys will be undertaken to identify priority projects.

St Albans City Football Club

- 9.101. St Albans City Football Club (SACFC) grounds are located to the North-East of St Albans City Centre area, at Clarence Park. The existing facilities at Clarence Park are in need of improvement or replacement. For the Club to develop modern purpose built facilities are needed. Due to site

constraints at Clarence Park it may be difficult for the Club to develop its existing ground and this may necessitate relocating to a new site. The Council supports the Clubs ambition to develop and recognises the important role played by SACFC in the wider community as noted in the Council's recent Corporate Plan²⁰.

Impact of Planned Growth

9.102. Residents of new developments are likely to increase the demand on the existing and new leisure and sports facilities across the District. Therefore it is expected that new development would contribute towards new, redeveloped or refurbished sport and leisure facilities through planning obligations or CIL in accordance with the SADC capital programme.

9.103. New provision will be required with sports use open space within East Hemel Hempstead developments. Initial work undertaken with the developers indicates that it will include formal playing pitches and children's play space, but that there is a need to plan the detail of provision taking account of existing provisions and deficiencies in Hemel Hempstead and the potential for joint use of the secondary school site and facilities.

9.104. At the East St Albans Broad Location, Oaklands College currently has sports facilities including synthetic pitches, grass pitches, a hydrotherapy pool and a sports hall. The redevelopment of the college site alongside the residential development provides an opportunity for shared use of sports facilities which will be explored through the master planning process.

Sports and Leisure Facilities	
Lead Agency	<ul style="list-style-type: none"> St Albans City and District Council (SADC)
Evidence Base	<ul style="list-style-type: none"> St Albans City & District Sport and Recreation Facilities Strategy 2005 St Albans City & District Playing Pitch Strategy 2005 St Albans City and District Council Corporate Plan
Existing Provision	<ul style="list-style-type: none"> A range of sports facilities and leisure centres in the District Seven sports pavilions associated with playing fields across the District.
Gaps in Provision	No indicated gaps in provision, however future refurbishment of sports pavilions may be required
Planned Provision	Future potential redevelopment of Westminster Lodge athletics track and separately of Harpenden Sports Centre and Pool
Impact of development proposals	Residents of new development will make use of existing and new leisure and sports facilities across the District. Therefore it is expected that new development would contribute towards new, redeveloped or refurbished sport and leisure

	<p>facilities through developer contributions through planning obligations or CIL.</p> <p>New provision will be required of open space with sports use within East Hemel Hempstead developments.</p>
Potential for Delivery	<p>Expansion/replacement of existing facilities.</p> <p>Smaller community based facilities could be incorporated as part of larger housing developments.</p> <p>Developer contributions under planning obligations/CIL</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP7 Community, Sport and Recreational Facilities acknowledges the Sport and Recreation Facilities Strategy and the need to replace facilities and the subsequent benefits to residents.</p> <p>SLP30 Delivery of Infrastructure.</p>

Cultural Services & Public Realm

9.105. The requirement for greater private and public sector investment in the City & District's cultural infrastructure reflects both the aspirations of local residents and the demands of an expanding visitor economy. The District Vision²² promotes the concept of the City as a cultural hub, which would take the form of both a physical and virtual sub-regional centre for arts and leisure, led by the City Centre and supported by the other settlements.

9.106. The Council has prioritised leisure and cultural provision. In addition to the leisure development outlined above, there are several key cultural development possibilities:

- Conversion of the Town Hall to support the presentation of the post Roman heritage of the City and contemporary arts. The previous premise on Hatfield Road has now been closed. Planning permission and listed building consent for the St Albans Museum and Gallery project has been granted. Work is scheduled to begin in 2016 and the museum is scheduled to open in autumn 2017.
- Development of Verulamium Museum to provide state of the art facilities to include presentation of the pre-Roman and natural heritage of the District in partnership with the Herts Wildlife Trust.
- The Alban Arena, an 850 seat auditorium which is located centrally within the Civic Centre Opportunity Site, requires either significant refurbishment or redevelopment in the near future. There are aspirations to increase capacity to 1,200 seats. Further detail is available in the Civic Centre Opportunity Site Development Brief (adopted July 2012).

- The Maltings Theatre is currently located within the Maltings retail complex. The future use of the Maltings Theatre has recently been reviewed. The annual revenue cost of the theatre is currently subsidised.
- Harpenden Public Halls has a theatre and smaller performance space. They are used for a variety of live performances, film, workshops and local youth theatre. In the medium to long term there is the potential for refurbishing or redevelopment of the public halls. Feasibility studies will be undertaken.

Cathedral

- 9.107. The Abbey Cathedral attracts approximately 200,000 annual visitors in addition to regular weekly congregations in excess of 1,000. The Council is working with the Cathedral to inform emerging plans for the physical and cultural expansion of the Cathedral in a number of spheres, all of which will greatly raise the visitor profile of St Albans as a heritage city, centre for worship and pilgrimage site. The Council has been working closely with the Dean and Chapter and a number of suggested proposals were identified in the City Vision 2009²² which would enhance the Abbey's national and local profile, expand and improve its education and outreach work, and enhance its facilities to fulfil its role as a centre of community activity.
- 9.108. The Cathedral is pursuing a substantial proposal for a New Cloister development of over some 700 m2 of new floorspace comprising education, conference and library space; supporting facilities; visitor information and a retail/catering area. This will require significant investment in new infrastructure to support the new facilities, including improved accessibility and movement (particularly for groups), car parking and servicing.
- 9.109. Joint initiatives with the Council would include linked marketing and promotion, enhanced accessibility, signposting and interpretation. These could be delivered in part by planned public realm improvements which would recognise the Cathedral Quarter as a destination linked to Verulamium Park.

Public Realm

- 9.110. The Council has identified the need to carry out a range of public realm improvements in both the City Centre and wider District to meet resident and visitor expectations. A Public Realm Delivery Strategy (PRDS) has been developed which identifies, rationalises and prioritises interventions on a long-term basis, and sets out management and funding mechanism²³.
- 9.111. There are three key project elements to the Public Realm Delivery Strategy:

- Public Spaces
A series of projects aimed at improving public spaces in the City Centre. Projects look to broaden the appeal of underutilised spaces in the St Albans, making them work harder for the city. Long term projects include the Market Place, the area around the Clock Tower, City Station and the Old Town Hall Square.
- Routes
These projects are aimed at improving public routes in the city centre to help movement of pedestrians, cyclists and vehicles around the city as well as improve the legibility of the city. The Verulamium Park Cycle Routes project identified in the strategy has now been completed, and the Green Ring cycle route is expected to be completed in February 2017. Other short term priorities include City Legibility projects (which are currently being delivered) and Victoria Street improvements. Longer term projects include City Core Traffic Management, St Peters Junction, George Street, Holywell Hill and Drovers Alley.
- Environment
A series of projects aimed at improving the public environment in the city centre. Long term priorities include new tree planting and new benches.

Impact of Planned Growth

9.112. The planned growth is likely to lead to an increase in demand for arts and cultural services and facilities. It is unlikely that development will include new cultural facilities. However, developer contributions / CIL could support the expansion/provision of new facilities.

Cultural Services and Public Realm	
Lead Agency	<ul style="list-style-type: none"> • SADC
Evidence Base	<ul style="list-style-type: none"> • St Albans City Vision (2008) • St Albans Rural Vision (2009) • St Albans Public Realm Delivery Strategy (2012)
Existing Provision	<ul style="list-style-type: none"> • Existing Verulamium and MOSTA museums
Gaps in Provision	<ul style="list-style-type: none"> • Lack of gallery space in the City centre • Required public realm improvements
Planned Provision	<ul style="list-style-type: none"> • Moving MOSTA into the Old Town Hall with gallery space; • Long term improvements to the Verulamium Museum; • Short and long term public realm improvements set out in the public realm delivery strategy; • New cloister development at the Cathedral.
Impact of development proposals	Significant housing growth is likely to lead to an increase in demand for arts and cultural services and facilities.

Potential for Delivery	It is unlikely that new cultural facilities will be provided as part of new developments. Developer contributions /CIL could contribute to the expansion/provision of new facilities. New development should also look to enhance the public realm and provide public art.
Delivery Mechanisms in the Local Plan	<p>Policy SLP4 Urban Design encourages public realm enhancements and the creation of public art.</p> <p>Policy SLP20 – Creating Attractive and Vibrant Centres sets out the Council’s intentions to improve city, town and village centres across the District.</p> <p>SLP21 Provision and Retention of Cultural Facilities supports the delivery of the Cultural Hub as well as the creation and improvement of a diverse range of cultural facilities in the District.</p> <p>Policy SLP22 Cathedral Quarter supports proposals to enhance and integrate the Cathedral Quarter.</p> <p>SLP30 Delivery of Infrastructure</p>

Libraries

9.113. HCC has responsibility for the delivery of library services. There are six libraries in the District: Harpenden Library; London Colney Library; Marshalswick Library; Redbourn Library; St Albans Central Library and Wheathampstead Library.

9.114. Hertfordshire Library Service adopted the ‘Inspiring Libraries’ Strategy in 2014²⁴. This strategy sets out a vision and direction for the library service over a ten years period. The context for library services has changed nationally over the last few years with public sector financial challenges, technological and lifestyle change. The library service needs to respond to these changes to maximise its relevance to customers and contribution to communities. The strategy is underpinned by three principal ambitions: creating community assets, utilising technology for the benefit of residents, and creating libraries as an enhanced gateway to reading, information and wellbeing.

9.115. The Strategy categorises Hertfordshire’s library buildings into three tiers, with central town and city libraries branded as tier one, offering broadest range of services and longest opening hours, down to tier three libraries, which offer self-service access and short opening hours. Within the District, Harpenden and St Albans libraries will be tier one, Marshalswick tier two, and London Colney, Redbourn and Wheathampstead libraries classed as tier three.

9.116. In addition, Hertfordshire County Council secured £700,000 in grant funding from the Department for Communities and Local Government to investigate the co-location of up to four libraries with retained fire stations in small towns and villages including Wheathampstead and Redbourn libraries²⁵. Feasibility studies were undertaken in 2015 and the subsequent report recommended the project proceeds to co-locate the libraries. Further work and consultations on the proposals are on-going.

9.117. Plans are progressing for a major refurbishment to modernise and improve facilities at St Albans Library in 2016/17, using planning obligation funding²⁶.

Impact of Planned Growth

9.118. The increased residential development may place pressure on library services. Increased demand will be accommodated within existing facilities.

9.119. For East Hemel Hempstead Broad Location development library facilities in Hemel Hempstead will be available. The Hemel Hempstead library, which is to be classed as a tier one library, was part of the HCC strategy, is located temporarily in the Hemel Hempstead Civic Centre, pending the development of the new Civic Centre, due to open in 2017.

Library Services	
Lead Agency	<ul style="list-style-type: none"> • HCC
Evidence Base	<ul style="list-style-type: none"> • HCC Inspiring Libraries: A new strategy for Hertfordshire Libraries • HCC Public Health, Localism and Libraries Committee Reports (various) • Cabinet Panel Reports (various)
Existing Provision	There are six libraries in the District
Gaps in Provision	No indicated gaps in provision
Planned Provision	Refurbishment of St Albans Library Planned co-location of Wheathampstead and Redbourn libraries with retained fire stations.
Impact of development proposals	Residents of new development are likely to make use of existing and refurbished library facilities. Increased residential development may place pressure on library services. However, new library facilities will not be required.
Potential for Delivery	New library facilities will not be required. Planning obligation or CIL contributions could be used to support improvements to existing facilities or replacement facilities.
Delivery Mechanisms in Local Plan	Policy SLP7 Community, Sport and Recreational Facilities identifies the need for the expansion of Harpenden Library and the replacement of

	<p>Redbourn Library. The Local Plan will seek to protect existing community facilities, such as libraries.</p> <p>SLP30 Delivery of Infrastructure</p>
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Cemeteries

9.120. In general terms, over the last 10 years there has been an average of about 225 burials per annum in the District. Approximately one third have been cremated, which means there are about 140-150 burials per year, approximately one third of which are in reopened family graves.

9.121. There are three cemeteries in the District:

- Hatfield Road Cemetery, St Albans – some capacity in relation to reclaimed graves. New laws to allow reuse of graves through 'lift and deepen' will potentially increase capacity.
- London Road Cemetery, St Albans – The District Council has extended London Road cemetery to provide capacity for a further 40 years. Part of the additional land is for Muslim burials.
- Westfield Road Cemetery, Harpenden – estimated 25 year capacity

9.122. There are five Churches in the District which carry out churchyard burials. In 2016 an assessment was carried out to determine the future capacity of churchyard burial sites in the District and to identify whether additional land for churchyard burials was required.

- St Leonard's Church, Sandridge - limited capacity – estimated 20 years
- St Mary's Church Redbourn – additional land for burials is being used at Westfield Road
- St Stephens Church, St Albans – estimated 20 year capacity
- St Marks Church, Colney Heath – estimated 5-10 year capacity
- St Helens Church, Wheathampsted – estimated 10 years

9.123. West Herts Crematorium at Garston is run by the West Herts Crematorium Joint Committee comprising of the authorities Three Rivers, Dacorum, Hertsmere, St Albans and Watford.

Impact of Planned Growth

9.124. The need for additional cemetery capacity is estimated on the basis of population increase and mortality rates rather than an increase in residential development. The general UK trend is that people are now living longer than they used, this is particularly the case in St Albans.

9.125. In relation to the growth proposed in the St Albans Strategic Local Plan there are no known requirements for additional cemetery or crematoria capacity.

9.126. Given the significant development at east Hemel Hempstead impacts on facilities in that town will need to be checked as part of the DLP / master planning process.

Cemeteries	
Lead Agency	<ul style="list-style-type: none"> • SADC – Community Services
Evidence Base	<ul style="list-style-type: none"> • Liaison with Community Services and the Council's Cemeteries Manager. • St Albans Parks and Open Spaces Management Plan 2015-2020
Existing Provision	<ul style="list-style-type: none"> • There three Cemeteries and five churchyards in the District.
Gaps in Provision	<p>There are no known existing gaps in provision.</p> <p>There may however be a need to contribute to the maintenance of further closed churchyards transferred to the Council for on-going maintenance. SADC currently maintain 4 closed Churchyards.</p>
Planned Provision	None at present.
Impact of development proposals	The development proposals will result in an increased population. Currently there is sufficient capacity to accommodate this. However, this will be kept under review.
Potential for Delivery	New cemeteries or crematoria improvements could be delivered by seeking developer contributions through planning obligations or CIL or funding from planning obligations.
Delivery Mechanisms in the Local Plan	<p>Policy SLP7 Community, Sport and Recreational Facilities will support the provision of new or expanded cemeteries if evidence suggests there is need.</p> <p>SLP30 Delivery of Infrastructure</p>

Youth Provision

9.127. Youth Connexions Centres offer young people information, advice, guidance and support on areas such as education, work, health / drugs and housing. Youth Connexions 'One Stop Shops' bring together local partners to deliver a wider range of services for young people. There are no 'One Stop Shops' in the District but the St Albans Youth Connexions

Centre located in Catherine Street provides links to wider services. There are 'One Stop Shops' in Hatfield, Hemel Hempstead and Stevenage.

9.128. Youth facilities and projects in the District include:

- Pioneer Youth Centre, St Albans
- Harpenden Youth Project
- St Albans Youth Connexions Centre
- Harpenden Youth Town Council
- St Albans Youth Council
- Wheathampstead Youth Project

9.129. There are also a number of existing skate parks and BMX tracks in the District which cater for older children at Rothamsted Park (Harpenden), Pioneer Youth Club (St Albans) and Oysterfields (St Albans)²⁷. Additionally, the Verulamium Park Management Plan has identified the need for the provision of a skate park in the park²⁸.

Pioneer Youth Centre

9.130. The Pioneer Youth Centre, based in St Albans, operates a varied programme of activities for young people in the District, including sports, arts, drama and music. The centre also offers trips and activities for young people, including the Duke of Edinburgh Awards Scheme.

9.131. The current building is in need of considerable modernisation to ensure the centre is able to meet the wide ranging needs of both the users and activities. At the same time, HCC is seeking to dispose of its land interest at Harpenden Road, St Albans which includes the site on which the Pioneer Youth Centre is located. HCC is considering options for the re-provisioning of the centre, including new facilities either on a new site or retaining the centre on site, as part of the any new developer scheme on the land. Proposals are likely to involve the consolidation of other youth services through shared accommodation with partners such as Youth Connexions and HCC's Health and Community Services²⁹.

Harpenden Youth Project

9.132. Based in a Youth Connexions facility above Harpenden Library on the High Street, the Harpenden Youth Project provides a wide range of activities and is equipped with a dance studio and a youth café. The project's activities are designed by and for young people and include sports, arts, cookery and multi-media activities. The project also provides information for young people on a number of issues including sexual health, relationships, drug education and personal safety. Harpenden Youth Project is open to all young people aged 13-19 and up to 25 for young people with a disability or learning difficulty.

Impact of Planned Growth

9.133. Development proposals will increase the need for, and use of, youth facilities in the future. Existing facilities and the re-provisioning of The Pioneer Youth Centre are likely to be able meet some of this demand. However, play areas and smaller youth facilities (including as part of school joint use, or in community buildings and new open spaces) can also be delivered through new developments.

Cultural Services – Youth Provision	
Lead Agency	<ul style="list-style-type: none"> • HCC Services for Young People • Hertfordshire Youth Connexions • St Albans City and District Council • St Albans and Harpenden Youth Councils • Town and Parish Councils
Evidence Base	<ul style="list-style-type: none"> • St Albans Play and Free Time Strategy (2007)
Existing Provision	<ul style="list-style-type: none"> • Pioneer Youth Centre, St Albans • Harpenden Youth Project • St Albans Youth Connexions Centre • Harpenden Youth Town Council • St Albans Youth Council • Wheathampstead Youth Project • Range of shelters, skate parks and BMX tracks
Gaps in Provision	Required reprovision of existing facilities
Planned Provision	<p>Re-provision of Pioneer Youth Centre, St Albans to facilitate development of existing site and provide better quality facilities. Further examination of options is required, however new provision will involve a consolidation with other youth services, such as Youth Connexions.</p> <p>Portable Youth Shelters are currently being trialled. Town Councils and Parishes are being consulted about plans to install permanent structures.</p>
Impact of development proposals	Development proposals will increase the need for and use of youth facilities in the future.
Potential for Delivery	Play areas and smaller youth facilities can be delivered through new developments. Larger facilities could be partially supported by developer contributions through planning obligations or CIL contributions.
Delivery Mechanisms in the Local Plan	<p>Policy SLP7 Community, Sport and Recreational Facilities recognises the strength of youth organisations across the District but also the need for improved facilities.</p> <p>SLP30 Delivery of Infrastructure</p>

10.0 Green Infrastructure

- 10.1. The Council has assembled a substantial and robust evidence base on the need for green infrastructure improvements in the District and at county level. This includes local open space provision as well as green infrastructure in the wider sense. Green Infrastructure has many environmental, social and economic benefits and its delivery and management is critical to achieving sustainable communities.
- 10.2. The Council has prepared two key documents in relation to Green Infrastructure: the Green Infrastructure Plan and the Green Space Strategy. These documents provide an assessment of existing provision at different spatial scales, consider improvement and enhancement strategies and set a direction for future provision. The IDP address the strategies set out by both documents in the following section.
- 10.3. This section is split into two by spatial scale: The first section deals with large scale strategic green infrastructure which often crosses local authority boundaries; the second focuses on local green spaces, such as parks, allotments and play areas.

Strategic Green Infrastructure

- 10.4. The District and County Green Infrastructure Plans identify further work which will be needed in future to provide and manage green infrastructure³⁰. The Green Infrastructure Plans:
 - Provide an overview of existing green infrastructure assets;
 - Set out an assessment of the ability of green infrastructure to provide multiple environmental, social and in some cases economic functions;
 - Consider opportunities for enhancement and creation of green infrastructure;
 - Outline a series of potential projects to deliver multiple functions and benefits, and
 - Provide advice on taking green infrastructure proposals forward through spatial planning and practical delivery.
- 10.5. St Albans District has a rich green infrastructure resource centred on the principal river valleys of the Ver, Colne and Lea, in addition to a varied mosaic of landscape and habitat types, such as heathland, ancient and plantation woodland and farmland.
- 10.6. As part of the Green Infrastructure Plan process, consultants were engaged to carry out contextual studies, map analysis and understand the existing supply and need for Green Infrastructure in the district. They then

formulated proposals including a strategic network of spatial and non-spatial projects including a guide to their future delivery.

10.7. The consultants identified a vision to:

- Conserve and enhance the varied landscapes, historic sites and riverine environments within the District
- To improve and create enhanced connectivity of green infrastructure both in towns and countryside.
- To recognise and value the District's existing heritage and cultural pattern and to improve opportunities in the landscape for health, quality of life and education.

10.8. Several action zones and green infrastructure types were then identified arriving at five key projects:

- Project 1 The enhancement of commons, grassland and heathland
- Project 2. The connection of a St Albans radial greenway.
- Project 3. The River Valleys conservation and enhancement.
- Project 4. St Albans approaches and urban greening.
- Project 5 Green Hertfordshire Interactive map.

10.9. There are several key on-going projects that are identified in the Green Infrastructure Plan including:

Watling Chase Community Forest

10.10. Watling Chase Community Forest (WCCF) was established in 1991 as one of a programme of 12 Community Forests in England. It is a long-term project to improve the countryside around the towns of South Hertfordshire and North London. It covers an area of 72 square miles to the north of London, including land in the southern part of the District. . Implementation is made up of area wide and individual projects. This includes the aim to increase woodland cover to 30% by 2030 through schemes to link and expand areas of native woodland and create new wet woodland. There is also a Rights of Way Improvement Plan looking at severance repair, upgrade to routes and links to neighbouring districts.

10.11. The vision for WCCF, described in the Forest Plan^{31 32}, is to see much of the area under positive and appropriate management by 2025. The initiative focuses on environmentally led activities for the benefit of all that live, work and play in the area. The vision in the Watling Chase Plan aims to achieve widespread landscape improvement, tree planting and increased opportunities for nature conservation, leisure and recreational access via positive and appropriate management.

10.12. The Forest objectives are developed and coordinated by the Countryside Management Service and the Groundwork Trust on behalf of Hertfordshire County Council, Welwyn Hatfield Council, Hertsmere Borough Council and St Albans City & District Council. The WCCF objectives are:

- Create new high quality woodland that provides significant landscape, heritage and/or biodiversity gains ;
- Facilitate good management of existing woodland;
- Create and enhance good quality access networks for leisure, recreation and/or commuting;
- Secure involvement in WCCF from a wide range of local communities, especially those socially excluded from their environment;
- Maximise opportunities to address climate change issues through WCCF activities;
- Maximise financial and in-kind investment from local businesses and external sources to deliver all WCCF objectives; and
- Maximise environmental benefits from planning applications/development proposals to enable delivery of WCCF objectives.

10.13. The Council will support and encourage WCCF projects and funding opportunities, particularly as a result of new development. The Council will also welcome detailed proposals for the purposes of landscape conservation, recreation, nature conservation and timber production.

Heartwood Forest

10.14. Heartwood Forest is a large-scale reforestation project that will see over 600,000 new trees planted over 347 hectares in 12 years on Green Belt land between Sandridge and Wheathampstead. The Forest is being developed by the Woodland Trust and planting will be completed in 2017, all carried out by volunteers. It is already a key part of the District's Green Infrastructure Network. New footpaths, cycle paths and bridleways have been created, linking in with surrounding areas. There will also be a community orchard, new wildflower meadows, an arboretum of native tree species and open spaces.

10.15. Once complete, Heartwood Forest will be the largest new native forest in England. The site will become broadleaved woodland and a natural resource which can support more species than any other land habitat. It is also part of the wider common, grassland and heathland enhancement projects supported in both the County and District Green Infrastructure Plans. Numbers of visitors have greatly exceeded expectations in the early years, demonstrating a high level of need for strategic green infrastructure³³.

Ellenbrook Country Park

10.16. Ellenbrook is a new country park being created on part of the former de Havilland aerodrome site east of Smallford, near Hatfield. The country park was devised and is being delivered through cross-boundary co-operation between this Council and Welwyn & Hatfield Council, primarily

through a planning agreement related to a major urban extension of Hatfield that has occurred in over the last 10 years.

10.17. The plans for the country park include hay meadows, woodland, cattle grazing, footpaths and a bridleway. Final plans are now under review as a result of new proposals for mineral extraction and possible further urban development in the Welwyn Hatfield Local Plan. A more comprehensive country park plan is being developed to include definitive public access and informal recreation opportunities. The conservation, enhancement and management of existing grassland and ancient woodland will be included alongside the creation of new lakes, woodlands and ecological habitats.

10.18. London Colney / Park Street Country Park (Strategic Rail Freight Site) Consent was granted for the development of the Strategic Railfreight Interchange in 2015 which included the provision of a new country park in the south of the district which will provide further opportunity to deliver the objectives of the Green Infrastructure Strategy.

Herts Ecological Networks Project.

10.19. The Herts Ecological Networks Report³⁴ identifies priorities and opportunities to connect, restore and create high priority habitats in order to establish resilient local ecological networks at a landscape scale within the District, at county level and beyond. The ecological networks mapping data will have a key role in informing the planning and development of new green infrastructure.

St Albans Rights of Way Improvement Plan (ROWIP)

10.20. The St Albans ROWIP is a living document and is part of the Local Transport Plan (LTP3)³⁵. It identifies improvements to the existing rights of way network and aims to improve accessibility for all users by addressing severance, supporting sustainable transport and enhancing provision for recreation and leisure activities. The implementation of the ROWIP is key to the development of a healthy multifunctional green infrastructure network.

River Corridors

10.21. The Green Infrastructure project aims to enhance the riparian character and wetland habitat connections while forming attractive, usable green links, along the District's river valleys (Ver, Lea and Colne). Improvements will also help create positive approaches to towns and villages in the District. Enhancements will deliver improved & continuous access along the network of rivers linking with projects in adjacent Districts & Counties. The Lea Valley Catchment Project, Ver Valley and Chalk Streams groups are also continuing to enhance and manage the river corridors.

10.22. Proposals include:

- Conservation & enhancement of the distinctive wetland environment;
- Positive approaches to St Albans & Harpenden (vantage points to appreciate cultural heritage);
- Significant opportunity to enhance wetland character near pinch points (Harpenden & Wheathampstead);
- Potential to create multi-functional spaces serving a multitude of purposes including accessible open space, habitat links, recreational corridors & climate change & flood mitigation functions;
- Sustainably managed biomass/wet woodland creation.

Commons, Grassland and Heathland Enhancements

- 10.23. The District includes ten areas of common land of varying size and character, spread across urban and rural areas. Managed for public access, they also represent an important natural resource and include semi-natural grassland, heathland, woodland and wetland priority habitats. Several are designated Local Nature Reserves, and Bricket Wood Common is a Site of Special Scientific Interest (SSSI).
- 10.24. The Green Infrastructure Plan recognises the potential of the commons to contribute to the development and enhancement of multifunctional green infrastructure and ecological networks. A key factor in this is the enhancement, expansion and linking of fragmented habitats, alongside provision for other green infrastructure functions and ecosystem services.
- 10.25. A core area for heathland restoration and expansion is identified in the Green Infrastructure Plan as the Harpenden-Wheathampstead Complex in the north of the District (based on Nomansland and Gustard Wood commons with the possibility of creating heathland type habitats on additional agricultural or forestry land to enlarge the area). Heartwood Forest adjoins Nomansland Common and has the potential to contribute to this objective, in addition to the creation of new woodland.
- 10.26. A second core area for grassland and heathland habitat restoration and expansion is identified as the Upper Colne Valley in the south of the District. This is based on Colney Heath and Bricket Wood commons and the potential for additional benefits through the restoration of minerals sites.
- 10.27. Commons are covered under the St Albans Parks and Open Spaces Management Plan produced at five year intervals by the District Council. Further details of on-going and planned projects at individual commons can be found in the suite of open space management and actions plans which support the overarching Parks and Open Spaces Management Plan (see source I).

Impact of Planned Growth

10.28. Development proposals contained in the Local Plan will result in increased demand for and the use of green infrastructure. The Broad Location sites have the potential to help deliver substantial green infrastructure benefits of local, district and county level importance.

10.29. Strategic Green infrastructure provision will be required as part of the East Hemel Hempstead broad location. Further detail will be outlined in the Local Green Infrastructure section of this plan.

10.30. Further details of can be seen in the appendices which provide some additional information on work currently underway on detailed planning for this provision

Strategic Green Infrastructure	
Lead Agencies	<ul style="list-style-type: none"> • St Albans City & District Council • Hertfordshire County Council • Town and Parish Councils • Local Nature Partnership (LNP) and members voluntary bodies
Evidence Base	<ul style="list-style-type: none"> • St Albans District Green Infrastructure Plan 2011 • St Albans District Green Space Technical Report (forthcoming) • Hertfordshire Strategic Green Infrastructure Plan 2011 (incorporating the Green Arc Area) • St Albans Parks and Open Spaces Management Plan 2015-2020 • SADC open space management and action plans (various) <p>Other important evidence base includes</p> <ul style="list-style-type: none"> • Hertfordshire's Ecological Networks Report 2013 • Landscape Character Assessment, Evaluation and Guidelines for Northern and Southern Hertfordshire (both 2001) • Hertfordshire Biodiversity Action Plan 2001 • St Albans Rights of Way Improvement Plan • Watling Chase Community Forest Plan Review 2001 • St Albans City and District Urban Wildlife Survey 2001 • Habitat Survey for St Albans City and District – A Nature Conservation Reference Guide 1998
Existing Provision	Existing Green Infrastructure Network
Gaps in Provision	Levels of provision in relation to national standards
Planned Provision	Details are set out in Green Infrastructure Plans. Planned provision includes:

	<ul style="list-style-type: none"> • Watling Chase Community Forest Projects • Heartwood Forest • River Corridor Improvements • Ellenbrook Country Park • Strategic Rail Freight Country Park • Rights of Way Improvement Plan • Improving Green Approaches to Settlements
Impact of Development Proposals	<p>Development proposals will result in increased demand for and the use of green infrastructure.</p> <p>Strategic Green infrastructure provision will be required as part of the East Hemel Hempstead broad location.</p>
Potential for Delivery	<p>Delivery alongside identified Local Plan development sites delivered by developers and/or via CIL from developments to deliver District and County Green Infrastructure Plan proposals as well as other funding mechanisms.</p> <p>The existing SPG for WCCF 'A Guide for Landowners, Developers and Users' is adopted and a new SPD is to be prepared to guide and secure the development of GI in the district and wider County.</p> <p>Management will be critical and it is important that appropriate arrangements are agreed upon at an early stage.</p> <p>Work in partnership with LNP, HCC, HLGIG, local organisations and interest groups to successfully bid for available funds from Government and other organisations.</p>
Delivery Mechanisms in the Local Plan	<p>Polices SLP26 Natural Environment and SLP27 Green Infrastructure set out the importance of natural spaces, environments and green infrastructure across the District. SLP27 requires the preservation, enhancement and creation of green spaces throughout the District.</p> <p>Strategic Green Infrastructure provision will be required as part of the East Hemel Hempstead broad location policies SLP13a and SLP13b</p> <p>SLP30 Delivery of Infrastructure</p>

Local Green Infrastructure

- 10.31. Green space is multi-functional. It enhances the amenity of urban areas; it provides opportunities for formal and informal recreation; it supports wildlife; and it performs a range of environmental functions. There are many different types of green spaces including playing fields, allotments, amenity green space, natural green space, parks and gardens, green corridors, children's play and teenager's provision.
- 10.32. The St Albans City and District Council are fortunate to own and manage a significant number of the parks and open spaces in the District. The Council has produced a management framework to guide the maintenance and development of these sites. The Parks and Open Spaces Management Plan covers the policies and contexts under which all of the sites are managed and sets out the approach for the management and development of each site³⁶.
- 10.33. At a strategic level, the District Council's has also produced an overarching strategy document for green infrastructure. The Green Space Strategy³⁷ provides an assessment of existing provision at different spatial scales, consider improvement and enhancement strategies and set a direction for future provision. The strategy is a comprehensive document that fulfils the following requirements:
- Reviews the amount, distribution and quality of existing provision;
 - Identifies where there is a need for more or better provision and the types of enhancements which will benefit existing facilities and spaces most;
 - Suggests appropriate provision standards for the District Council to use as part of the planning process;
 - Suggests how to tackle the key issues relating to green space, sport and recreation provision facing the Council and its partners.
- 10.34. The Council has prepared a Green Space Technical Report³⁸ that draws on the Green Spaces Strategy to assist policy development for the Detailed Local Plan (DLP).
- 10.35. This section highlights the key points of the Green Spaces Strategy and Technical Report for the different types of green spaces provision in relation to provision in new development. The Technical report includes the local standards applicable to each of the types of space.
- 10.36. The analysis provides standards that are applicable to all major new development in the Plan. However, it is noted that for major development at Hemel Hempstead new provision will need to be planned in detail through the DLP and master planning process to take full account of the existing provision and the wider approach to open space in Hemel Hempstead.

Allotments

- 10.37. Allotments are a valued and important asset to the St Albans City & District, providing a wide range of benefits to both communities and the environment.
- 10.38. The Council provides, manages and maintains approximately 775 plots spread across 11 sites within the St Albans Area. A further 29 allotment sites, providing approximately 1065 plots, are located in the parishes of London Colney, Harpenden, Colney Heath, Wheathampstead, Redbourn & St Stephens. An additional 2 sites totalling 102 plots are managed privately³⁹.
- 10.39. There is a waiting list of over 140 people for the Council operated sites. This rise in demand has been attributed to an increase in interest in gardening and growing produce generally, as well as a diversification of those interested in becoming allotment holders (particularly by women and younger individuals). The type of demand is also changing with more interest in smaller plots and additional onsite facilities. Traditionally plots have been 10 poles (around 253m²) but many have been subdivided into 5 or even 2.5 pole plots.
- 10.40. The 2014 St Albans City and District Council Allotment Strategy sets out actions to accommodate the current waiting list:
- investigate the demand for smaller plot sizes, and provide if required which will reduce waiting list times
 - Review the current level of allotment provision and look at the possibility of opening new allotment sites
- 10.41. New development will be expected to make contributions towards the provision of allotments. The Green Space Technical Report suggests a quantity standard of 4.5 square metres per person and an accessibility standard of 600 metres based on the distance residents indicated they were willing to travel to access an allotment. Provision standards for new development will be set out in the DLP. Requirements are dependent on the location of development and deficiencies in that area.

Amenity Green Space

- 10.42. This includes informal recreation spaces, green spaces in and around housing, domestic gardens and village greens. Surveys in the District have found that the distribution of amenity green space is generally good, but some areas are of poorer quality or value³⁷. There are also areas of the City and District without ready access to local spaces. However, the main priority should generally be to harness new development to make essential new provision alongside enhancement of existing spaces.
- 10.43. Amenity green space, natural green space and parks and gardens are considered as multi-functional green space. The specific form and mix of provision within a new development will be negotiated in relation to the considerations in this policy and local green space deficiencies. Where

possible, all green space should seek to be multi-functional and provide for various types of users and enjoyment.

- 10.44. Where possible creation of new green space through development or other opportunities will be directed at meeting identified deficiencies and needs as identified in the Green Space Strategy.

Natural and Semi Natural Green space

- 10.45. The definition of natural green space includes woodlands, urban forestry, scrub, grasslands, wetlands, open and running water, wastelands and derelict open land and rock areas. It is important to note however that the distinction between natural green space and amenity green space is sometimes unclear.
- 10.46. The Green Spaces Strategy found that the District has some excellent natural green spaces but more could be done to make them welcoming and inform visitors about nature conservation. Since the strategy was written, significant work has been undertaken to improve the signage and information available in green spaces. However, a number of improvements are still required including better parking and disabled provision, and measures to ensure better control of dogs in natural and semi natural green spaces.

Parks and Gardens

- 10.47. There are 17 parks and public gardens across the District: three gardens and three parks in St Albans, two parks in Harpenden, and one park in Redbourn, one park on the border of Colney Heath and St Albans and one park in Chiswell Green. These green spaces range from those such as Verulamium Park in St Albans which attract visitors from across the District and beyond, to smaller green spaces which primarily serve the immediate locality.
- 10.48. As is the case with natural green space, the presence of parks and gardens have the ability to decrease the need for amenity green space. However, the Green Space Strategy found that parks and garden space is not uniformly distributed and some parts of the District have little or no park or garden provision such as London Colney, Sandridge and Wheathampstead.
- 10.49. The Green Space Strategy found the need for enhancement works in parks and gardens across the District. As with indicated above, significant work has been undertaken over recent years to improve the signage and information available in green spaces. However, additional improvements highlighted by the strategy include:
- Increased or improved toilet facilities;
 - Lighting for those parks open at night;
 - Increased parking;
 - Improved paths;

- Enhanced play and educational value;

Play Pitches

- 10.50. There are over 270 pitches across the District, which includes football pitches, mini soccer pitches, cricket pitches, rugby pitches, grass hockey pitches, lacrosse pitches, and Synthetic Turf Pitches (STPs). Playing pitches have a dual purpose as they function as both leisure facility and green space provision⁴⁰.
- 10.51. The Green Space Technical Report suggests there has been a deficit of playing pitches in St Albans, Harpenden and Colney Heath / London Colney, particularly in junior football pitches. To an extent these have been addressed by new public all weather provision in Cotlandswick, Rothamsted and Wheathampstead. However, the Green Space Technical Report suggests further improvements to existing facilities may be required to allow more intensive use of existing provisions. Opportunities to provide new facilities for private, especially junior, clubs through major new development should be considered.

Children's Play Areas

- 10.52. There are 87 play areas across the District. These range from small local play parks with one or two pieces of equipment to much larger facilities with wide catchments areas such as those at Rothamsted, Verulamium and Clarence Parks.
- 10.53. Many of these parks are in need of refurbishment. Much of the equipment is old and is in need of replacement³⁷. Surveys will be undertaken to identify priority projects. Refurbishment and replacement of facilities will be an on-going project across the plan period. Key improvements needed are:
- Additional play equipment or replacement of some existing equipment;
 - Enhanced accessibility;
 - Enhanced safety;
 - Better facilities for parents and carers;
 - Enhanced maintenance;
 - Better signage.
- 10.54. The approach suggested in the Green Spaces Strategy is based on a mix of fewer, but significantly larger and more stimulating, equipped play areas at key locations such as parks and local green spaces. Existing play equipment in the District has traditionally been quite formulaic in nature. It is proposed that redeveloped and new spaces should be designed with rocks, logs, and other features that stimulate children's imagination and promote and facilitate "natural play".

- 10.55. In terms of new development, the Council is keen to move away from the inclusion of smaller, less equipped spaces introduced as part of new residential areas. Instead there is an emphasis placed on contributions to improve and extend the existing large and better served play spaces.

Teenage Provision

- 10.56. Teenage facilities are defined as aerial runways, ball courts, BMX tracks, shelters, skateboard areas, and similar open access facilities. There are a number of skate parks and BMX tracks in the District including those at Rothamsted Park (Harpenden), Pioneer Youth Club (St Albans) and Oysterfields (St Albans).
- 10.57. An initiative currently being trialled is the Portable Youth Shelter which provides a space for young people to meet and take shelter when out in the open. The shelter has been installed at different community spaces in the District and usage by young people, park users and residents is being monitored. Town Councils and Parishes are being consulted about whether to install permanent structures⁴¹. Additionally, the Verulamium Park Management Plan has identified the need for the provision of a skate park in the park²⁸.
- 10.58. There is a real need to work more closely with teenagers to provide them with accessible, attractive facilities and to work with local communities to ensure that groups of teenagers are not seen as a possible threat. Further information is contained in the Youth Provision section.

Impact of Planned Growth

- 10.59. The development strategy contained in the Local Plan will result in increased demand for and use of green infrastructure and local green spaces. To meet this increased demand all residential developments of more than 30 dwellings will be expected to make on-site provision to this standard. Indicative green space standards for new developments have been set out below (to be developed through the DLP).
- 10.60. In terms of the Broad Location, all four sites will be required to provide green space as part of the development strategy. Initial work undertaken in conjunction with the landowners and developers of the Broad Location sites suggest that provision may be addressed as follows:

East Hemel Hempstead (north and south)

Initial work suggests that 40% of the site could remain undeveloped and publicly accessible open space. This would in addition to formal provision of park and garden spaces, recreation areas, allotment/community orchard space, and children's play areas.

North West Harpenden

Initial work suggests provision onsite could include significant public open space and children's play facilities of around 5.5 hectares, alongside a

community orchard and allotment space which would include associated amenity facilities and parking/servicing provision.

East St Albans

The development of this site would require the inclusion of green space provision. Initial work suggests that proposals will include areas of residential amenity space, open public green spaces and shared allotments.

10.61. Further details of can be seen in the appendices which provide some additional information on work currently underway on detailed planning for this provision

Local Green Infrastructure	
Lead Agencies	<ul style="list-style-type: none"> • SADC • Town and Parish Councils • Local Nature Partnership (LNP) and member voluntary bodies
Evidence Base	<ul style="list-style-type: none"> • St Albans District Green Infrastructure Plan 2011 Land Use Consultants • SADC Green Spaces Strategy Kit Campbell Associates • St Albans Parks and Open Spaces Management Plan 2015-2020 • SADC open space management and action plans (various) • SADC Playing Pitches Strategy • St Albans District Green Space Technical Report • SADC Allotment Strategy 2014-2019 <p>Further important elements of the evidence base include:</p> <ul style="list-style-type: none"> • Hertfordshire Biodiversity Action Plan 2001 • Verulamium Park Masterplan 2008 • St Albans City and District Urban Wildlife Survey 2001 • Habitat Survey for St Albans City and District – A Nature Conservation Reference Guide 1998
Existing Provision	Extensive network of open spaces of various kinds, largely meeting local standards. This includes playing fields, allotments, amenity green space, natural green space, parks and gardens, green corridors, children's play and teenager provision.
Gaps in Provision	Some deficiencies exist, particularly in St Albans, London Colney and North Harpenden.
Planned Provision	On-going enhancement works in various areas, particularly around accessibility, signage and quality of green spaces and plat space across the district.

Impact of Development Proposals	<p>Development proposals contained in the Local Plan will result in increased demand for and use of green infrastructure and local green spaces.</p> <p>New green space will be required in development of the broad locations. Indicative standards for new development are (to be updated in the DLP):</p> <ul style="list-style-type: none"> • Allotments – 4m²/person; • Amenity green spaces – 15 sqm/person; • Urban natural and semi natural green spaces – 5m²/person; • District wide natural green spaces – 22m²/person; • District Park – 2.2m²/person; • Local parks – 8.2m²/person • Children and young people 2m²/person; <p>All residential developments of more than 30 dwellings will be expected to make on-site provision to this standard. In some cases, it may be acceptable to commute this requirement in the form of a financial payment to support maintenance and improvement of an existing green space.</p> <p>The specific form and mix of provision within a new development will be negotiated in relation to existing and new deficiencies identified, e.g. In St Albans and London Colney the creation of new, multi-functional green space is considered essential if new housing developments are proposed.</p> <p>New green space in the Broad Locations (SLP 13) should address deficiencies identified.</p>
Potential for Delivery	<p>Provision alongside identified Local Plan development sites delivered by developers and/or via developer contributions. From smaller sites CIL or appropriate developer contributions will be sought.</p> <p>Management will be critical and it is important that appropriate arrangements are agreed upon at an early stage.</p> <p>Work in partnership with HCC, local organisations and interest groups to successfully bid for available funds from Government and other organisations.</p>
Delivery Mechanisms in the Local Plan	<p>Polices SLP26 Natural Environment and SLP27 Green Infrastructure set out the importance of natural spaces, environments and green infrastructure across the District. SLP27 will require the preservation, enhancement and creation of green spaces throughout the District.</p> <p>New green space will be required in development of</p>

	the broad locations (SLP13a-d). SLP30 Delivery of Infrastructure
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11.0 Physical Infrastructure

Transport

- 11.1. Hertfordshire County Council (HCC) in its role as the local transport authority is responsible for producing transport strategies. A number of these strategies are relevant to Local Plan work and the IDP.

Local Transport Plan

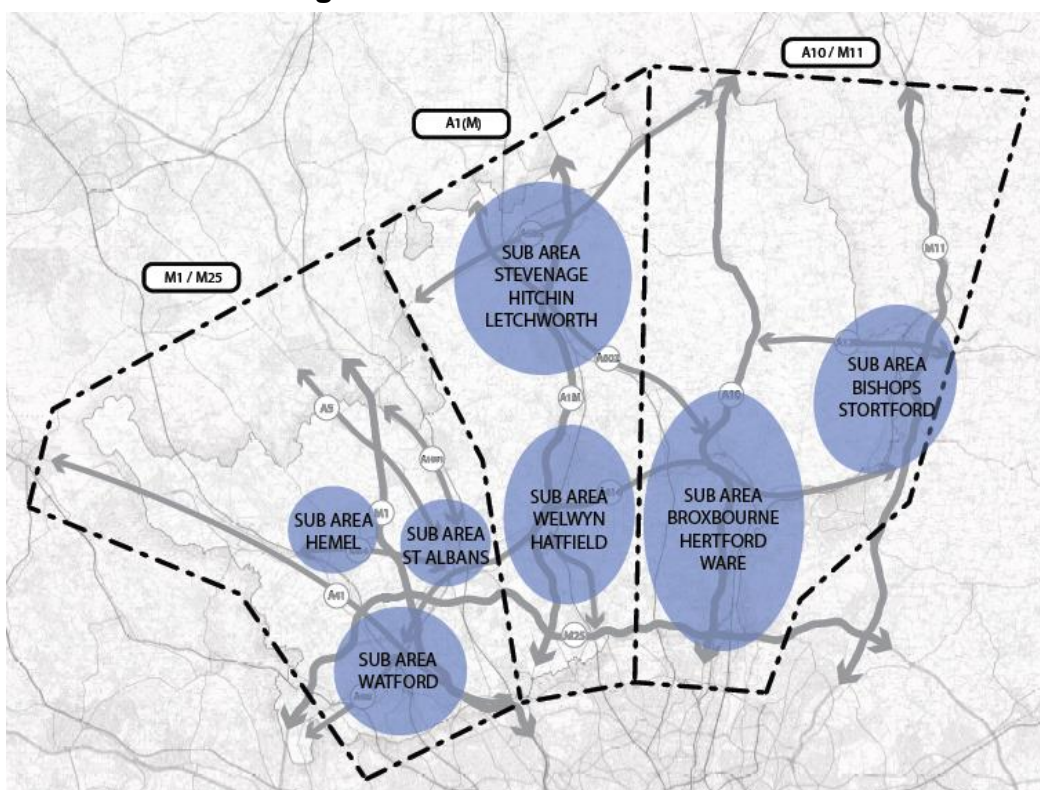
- 11.2. The County adopted its third Local Transport Plan (LTP3)⁴² in 2011. The Local Transport Plan is the statutory document setting out Hertfordshire County Council vision and strategy for the long term development of transport in the County. The Plan provides the framework for transport to support the economic and social development of Hertfordshire over a 20 year period. The LTP3 promotes effective use of the existing network, the introduction of targeted schemes where improvements are required, and the promotion of sustainable travel to reduce car use.
- 11.3. LTP3 is supported by a number of documents that provide strategies for specific areas of transport in Hertfordshire, contributing to the overall goals. The supporting strategy documents relevant to this District include:
- Active Travel Strategy
 - Bus Strategy
 - Intalink Strategy (covers multi modal public transport use and interchange)
 - Intelligent Transport Systems (ITS) Strategy
 - Inter-Urban Route Strategy
 - Rail Strategy
 - Rights of Way Improvement Plan
 - Road Safety Strategy
 - Rural Transport Strategy
 - Speed Management Strategy
- 11.4. In light of recent changes in the local and national transport and economic /spatial planning context, HCC is working on a new spatial 'Transport Vision for Hertfordshire'. This vision will feed into the forthcoming LTP4 which will present a strategy for the long term development of transport in the County to 2050. The principal aim of the Transport Vision for Hertfordshire is to ensure that the transport network is able to support and unlock growth in the county, looking at the accessibility, connectivity, capacity and quality of the network⁴³. HCC is currently working on the third stage of the vision process and there will be public consultation on the proposed content of the new LTP4 in the summer of 2016. The outputs of this plan will be considered alongside

implementation of the SLP through the DLP and masterplanning. Further details on the vision as well as updates on the progression of LTP4 can be found on the HCC Local Transport Plan Live website (see source J).

Urban Transport Plans & Growth and Transport Plans

- 11.5. HCC has prepared Urban Transport Plans (UTPs) covering St Albans (main area of City), South St Albans and Harpenden to address the detail of local transport requirements⁴⁴. These set out locally specific transport issues and explore potential improvements, with an emphasis on sustainable transport modes and improving highway safety.
- 11.6. HCC is currently developing Growth and Transport Plans (GTP) which will replace the UTPs. GTPs will cover wider graphical areas and be broadly aligned to where growth is predicted to occur. SADC will be included in the South West Hertfordshire Growth and Transport Plan. The SW Hertfordshire area covers the M1/ M25 growth corridor and includes the administrative areas of Dacorum Borough Council, St Albans City and District Council, Hertsmere Borough Council and Watford District Council. A map of the area is shown below.

Figure 2: M1/M25 Growth Corridor



*source: HCC

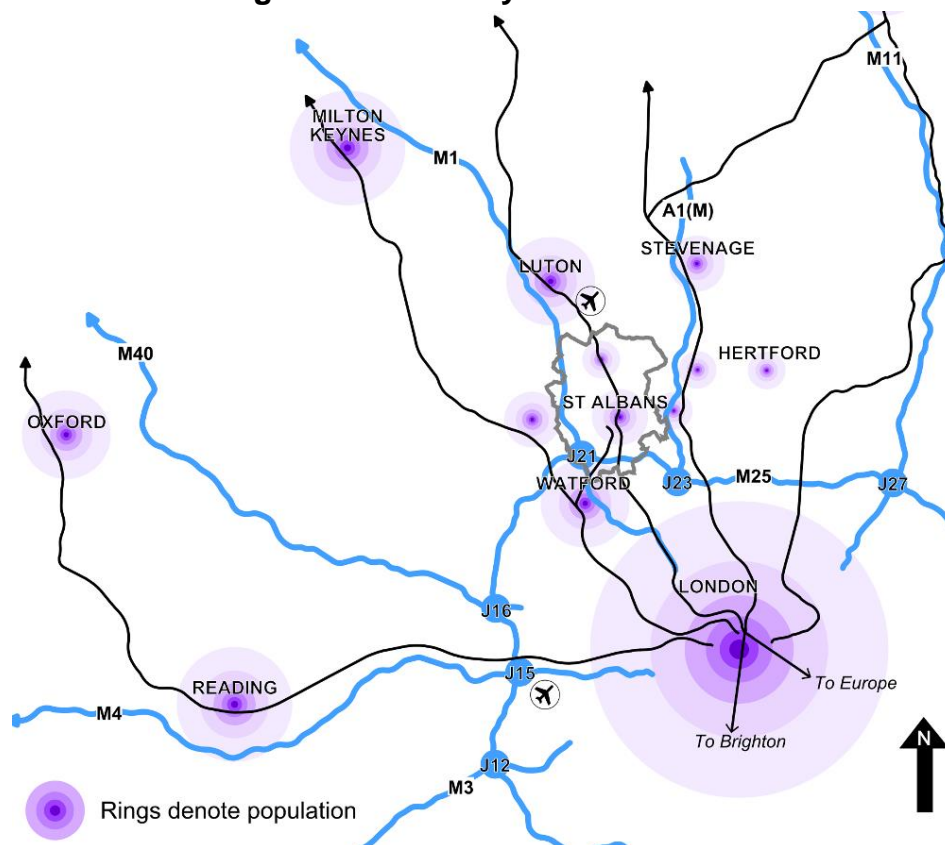
- 11.7. The purpose of the GTPs will be to apply Local Transport Plan policies and objectives to a growth-focused area and identify packages of schemes and actions required to deliver the planned growth. Evidence packs are currently being set up for each area and the South West Hertfordshire GTP is planned to go out for consultation in early 2017. This emphasises a new, clear, focus by HCC on the transport infrastructure

measures needed to deliver growth proposals arising from Local Plans across Hertfordshire.

Road Network

- 11.8. The road network in Hertfordshire is dominated by the north-south routes with major roads running through the county as part of the national transport system linking London to the rest of the country. Traffic levels are high with a complex movement pattern both within the County and across the borders. The M1 runs through the west of the St Albans District and the A1(M) motorway runs immediately to the east. The M25 provides the London orbital east-west route across the south of the District.
- 11.9. Throughout the network congestion at peak times is a major issue. At the county level, daily flow rates on the motorways and trunk roads are over twice the national average for similar standard roads. Due to the historic road pattern, the District, and particularly in St Albans, suffers from traffic congestion especially during peak hours and when there is congestion on the M1 and M25.

Figure 3: Motorway Road Network



Strategic Road Network

- 11.10. Highways England operates, maintains and improves motorways and major A roads in England and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such Highways England works to ensure that it is

managed in the public interest, both in respect of current activities and needs as well as its long-term operation and integrity. In the District area the SRN is the M1, M25 and A1(M).

- 11.11. Highways England has a number of projects underway in the County area. Work is on-going to create a network of smart motorways, known as the 'Smart Spine', using Active Traffic Management (ATM) technology to manage traffic flows and increase capacity. The Smart Spine will include the M1 from London to Leeds. Parts of the M1 and M25 in Hertfordshire have already been converted to smart motorway roads. While the next phases of scheme will be delivered outside of the County, outcomes should deliver journey time reliability improvements to the M1 in Hertfordshire.
- 11.12. Highways England is also planning to improve the reliability of journeys on the A1(M) through the introduction of smart motorway between junctions 6-8, funded through the Roads Investment Strategy scheme. In addition, work has recently been completed to widen the M25 to four lanes between junctions 16 and 23 and between junctions 27 and 30.

Local Road Network

- 11.13. The local highways network is managed by Hertfordshire County Council (HCC). As part of its role as local transport authority HCC is responsible for producing transport strategies for the road network in the county to support the Local Transport Plan.
- 11.14. The Inter-Urban Route Strategy (IURS) was published in 2013 and provides a strategy for a series of key corridors linking the urban centres within the County and across the borders to neighbouring authorities⁴⁵. The IURS identifies congestion issues and potential interventions across the key highway corridors. Two of these are directly related to St Albans District. These are the A405/A1081 Watford –St Albans – Luton and the A414 Hemel Hempstead to Harlow. Both these corridors suffer from congestion and are key commuter routes. Potential major transport schemes for the District area include:
- Bus priority along Hatfield Road A1057 between Hatfield, St Albans City Station and St Albans Abbey Station
 - Maylands Business transport hub with improved bus facilities and networks serving the Business Park, Hemel Hempstead town centre and St Albans city centre and stations in both towns
 - Potential for Transport hub at junction of M1 Junction 10A / A1081 which could provide park and ride facilities (destination of park and ride dependant on further analysis work)
 - Parallel walking and cycling route along all bus ways, including investigation of potential for linked routes near Abbey Line between St Albans and Watford

Further work will be undertaken to identify which routes and interventions identified in the strategy will be prioritised.

- 11.15. A key priority of LTP3 is to reduce traffic congestion and the potential of using Intelligent Transport Systems (ITS) has been investigated⁴⁶. Using traffic data, advanced modelling and the provision of real time information, traffic can be re-routed and junction signalling optimised to maximise the efficient use of the highway network. Further details are available in LTP3⁴¹ and the HCC Intalink Strategy⁴⁷.
- 11.16. In conjunction with HCC, the Council is looking to introduce a range of city centre public realm enhancements and traffic management initiatives as part of the package to improve the public realm in St Albans City centre. Such initiatives include traffic restraint and improved conditions for bus use, pedestrians and cyclists in St Peter's Street and surrounding streets. Feasibility work is on-going.

County Wide Traffic Model (COMET)

- 11.17. Hertfordshire County Council has been developing a County Wide Traffic Model (COMET) which will enable testing of the cumulative impact of development across the County.
- 11.18. This exercise will enable HCC to identify the locations requiring mitigation and will provide the platform to test further interventions. The COMET model will also be available for local authorities' use and for developers to commission their own standalone tests. The first run of the future year (2031) version of the COMET model has been completed and relevant findings are now being made available. The Council has commissioned additional interpretation work to assist in strategic assessment of the transport infrastructure needs arising from the SLP proposals. This will inform DLP and Master planning work. Further details of this COMET modelling project are included in the appendices to the IDP.

Impact of Planned Growth

- 11.19. The SLP Development Strategy is expected to result in some increased pressure on parts of the strategic and local highway network. Discussions with Highways England suggest that the proposed growth could generate increases in journeys between Junctions 7 and 8 of the M1, A1(M) Junctions 3 and 4, M1 Junction 9 and M25 J21a.
- 11.20. Increased stress on the highway network is predicted as a result of general growth pressures, particularly in St Albans City centre, at key junctions on the main roads into St Albans and in Harpenden town centre. Although this is unlikely to result in the need for major new transport infrastructure, some road improvement measures, such as junction improvements, will be desirable. These will be complemented by a range of sustainable movement and public realm enhancements and traffic management measures.

11.21. Some transport infrastructure requirements will arise specifically from SLP proposed development at the Broad Locations. To support the Development Strategy outlined in the SLP, St Albans City and District Council has been working with HCC as well as landowners and developers to develop transport assessment and explore intervention options for the Broad Locations. Transport assessments, testing and modelling for the Broad Locations is on-going and the outcomes will be fed into the DLP and master planning process. The following sections outline the outcomes of investigative work to date. Further details can be seen in the appendices.

East Hemel Hempstead (north and south combined)

11.22. The development of the East Hemel Hempstead site will necessitate major strategic and local road network improvements. Over the medium to long term, there is a need to complete the significant improvement works along the Maylands Growth Corridor (formally known as the Hemel Hempstead North-East Relief Road). This work will relieve congestion in and around the Maylands Business Park and facilitate development in east Hemel Hempstead and on the Spencer's Park site, both within this District and in Dacorum.

11.23. The Maylands Growth Corridor Study is a project undertaken by the Council in conjunction with Hertfordshire Local Enterprise Partnership (LEP), HCC and Dacorum Borough Council, with specialist consultancy provided by AECOM. The study has identified a package of key transport infrastructure scheme concepts that, in combination, aim to improve existing traffic conditions in the area. In conjunction with developer-led measures within their schemes, this will facilitate planned new development.

11.24. The study is exploring two major road network improvements options with a particular focus on highway connectivity and reducing traffic congestion:

- A414 Breakspear Way/Green Lane Junction Improvement:
This project involves improvements in the vicinity of M1 Junction 8 and the A414 Breakspear Way – Green Lane roundabout. Out of eight schemes tested, three are to be taken forward for further study. Options include a reconfigured M1 junction 8 with new Maylands western gateway access to the north, a new large lozenge signalised junction with access links north and south, and a new compact grade-separated junction with northern and southern roundabouts on Green Lane. Further assessment is planned to allow selection of the most appropriate scheme.
- East Hemel Hempstead North-South Spine Road:
This project involves the creation of a new north-south spine road, utilising part of the existing Green Lane alignment, and linking the B487 Redbourn Road with the A414 and the A4147. Forthcoming masterplanning exercises to be carried out by the Crown Estate and local authorities will help define the exact alignment and form of

the spine road. However, conceptually, it is understood that a link road of some form will be provided between the B487, A414 and A4147.

- 11.25. A number of other potential transport schemes have also been identified. These comprise interventions to improve local traffic flows and encourage modal shift to walking, cycling and public transport (including improved bus facilities and services, the potential conversion of Cherry Trees Lane, Buncefield Lane and Green Lane to 'Quietways' to discourage through traffic, a new link road between Wood End Lane and Boundary Way, measures to improve lorry parking).

East St Albans

- 11.26. The East St Albans site will have implications for the local road network. Initial investigations undertaken in conjunction with the developers indicate that the largest increase in traffic flows is forecast to occur at the Marshalswick Lane/Sandpit Lane junction. Significant traffic increases are also anticipated on Sandpit Lane at the junctions with Barnfield Road and House Lane. There is potential for traffic flows to increase by more than 5% in the following locations:

- Marshalswick Lane/The Ridgeway (mini-roundabout);
- Sandridge Road/Sandpit Lane (priority T-junction);
- Hatfield Road/Beechwood Avenue/Ashley Road (double mini-roundabout)

- 11.27. New road junction and improvements will be required as part of the delivery of this site including new off-site junctions and access roads on both Hatfield Road and on Sandpit Lane. Testing of network improvements and access proposals are on-going. However, initial assessments suggest a range of potential transport interventions, including:

- A new entrance to the College on Hatfield Road aimed at reducing the amount of traffic using South Drive;
- Two new vehicular accesses on Sandpit Lane to serve the proposed residential development;
- A new bus only road link across the site that connects Sandpit Lane and Hatfield Road;
- A range of improvements to existing junctions in the immediate vicinity along Sandpit Lane to accommodate the additional traffic movements.

A significant issue to investigate further is whether the link road across the site should be open to all traffic. This will inevitably have both advantages and disadvantages.

North West Harpenden

- 11.28. The North West Harpenden Broad Location will require road junction improvements and access roads. The site fronts onto the A1081 Luton Road which is likely to form the principal access point. There are also frontage onto Thrales End Lane, Cooters End Lane and Ambrose Lane.
- 11.29. New road junctions into residential development on Luton Road will be required. Initial assessment has identified the possibility of taking vehicular access for the development site from Thrales End Lane or Cooters End Lane potentially using simple priority junctions and localised road widening if required.
- 11.30. Further details of can be seen in the appendices of this report which provide additional information on work currently underway on detailed planning for this provision.

Road Network	
Lead Agencies	<ul style="list-style-type: none">• Hertfordshire County Council• Highways England• SADC (through planning decisions / control)
Evidence Base	<ul style="list-style-type: none">• Local Transport Plan 3 (LTP3)• Transport Vision for Hertfordshire (LTP4)- Stages 1 & 2• Inter Urban Route Strategy (IURS) 2013• COMET model investigations of growth impacts• Broad Location initial transport studies / assessments
Existing Provision	Existing road network
Gaps in Provision	Network congestion at peak times is significant issue, interventions and junction improvements required
Planned Provision	Further motorway improvements around M25, M1 and A1(M). Further improvement works planned, pending outcomes of County Wide Traffic Model and Maylands Growth Study.
Impact of Development Proposals	The SLP Development Strategy is expected to result in some general increased pressure on the road network. Transport network (junction and road) improvements will be required associated with all Broad Locations. Possible junction improvements include: <ul style="list-style-type: none">• <u>East Hemel Hempstead (North & South):</u> strategic road improvements required to the A414 / A147 and Green Lane and / or Westwick

	<p>Row. Potential solutions include a new compact grade-separated junction with northern and southern roundabouts on Green Lane, incorporating shared use footway/cycle path plus bus laybys and parking. Additionally, enhanced road link between A414, Maylands & new residential areas required. Upgrading of Punchbowl Lane</p> <ul style="list-style-type: none"> • <u>East St Albans</u>: new road junction improvements including new junctions and access roads on both Hatfield Road and on Sandpit Lane • <u>North West Harpenden</u>: new road junctions into residential development on Luton Road
Potential for Delivery	<p>Delivered by developers and/or via CIL or developer contributions. Collection of CIL or developer contributions from smaller developments may assist in delivery of wider HCC transport initiatives and highway improvements in line with LTP3 (LTP4 when released).</p> <p>Other funding mechanisms may also be used (e.g. LEP funding and Enterprise Zone investment).</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP25 Transport Strategy builds on LTP3 and Urban Transport Plans to set out the identified transport issues, priorities and solutions in the District.</p> <p>SLP30 Delivery of Infrastructure</p>

Parking

11.31. The Council's Parking Service covers the management of Council owned car parks and the enforcement of Controlled Parking Zones on-street, and the enforcement of parking in car parks (off-street). There are a total of 48 car parks in the District. Of these, 31 are owned by the Council and 17 are privately owned or leased by external organisations⁴⁸.

11.32. An average of 30,513 cars per week use the district's public car parks, equating to around 1,525,650 per year and this level of vehicular activity needs to be managed effectively⁴⁹. The appeal of local retail centres and tourist attraction locally has increased pressures on parking in and around the District. Sufficient parking provision is an important component of local infrastructure provision to ensure the vitality of retail centres and employment areas.

11.33. In 2015, the Council's revised the St Albans City and District Council Parking Strategy. The strategy looks to ensure parking provision meets the needs of residents, businesses and visitors while contributing to the effective management of congestion in urban areas.

11.34. The strategy looks to promote off-street car parks across the District. Many multi-storey car parks in the District are not used to capacity, and public feedback indicates dissatisfaction with the flexibility of use and the perceived cost. The strategy looks to address this through a number of measures including the reclassification of car parks to reflect main uses, reviewing tariff structures accordingly, and improving surrounding signage.

11.35. Additionally, the Council set a commitment in the 2016 Corporate Plan to work with residents and businesses to improve parking provision in the District and explore solutions to difficulties in parking 'hot spots'²⁰.

Impact of Planned Growth

11.36. The Local Plan looks to follow the approach set out by the Council's Parking Strategy to ensure parking provision. Further detail of parking provision for new development will be set out in the DLP which will contain a policy setting out levels of parking for broad classes of development. This policy will be based on a zonal approach which reflects the character and accessibility of different parts of the District. Consideration of parking provision for new development will be required at the Broad Location sites.

Parking	
Lead Agencies	<ul style="list-style-type: none"> • SADC • Hertfordshire County Council (through planning decisions / highway advice)
Evidence Base	<ul style="list-style-type: none"> • Annual Parking Report 2014 2015 • St Albans City and District Council Parking Strategy 2014 – 19 • St Albans City and District Council Corporate Plan
Existing Provision	48 off-street car parks in the District On-street parking provision across District
Gaps in Provision	Increased demand for parking- need to improve the flexibility of off-street provision to encourage use.
Planned Provision	On-going investigative work
Impact of Development Proposals	<p>The SLP Development Strategy is expected to result in some general increased pressure on parking provision. This will be principally managed through the promotion of existing off-street car parks.</p> <p>New development will be required to provide adequate parking provision for residents, visitors or employees. Further details will be set out in the DLP</p>
Potential for Delivery	Onsite provision delivered directly by developers.
Delivery Mechanisms in the Local Plan	<p>Policy SLP25 Transport</p> <p>SLP30 Delivery of Infrastructure</p>

Public Transport

11.37. 'Quality Network Partnerships' (QNP) exist for public transport networks works in the County. These are voluntary partnerships, bringing together local authorities, public transport operators alongside transport experts. The St Albans Network (branded as 'Network St Albans') has been set up by St Albans Council, Hertfordshire County Council and local bus and train operators. The main aim of QNPs is to achieve improvements to local passenger transport services providing viable alternatives to car use, reducing congestion and promoting sustainable travel. The partnerships have been part funded through financial support from the Department for Transport (see Source K for further information).

11.38. Among the objectives of the QNP are to provide:

- Truly integrated passenger transport;
- Better accessibility for the disabled;
- Improved reliability and punctuality;
- Enhanced frequency of service;
- Better quality travel information;
- Encouragement to use other non-car modes of travel e.g. walking and cycling.

11.39. A programme of initiatives started in October 2011. Improvements so far include an increase of bus frequencies on certain routes, multi operator bus tickets, and the introduction of low emission diesel hybrid buses.

Rail Network

11.40. There are four major rail lines through Hertfordshire- the Midland Main Line through St Albans, the West Coast Main Line through Watford, the East Coast Main Line through Stevenage and the West Anglia Line through Broxbourne. The Midland Main Line that runs through the District is also part of the Thameslink system which crosses through London to the south. A significant proportion of rail users in the county are commuters to central London resulting in capacity problems and overcrowding at peak hours⁵⁰.

11.41. The Abbey Line, a single non-signal line, runs from St Albans Abbey station to Watford. However, there is no east-west rail line across the County although the possibility of such a link is supported by the HCC.

11.42. HCC is currently working a new Rail Strategy for Hertfordshire. The draft strategy which was consulted on in 2015 included the following aims:

- Improved connectivity to a wider range of destinations, either with direct trains or requiring minimal changes
- Improved service frequency and journey times

- Reduced overcrowding on trains and at stations by addressing capacity needed now and in the future
- Improved access to stations for all
- Improved access to key employment centres and hospitals

11.43. This also sets out a proposed a strategic priority to lobby for the introduction of long distance stops at St Albans following electrification of the Midland Main Line. This would improve connections to key destinations such as Sheffield and Nottingham.

Thameslink Programme

11.44. This is a government funded £6bn programme of works to improve the Thameslink service to and across London⁵¹. The improvements include new and improved stations, new track, new cross-London routes and new longer and more frequent trains with the express purpose of increasing capacity and reducing overcrowding. The first phases of the project have been completed and the entire project should be completed by the end of 2018.

11.45. There are two stations on this line in the District, Harpenden and St Albans City, and a large number of commuters in the District rely on these services.

11.46. An additional £5 million in funding for the redevelopment of St Albans City station was confirmed by the Department of Transport in March 2016. The redevelopment plans include additional ticket gates, better pedestrian access, an expanded entrance concourse and improved station facilities. The work is planned to be completed by the end of 2018.

11.47. Govia Thameslink Railways who manage the network are also keen to improve parking facilities at Harpenden Station. However, a recent bid to the Department of Transport for a decked car park at Harpenden station was not successful. Govia Thameslink Railways are exploring alternatives.

Abbey Line Light Rail

11.48. HCC and the Department for Transport (DfT) want to increase the frequency of services on the local rail line between Watford Junction and St Albans Abbey stations (the 'Abbey Line'). At present the Abbey Line is a single non-signal line with one train running from St Albans to Watford and back.

11.49. A number of strategies have been considered to improve the service, including converting the branch line into a light railway, introducing a guided busway, or enhancing the existing infrastructure to enable the delivery of a heavy rail service. HCC outline in the new Transport Vision that the improvement option pursued should enable extension of the service at either end of the line⁵². Further work will be undertaken through the delivery of LTP4.

St Albans Station Connections

- 11.50. HCC is exploring the possibility of improving the connectivity between St Albans Abbey rail station and St Albans City rail station. This would enable faster and easier connections between the Midland Main Line at St Alban's and the West Coast Main Line at Watford. This is still a concept level scheme at present and HCC are looking at the possibility of improved connectivity potentially through Light Rail Transit (LRT) or Bus Rapid Transit (BRT) between the two stations.

High Speed 2

- 11.51. Construction on the new north-south High Speed 2 (HS2) is expected to commence in 2018 with implications for West Hertfordshire through the construction of the new railway to Euston. When HS2 services commence in 2026, virtually all long-distance services (up to 15 per hour) will transfer from the West Coast Main Line to HS2. This presents a significant opportunity to radically enhance commuter and medium distance services on this corridor, which could deliver connectivity, capacity and reliability benefits for Hertfordshire's commuters. It will also open up the opportunity for more long-distance journeys to call at Watford and potentially St Albans⁴².

Impact of Planned Growth

- 11.52. The growth in the District is likely to place further pressure on the existing rail infrastructure. In particular, numbers of commuters may grow with the increase in both housing and employment in the District. However, the on-going projects set out by the rail operators (detailed earlier in this chapter) are likely to have a positive impact on rail capacity and support the increase in demand linked to the growth strategy.
- 11.53. The SLP development strategy proposals for the East Hemel Hempstead Broad Locations are to be considered in view of rail transport opportunities in the Town. The opportunities arising from changes noted to the West Coast Mainline and potential expansion of Crossrail to Hertfordshire (including a proposed station stop in Hemel Hempstead) are important. Bus network connections and service quality to the Hemel Hempstead stations are crucial.
- 11.54. Further details of can be seen in the appendices: appendices (insert numbers) provide some additional information on work currently underway on detailed planning for this provision

Rail Network	
Lead Agency	<ul style="list-style-type: none">• Govia Thameslink Railways• Network Rail• London Midland Trains• HCC
Evidence Base	<ul style="list-style-type: none">• Local Transport Plan 3 (LTP3)• Transport Vision for Hertfordshire (LTP4)- Stages

	<p>1 & 2</p> <ul style="list-style-type: none"> • HCC Rail Strategy 2011 • Croxley Rail Link website • Thameslink Programme website
Existing Provision	Existing rail transport network
Gaps in Provision	<p>Identified gaps highlighted forthcoming HCC Rail Strategy include the need for greater connectivity to a wider range of destinations, greater service frequency and journey times, and improved accessibility to stations.</p> <p>Links between St Albans City and Abbey Line station required.</p>
Planned Provision	<p>Thameslink programme improvements include new and improved stations, new track, new cross-London routes and new longer and more frequent trains with the express purpose of increasing capacity and reducing overcrowding.</p> <p>Redevelopment of St Albans City station</p> <p>Potential to improve parking facilities at Harpenden Station</p>
Impact of Development Proposals	<p>Development proposals are likely to place further pressure on the existing rail infrastructure in the District.</p> <p>However, the projects listed above will have positive implications for capacity on services in the District.</p>
Potential for Delivery	<p>Development proposals will not be of a sufficient scale to provide strategic rail improvements. However, as noted in LTP3, options for developer funding support will need to be considered. This is likely to relate to promotion of inter-modal public transport and particularly walk, cycle and bus interchange.</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP25 Transport Strategy builds on LTP3 and Urban Transport Plans to set out the identified transport issues, priorities and solutions in the District.</p> <p>SLP30 Delivery of Infrastructure</p>

Bus Network

11.55. Bus networks provide an important service in the District, particularly for more rural areas. However, in rural areas such routes often suffer from economic viability issues due to the low population density and therefore are not as frequent as users would like⁵³.

- 11.56. Providing viable and sustainable bus services in counties such as Hertfordshire is complex. The county has high car ownership, leading to congestion on some roads particularly at peak times. It has many small towns surrounded by Green Belt, which do not create natural conditions for commercial bus operation. Furthermore, the current transport legislation offers limited powers or controls for the county to fundamentally change the commercial bus provision⁴³.
- 11.57. Hertfordshire County Council is keen to promote passenger transport across the county to encourage increased use of modes of travel other than by car. There is a need for improved bus links from the rural areas to the towns and City⁵⁴. Existing bus services including minibuses, taxi buses and community transport are sometimes expensive, unreliable, infrequent and do not sufficiently provide an effective alternative to the car. Further details of potential initiatives will be available through the development of Local Transport Plan 4 and The South-West Hertfordshire Growth and Transport Plan.

Park & Ride

- 11.58. Small Park and Ride schemes on the main routes into St Albans and at Hemel Hempstead have been considered by HCC as a potential solution to congestion and parking issues in the central areas. City Centre Park and ride schemes have shown to be an effective solution in other cities with historic street patterns, such as Oxford and Cambridge. Smaller park and ride sites, which would not require dedicated bus services, could be located on the main entry / exit route to and from St Albans. Further investigation into park and ride schemes is being considered by HCC. However, viability and ability to successfully divert journeys, plus the impact on full use of public transport use within the urban areas needs to be carefully considered.

Impact of Planned Growth

- 11.59. Public transport links will be considered to facilitate connectivity within proposed development areas. In particular, the East Hemel Hempstead Broad Location requires new public transport links to connect to new community to District and Hemel Hempstead facilities. Initial investigations undertaken with developers suggest that new bus routes could be introduced and existing routes expanded to link the development with both Hemel Hempstead (including the train station) and St Albans.
- 11.60. In terms of East St Albans, the Oaklands College Campus is currently served by several bus routes that operate along Hatfield Road, linking the site St Albans city centre and the rail station, as well as to Hatfield and Welwyn Garden City. The initial masterplan presented by the developer includes proposals to provide a bus link through the Oaklands College site connecting Sandpit Lane and Hatfield Road. This would offer the opportunity for existing bus services to be effectively diverted through the site.

11.61. Public transport provision for all Broad Location sites will be explored through the DLP and master planning process

11.62. Further details can be seen in the appendices which provide some additional information on work currently underway on detailed planning for this provision.

Bus Network	
Lead Agencies	<ul style="list-style-type: none"> • HCC • SADC • Various bus operators
Evidence Base	<ul style="list-style-type: none"> • Local Transport Plan 3 (LTP3) • Transport Vision for Hertfordshire (LTP4)- Stages 1 & 2 • HCC Bus Strategy 2011 • St Albans UTP • Harpenden UTP • South St Albans UTP • HCC Intalink Strategy 2011 • Intelligent Transport Systems (ITS) Strategy • HCC Rural Transport Strategy 2012
Existing Provision	Existing rail transport network
Gaps in Provision	<p>Need for improved bus links from the rural areas to the town and city areas.</p> <p>Provision to ensure new development has sufficient bus links.</p>
Planned Provision	<p>Exploring potential of park and ride scheme for future development.</p> <p>Further planned provision pending outcomes of Local Transport Plan 4 and The South-West Hertfordshire Growth and Transports Plan.</p>
Impact of Development Proposals	<p>There will be a need for review of bus provision to facilitate services within proposed development areas. This will be included in collaborative master planning work. Diversity of provision to improve access to/from rural areas to towns and key community facilities, such as hospitals will be encouraged. Larger new developments will need to be supported by new or enhanced bus routes. Promotional strategies and incentives will be a key part of improvements and embedding of usage.</p> <p>Public transport links for the Broad Locations will be addressed, particularly for East Hemel Hempstead to Hemel Hempstead facilities and between St Albans and the Broad Location to connect the new community to District</p>
Potential for Delivery	Development proposals are of a sufficient scale to

	support bus improvements. As supported in LTP3, developer contributions to service / facility provision and improvements will be considered.
Delivery Mechanisms in the Local Plan	Policy SLP25 Transport Strategy builds on LTP3 and Urban Transport Plans to set out the identified transport issues, priorities and solutions in the District. SLP30 Delivery of Infrastructure

Walking and Cycling Infrastructure

- 11.63. Sustainable travel infrastructure is strongly supported by both the HCC and the District Council. The LTP3, the strategies that supports it, and strategies set by the District Council outline various measures to encourage walking and cycling locally.
- 11.64. SADC's Walking Strategy⁵⁵ encourages walking to school, walking for short journeys and as a leisure activity. It also provides guidance and requirements for meeting the needs of disabled groups when designing new development. Key actions in the Walking Strategy include encouraging walking to school and work, promoting walking as a leisure activity, improving rights of way, addressing the needs of disabled people and designing new development to encourage walking.
- 11.65. The Council will support improvements to public rights of way as part of delivering the County's Rights of Way Improvements Plan and as green infrastructure connections⁵⁶.

Green Ring

- 11.66. The Green Ring originated in work undertaken by the District Council as part of the "City Vision" for St Albans in 2009 as a project to provide new, sustainable walking and cycling infrastructure for the City.
- 11.67. The St Albans Green Ring aim is to provide a continuous walking and cycling route (approx. 9km long) that will encircle the city centre to help reduce congestion, pollution and provide a valuable and easy way to get enough exercise. The route primarily enhances existing cycling and walking routes and extends from Townsend in the north to Fleetville in the east, Sopwell in the south and into Verulam Estate to the west. At least 13 green spaces are connected by the Ring along with schools, places of worship, heritage sites, retail centres, leisure facilities and both city railway stations.
- 11.68. The route has been sub-divided into a number of specific, self-contained sections according to cost of delivery; difficulty of resolving design and safety concerns and related maintenance issues. The main route is

complete with the exception of the section in the common land area at Sandpit Lane, St Albans, which are planned to be completed in 2016.

- 11.69. Further connections will be sought to assist in the comprehensive coverage of the District.

Cycle Routes

- 11.70. There are other cycle route projects planned in the District. Key priorities in the Council's Cycling Strategy⁵⁷ include new cycle routes, secure cycle parking (e.g. at stations) and other facilities such as shared use of paths in public parks. Future projects include:

- Improvements in Harpenden and Wheathampstead to National Cycleway Routes 6 and 57. A new link should be provided to connect Routes 6 and 57 in Harpenden
- Cycle link along the A4147- New cycle route to be provided from King Harry Lane, St Albans to Leverstock Green

Impact of Planned Growth

- 11.71. All new development will require consideration of walking and cycling infrastructure to ensure connectivity and promote sustainable transport. In the Broad Location sites, there will be a need for reviewing and introducing new walking and cycling routes to facilitate services within proposed development areas. The following sections outline the outcomes of investigative work to date. Further details can be seen in the appendix.

East Hemel Hempstead (north and south combined)

The development of the East Hemel Hempstead site will necessitate cycle and footpath links. The Maylands Growth Corridor Study has considered walking and cycling links as part of its remit. The study has suggested two concept improvements options related directly to access for walking and cycling.

- Nickey Line Access Improvements:
A key issue identified is the poor linkage between the Nickey Line, Cherry Tree Lane and Three Cherry Trees Lane for pedestrians and cyclists. The existing connections from these roads onto the Nickey Line are steep and do not conform to preferred path widths and gradients. Access improvements to the Nickey Line are being tested which may include a branch line extension.
- Pedestrian and Cyclist Crossings:
This project involves the creation of a new and/or improved pedestrian and cyclist crossing facilities to address existing severance and enhance access to the Maylands area from surrounding residential areas. The scheme being considered recognises the need to provide a number of pedestrian and cycling

crossings along key corridors around Maylands Avenue, Redbourn Road and Breakspear Way.

Additionally, initial design work undertaken by the developers shows the potential for new footpaths and cycle links. These could connect to both Hemel Hempstead and east into St Albans City and District through linkages to the Nickey Line and the potential creation of a cycle route within grass verges along the A414.

East St Albans

Initial assessment work undertaken on behalf of the developers envisages a number of enhancements to existing paths and the creation of new links. Concepts being investigated include:

- New segregated cycle path along South Drive with improved cycle access into the College from the south.
- A shared footway/cycleway alongside the residential access road from Sandpit Lane with an east-west spur
- New footpath along the south-eastern boundary of the site linking East Drive with Hatfield Road.
- Routes for walking or running around the perimeter of the Oaklands site and an internal cycle and footpath network, including links between residential areas and college site.
- Improved connections to the Alban Way, with new pedestrian and cycle crossings on Hatfield Road at the Colney Heath Lane junction.

Further work will be undertaken and addressed through the master planning process.

North West Harpenden

Walking and cycling links to Harpenden will be considered as part of the design process. Assessment work undertaken on behalf of the developers identified scope for a shared footway / cycleway along the site frontage on Luton Road which could be continued to the east with a potential link to the Nickey Line. Additionally, improvements to footpaths and new rights of way to improve public access to the surrounding countryside have been proposed.

11.72. Further details of can be seen in the appendices which provide some additional information on work currently underway on detailed planning for this provision

Walking and Cycling Infrastructure	
Lead Agency	<ul style="list-style-type: none">• SADC• HCC

Evidence Base	<ul style="list-style-type: none"> • Local Transport Plan 3 (LTP3) • St Albans UTP • Harpenden UTP • SADC Cycling Strategy July 2007 • SADC Walking Strategy 2007 • Rights of Way Improvements Plan
Existing Provision	Existing walking and cycling infrastructure network
Gaps in Provision	<p>Further provision of walking and cycling infrastructure. Particularly, improved cycling provision along more routes in district and connecting new development.</p> <p>Rights of Way Improvements across the district</p>
Planned Provision	<ul style="list-style-type: none"> • New and enhanced walking cycle routes • The Green Ring • Rights of Way Improvements Plan
Impact of Development Proposals	<p>The Strategic Local Plan requires new development to be located in areas which reduce the need to travel and encourage the use of sustainable transport modes. New development will be required to produce travel plans to encourage sustainable travel.</p> <p>There will be a need for masterplanning/ reviewing walking and cycling routes to facilitate services within proposed development areas.</p> <p>The Broad Locations will be required to consider:</p> <ul style="list-style-type: none"> • <u>East Hemel Hempstead (North & South):</u> Access and upgrading to Nickey Line, Footpath and cycle network links both internally and to facilities in Hemel Hempstead and St Albans. • <u>East St Albans:</u> Footpath and cycle routes, including connections to the Alban Way <p>Further detailed investigations are on-going</p>
Potential for Delivery	Depending on the location and scale of development, proposals may be able to provide required sustainable transport improvements either in kind or through planning obligations. It is likely that CIL contributions will be required towards sustainable and local transport improvements.
Delivery Mechanisms in the Local Plan	<p>Policy SLP25 Transport Strategy sets out that the Council supports measures which ensure the free flow of traffic, reduce traffic congestion and encourage more sustainable travel, by public transport, walking and cycling. Various required improvements are set out in the policy.</p> <p>SLP30 Delivery of Infrastructure</p>

12.0 Utilities Infrastructure

- 12.1. Utilities infrastructure provision traditionally operates on shorter planning horizons and is therefore quite reactive towards infrastructure requirements for new development. This is because the providers operate in a regulated but commercial framework. Their capital investment plans have to be related to agreed pricing negotiations with regulating bodies. The Council and public sector partners have however tried to adopt a proactive approach. This has included extensive engagement with utilities companies to estimate the requirements for utilities infrastructure as a result of growth in the District.

Water Infrastructure

- 12.2. The Water Cycle Study⁵⁸ was jointly conducted in 2010 by Local Planning Authorities in southwest of Hertfordshire including Dacorum Borough Council, St Albans City and District Council, Three Rivers District Council, Watford Borough Council and Welwyn Hatfield Borough Council. The study provided an evidence base to support policy work related to water resources, supply and sewerage, wastewater treatment, flood risk, water quality and the wider water environment.
- 12.3. Work is currently underway to update this study to reflect current growth levels in Hertfordshire, which will increase pressure on water related infrastructure and the environment. The Water Project for Hertfordshire 2015- 2051 is a joint study undertaken Hertfordshire County Council, the Environment Agency; the Hertfordshire Local Economic Partnership, Local Hertfordshire Councils and water infrastructure providers. The project aims to gather information to provide project partners with a range of information on effects of planned growth on the water environment, water supply and wastewater treatment infrastructure requirements in the county. This will provide an evidence base which allows informed decisions to be made on how water and wastewater infrastructure needs can be managed to facilitate sustainable future growth.
- 12.4. The first phase of the project, due to be delivered in 2016, looks to model planned growth in the county and assess infrastructure options for water supply and wastewater treatment across the County and beyond. The result of phase one will feed into the further detailed infrastructure planning at the District level once published. More information is available in the appendices.

Water Supply

- 12.5. The District is supplied water by Affinity Water who provides drinking water to approximately 1.4 million properties in the South East of England. Currently, Affinity Water has 130 groundwater sources, four river intakes on the River Thames, one impounding reservoir and 12 bulk supply imports from neighbouring water companies. Within St Albans District,

there are two major water sources which are responsible for transferring water across the region- one in Harpenden and one in St Albans.

- 12.6. Affinity Water supply is divided into eight water resource zones (WRZs) that are broadly connected areas in which customers are supplied by a common pipe network from a number of local water resources. St Albans is in Colne catchment area (Water Resource Zone 2). The population forecasts used by Affinity Water for the Colne catchment area show an increase of 14% by 2040, based on the 2011 Census figure projections⁵⁹. This increase is sufficient to reflect the development growth envisaged in the SLP. An assessment of water available identifies that South East region does not have sufficient water for the whole of the 25 year planning period to meet the demand.
- 12.7. Water companies are required to produce a Water Resources Management Plan (WRMP) every five years. Each WRMP looks ahead at least 25 years to ensure sufficient water to meet customer demand whilst balancing the needs of the environment at a strategic level. The most recent WRMP covers the period 2015 – 2040 and identifies a supply / demand deficit in five of the eight water resource zones (which includes Water Resource Zone 2) at the beginning of the planning period and in seven zones by 2040. Water Resource Zone 2 is one of the zones with some level of deficiency across the plan period. The WRMP sets out a series of preferred options for Water Resource Zone 2 to improve supply and efficiency including source optimisation in St Albans and leakage reduction.
- 12.8. Affinity Water has a legal requirement to supply water to new developments. The Water Industry Act 1991 recognises the impact of new developments on the existing water supply network and allows water companies to make an infrastructure charge for each property connected to the water supply. These charges are designed to ensure that existing customers do not have to bear the full burden of the investment needed to serve new developments. This charge is separate to the cost that companies charge developers for the requisition of new mains which is based on the total cost of the mains off-site pipe work and any necessary upgrades downstream.

Water Drainage / Sewerage

- 12.9. Thames Water is the statutory sewerage undertaker for the District. Statutory water and sewerage undertakers' investment programmes are based on a five year cycles, known as the Asset Management Plan (AMP)⁶⁰ process. AMP6 is the current period, which runs from 1 April 2015 to 31 March 2020.
- 12.10. As part of the five year business plan review, Thames Water advise the regulator Ofwat on the funding required to accommodate growth to ensure their treatment works can continue to meet the standard required by treatment consents set by the Environment Agency. Their investment programmes are based on a range of factors, including population

projections and development plan allocations, which help to form the clearest picture of the future shape of the community. The AMP6 sets out a commitment to sewage works improvements, flooding prevention and the generation of renewable energy to meet some of their own operational needs.

- 12.11. Thames Water's wastewater network includes sewers, pumping stations and other equipment used to capture and transport sewage. All of the District's sewage drains to the Maple Lodge, Harpenden or Blackbirds Wastewater Treatment Works (WwTW). These WwTW serve other Local Authorities, whose proposed Development Plans also need to be considered when planning future infrastructure.

Table 5: Wastewater Treatment Works

Wastewater Treatment Works (WwTW)	Settlement
Blackbirds	Chiswell Green, How Wood, London Colney, Park Street/Frogmore, Redbourn, St Albans
Harpenden	Harpenden, Wheathampstead
Maple Lodge	Bricket Wood, Chiswell Green, Ho Wood, London Colney, Park Street/Frogmore, Redbourn, St Albans

- 12.12. In terms of planning for new development, water and sewerage undertakers have limited powers under the water industry act to prevent connection ahead of infrastructure upgrades. Waste water undertakers may tend to rely heavily on the planning system to try to ensure that infrastructure is provided ahead of development either through phasing or the use of planning conditions. However the planning system is often not ideally suited to dealing with these issues and this can lead to longer term infrastructure planning uncertainties. This issue has been reflected in IDP engagement with the provider.

Impact of Planned Growth

- 12.13. Current growth levels in Hertfordshire will increase pressure on water related infrastructure and the environment. Although Hertfordshire is located in one of the driest regions in the UK, Affinity predicts no significant supply issues during the Local Plan period based on the planned improvement and efficiency works set out in the Water Resources Management Plan. Despite this position, the future reality of increasing water supply constraints is reflected in joint work with the industry in the Water Study and in the emerging policy approach to water saving measures in new development (SLP 29).
- 12.14. In terms of waste water and sewerage, additional capacity at both Maple Lodge and Blackbirds WwTW are likely to be required to accommodate the increase in wastewater from development in the District to 2031. However, this may be constrained by growth in surrounding districts

served by the WwTW. Further studies are currently being undertaken to understand capacity and the impact of proposed development as part of the Water Project for Hertfordshire.

12.15. New development puts additional pressure on the existing wastewater infrastructure network and could exacerbate existing sewer flooding issues or lead to sewer flooding if there is insufficient existing capacity within the sewerage network. It is therefore critical that any development is delivered alongside any necessary upgrades to the sewerage infrastructure network required.

12.16. It is essential that developers engage with the provider in detail when planning development and that best use is made of available capital investment and land use planning mechanisms to address constraints at the earliest opportunity. Where there is a capacity problem and no improvements are programmed by the statutory undertaker, then the developer needs to contact the undertaker to agree what improvements are required and how they will be funded prior to any occupation of the development. One aim of the Water Study is to create a robust overall framework, including modelling tools, to deal with this issue.

12.17. Analysis of specific improvement works needed, pending the outcome of the Water Study Project. Further details of can be seen in the appendices which provides some additional information on work currently underway on detailed planning for this provision.

Water Infrastructure	
Lead Agency	<ul style="list-style-type: none"> • Affinity Water • Thames Water Utilities
Evidence Base	<ul style="list-style-type: none"> • Water Project for Hertfordshire 2015-2051 • Water Cycle Study Scoping Study 2010 • Thames Water AMP6 Business Plan • Thames Water 25-Year Strategy for 2015 to 2040 • Affinity Water Business Plan • Affinity Water: Water Resources Management Plan, 2015-2020
Existing Provision	St Albans District drains to three WwTW facilities. <ul style="list-style-type: none"> • Harpenden • Maple Lodge • Blackbird
Gaps in Provision	No current gaps in potable water supply as Affinity water already set out plan to improve distribution network in this WRMP to 2040.
Planned Provision	None identified at present but pending outcomes of Water Project
Impact of Development Proposals	Growth will increase pressure on water supply and waste and sewerage infrastructure. Analysis of specific improvement works needed pending outcome Water Study Project.

Potential for Delivery	<p>The water provider has a duty to supply water to all development. It is essential that developers demonstrate that adequate capacity exists both on and off the site to serve the development and that it would not lead to problems for existing users. Developer funded impact studies and developer contributions to infrastructure upgrades may be required.</p> <p>Approximate timescales for delivery of necessary upgrades:</p> <ul style="list-style-type: none"> • 18 months to 3 years for waste water network upgrades; • 3 to 5 years for waste water treatment upgrades; • 7 years + for new treatment works. All timescales are subject to funding being in place first. <p>New dwellings will be required to meet higher standard (building regulation) Code for Sustainable Homes water usage efficiency targets</p> <p>Supply infrastructure and connections are part funded by the developer in the form of a connection charge.</p>
Delivery Mechanisms in the Local Plan	<p>SLP 29 Environmental Performance of New Development including Sustainable Design and Construction</p> <p>SLP30 – Delivery of Infrastructure</p>

Energy Distribution

Electricity Distribution

- 12.18. UK Power Networks (UKPN) manages the local electricity distribution network in St Albans District. They are supplied from the exit points from the high voltage network managed by National Grid.
- 12.19. The Harpenden, Redbourn and Wheathampstead areas are supplied from two Primary substations (33kV/11kV), East Harpenden and Central Harpenden. The Primary substations are fed from Luton South Grid (132kV/33kV), which is in turn fed from Sundon Supergrid (400kV/132kV).
- 12.20. The St Albans, Chiswell Green, London Colney and Colney Heath areas are supplied from six Primary (33kV/11kV) substations, Marshalswick, Adelaide St, Hatfield, Cell Barnes, Park Street and Shenley. The Primary substations are fed from either Cell Barnes Grid or Hatfield Grid (132kV/33kV), which are in turn fed from Elstree Supergrid (400kV/132kV).

- 12.21. There is no existing infrastructure or capacity issues in the District, although UKPN are currently looking to replace switching gear at East Harpenden Primary (circa 2019). Capacity in the Harpenden area is supplied via East and Central Harpenden Primary substations. Whilst spare capacity is limited in the Harpenden area, UKPN will seek to maximise the utilisation of the 11kV network and transfer loads between sites accordingly.
- 12.22. In an event of new development, UK Power Networks aim to align installation of underground power cables. UK Power Networks has an obligation under the terms of their distribution license to develop and maintain an economic and efficient network⁶¹. To this end, UKPN does not seek to reinforce the electricity network ahead of need, but consider current and future predicted load growth as a result of planned development. Where proposed development triggers the need for reinforcement the developer will be expected to pay all or a proportion of the costs.
- 12.23. On average a 3/4 bed property consumes 1.5 - 2kVA, this will vary depending on systems used with the property. It is the responsibility of the developer to engage with the supplier and nominated specialist consultants to determine their load requirements and determine the connection to the electricity network.

Gas Transmission and Distribution

- 12.24. National Grid also owns and operates the high pressure gas transmission system throughout Great Britain. There are no gas transmission pipelines within the administrative area of St Albans. National Grid has a duty to develop and maintain an efficient co-ordinated and economical transmission system for the conveyance of gas. New gas transmission infrastructure is periodically required to meet increases in demand and changes in patterns of supply⁶².
- 12.25. National Grid Gas Distribution owns and operates the local gas distribution network in St Albans area. Reinforcements and developments of the local distribution network are generally as a result of overall demand in a region, rather than site specific developments. National Grid will not install infrastructure on a speculative basis to serve potential developments. Provision of on-site gas distribution is the responsibility of the developer.
- 12.26. National Grid may wish to install strategic pipelines at an early stage of the developments and will recharge a proportion of the costs to each developer. National Grid will not install infrastructure on a speculative basis to serve potential developments and will need to enter into agreements with developers before any work is commenced.

Onsite Energy Provision

- 12.27. The Council is committed to sustainable development and is working to reduce greenhouse gas emissions in line with local and national targets.

Onsite energy generation through renewable and low carbon generation is one of the ways in which the District can work towards carbon-neutral status.

- 12.28. The SLP sets out a requirement for all major new development to maximise realistic opportunities for delivering renewable and low-carbon energy technologies. Such provision has the potential not only to supply new development but also nearby existing development. The Plan identifies district heating (DH), combined heat and power (CHP) and micro generation as technologies with the greatest potential in the District.
- 12.29. Large scale development such as those presented by the Broad Location sites present significant opportunities to deliver DH or CHP. Both the East Hemel Hempstead and East St Albans Broad Locations will be expected to deliver substantial renewable energy generation /supply for the development itself and the wider area.

Impact of Planned Growth

- 12.30. Growth over the plan in the District will increase demand on both electricity and gas distribution infrastructure. Much of the planned growth can be accommodated with the existing infrastructure provision. However, upgrades may be required at the Central Harpenden, Adelaide Street and Hatfield Primary Substations in order to accommodate the level of growth set out in the Strategic Local Plan.
- 12.31. In terms of the Broad Location sites, the following works may be required to ensure adequate provision:

East Hemel Hempstead (north and south combined)

East Hemel Hempstead Broad Locations could trigger a need for reinforcements to the UKPN network in conjunction with the proposed extension of Maylands Business Park in Hemel Hempstead. This is in part due to the commercial uses in this location which are likely to require large power supply loads. Further modelling work may be required.

It is likely that provision of onsite renewable and low carbon energy will be required to supply new development and potentially to supply nearby existing development in line with SLP28.

East St Albans

There is currently sufficient capacity at the Primary Substation level and Cell Barnes Primary Substation can supply East of St Albans Broad Location.

It is likely that small scale renewable energy production will be required to supply the college and new development in line with SLP28.

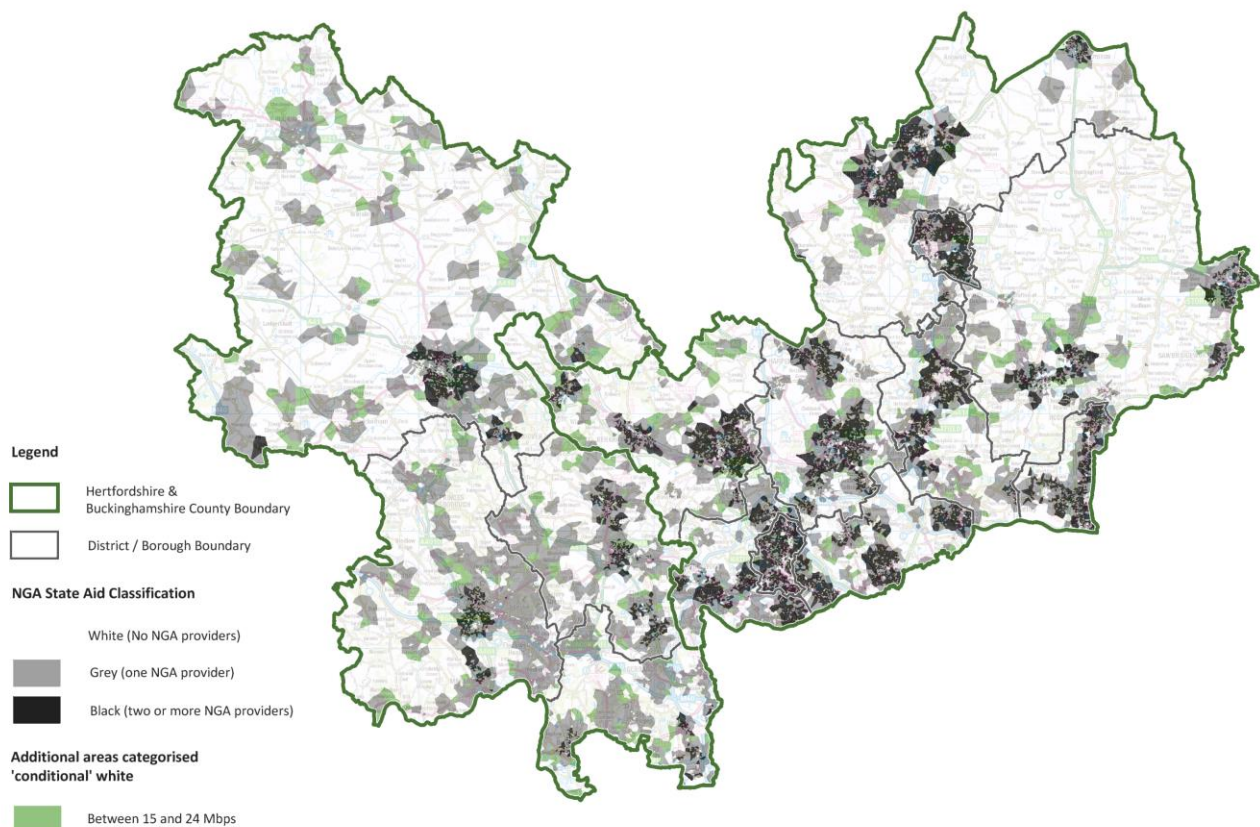
North West Harpenden

Capacity is more limited in Harpenden. However there is the potential to transfer load from alternative primary substations to manage capacity as necessary. This could require physical upgrades of switching gear or upgrades to cabling.

Energy Infrastructure	
Lead Agency	<ul style="list-style-type: none"> • National Grid • UK Power Networks
Evidence Base	<ul style="list-style-type: none"> • Eastern Power Networks Business plan (2015 to 2023) • National Grid Gas Ten Year Statement 2015 • Liaison with UK Power Networks
Existing Provision	<p>Grid site at Cell Barnes and 3 Primary substations in St Albans and a further Primary Substation at Park Street.</p> <p>Harpenden and the surrounding area is supplied by two Primary substations that are connected to Luton South Grid Substation</p> <p>Gas network is supported by a range of local and regional infrastructure.</p>
Gaps in Provision	None at present
Planned Provision	None at present
Impact of Development Proposals	<p>Much of the planned growth can be accommodated with the existing infrastructure.</p> <p>There is currently sufficient capacity at the Primary Substation level and Cell Barnes Primary Substation can supply East of St Albans Broad Location. Capacity is limited in Harpenden, however there the potential to transfer load from alternative primary substations to manage capacity as necessary.</p> <p>East Hemel Hempstead broad locations in conjunction with the proposed extension of Maylands Business Park in Hemel Hempstead could trigger a need for reinforcements to the UKPN network. Further modelling work may be required.</p>
Potential for Delivery	<p>It is the responsibility of the developer to engage with consultants to determine their load requirements and determine the connection to the electricity and gas networks.</p> <p>Where proposed development triggers the need for reinforcement then the developer will pay all or a proportion of the costs.</p>
Delivery Mechanisms in the Local Plan	<p>SLP28 Renewable and Low Carbon Energy</p> <p>SLP30 Delivery of Infrastructure</p>

Digital Infrastructure

- 12.32. Although there has been significant progress in digital infrastructure provision in recent years, much of the underlying network in the UK has remained unchanged for decades. The access network, which feeds off the underlying network, is the sections of the network that connects between the consumer's premise and the nearest location which houses the provider's equipment⁶³.
- 12.33. The copper access networks that supports much of the mass market broadband services today restricts the type, and speed, of technologies and services that can be delivered. The continuing development of high speed services may mean that current generation access networks will be unable to meet future demand. Next Generation Access (NGA) networks are designed to overcome these limitations and involve fundamental changes to the infrastructure of the underlying network.
- 12.34. The government has allocated £500 million nationally to subsidise upgrade of broadband coverage to superfast broadband specifically to deal with areas where commercial provision is not viable. Connected Counties⁶⁴ operates under this Government project to provide public funding for improvements to broadband provision in areas where such provision would not be commercially viable. The programme is a partnership between Hertfordshire County Council and Buckinghamshire County Council working to increase fibre broadband coverage in the two counties. The programme is funded jointly by Buckinghamshire and Hertfordshire County Councils, the Local Enterprise Partnerships for each county, BT and the Government's Broadband Delivery UK team (BDUK).
- 12.35. The diagram below shows the current broadband provision In



Hertfordshire & Buckinghamshire. The colour coding highlights the number of Next Generation Access (NGA) providers available per postcode area. NGAs are access networks which have been substantially upgraded and are capable of delivering super-fast broadband speeds.

Figure 4: Next Generation Access provision

*Source: Connected Counties

- 12.36. Connected Counties is working with BT to achieve county-wide fibre coverage of at least 90 per cent by the end of March 2016 and aims to ensure that everyone in the two counties has access to a minimum of 2 Mbps broadband speeds. The programme looks to extend fibre broadband further still, with coverage to reach 95% in Hertfordshire by September 2017 and 98% by June 2018. Planning for new development is not covered under this programme and requires direct communication with the commercial providers.
- 12.37. Broadband is not a regulated utility and commercial providers have no legal obligation to provide broadband to a newly developed area. Facilitating early contact between developers and service providers is necessary to ensure provision of basic service infrastructure.
- 12.38. Broadband provision is commercially based. The two major providers of infrastructure (as opposed to specific services through that infrastructure) are:
- British Telecom (BT) - currently the principal provider of infrastructure. For infrastructure provision BT operate as Open Reach – providing the network through which other commercial providers can offer services.
 - Virgin – own a fibre cable system which has wide coverage in Hertfordshire, but is not being actively extended. There is no other provider access through the Virgin cable network. Virgin's main focus is on increasing usage/ customers for their system.
- 12.39. In term of public access in the City, the District Council is currently working to develop a free outdoor wi-fi network for St Albans City Centre, with the potential to extend it to other areas of the District.

Impact of Planned Growth

- 12.40. Utility provision for broadband network will be required in new development areas including at the Broad Locations. Early contact between developers and service providers is necessary to ensure provision of basic service infrastructure within all new developments. Further work is likely to be considered through the master planning process.

Digital Infrastructure	
Lead Agency	<ul style="list-style-type: none"> • BT OpenReach • Connected Counties
Evidence Base	<ul style="list-style-type: none"> • Liaison with Connected Counties • Connected Counties website
Existing Provision	Across the county
Gaps in Provision	Need to increase speeds and access
Planned Provision	<p>The government has allocated £500 million nationally to subsidise upgrade of broadband coverage to superfast broadband specifically to deal with areas where commercial provision is not viable.</p> <p>Programme to roll out superfast broadband (30mb) to cover 90% of properties in Hertfordshire. Hard to reach properties will receive minimum speeds of 2mb.</p> <p>SADC is working to develop a free outdoor wi-fi network for St Albans city centre, with the potential to extend to other parts of the District.</p>
Impact of Development Proposals	<p>Utility provision for broadband network in new development areas.</p> <p>Broadband is not a regulated utility and commercial providers have no legal obligation to provide broadband to a newly developed area. Facilitating early contact between developers and service providers is necessary to ensure provision of basic service infrastructure.</p>
Potential for Delivery	Development guidance required to encourage early provision of basic service infrastructure. Negotiated provision agreements with developer and public service obligation providers (BT Open Reach) or alternative providers to maximise choice and quality of provision for residents and businesses.
Delivery Mechanisms in the Local Plan	SLP30 Delivery of Infrastructure.

Waste Infrastructure

12.41. Locally the District Council runs the household refuse and recycling collection service for all residents in the District. A current priority for the Council is providing a high standard waste and recycling service for the benefit of all households as set out in the 2016 Corporate Plan²⁰. The Council has set an ambitious target of ensuring that 60% of waste is recycled and is currently working to speed up the rate of delivery of this target.

- 12.42. HCC operate the three Household Waste Recycling Centres that serve the District at St Albans, Harpenden and Garston. They accept a wide range of materials for recycling and are for household waste only. Additionally, there are eighteen recycling sites across the District, principally based in accessible car parks.
- 12.43. HCC is responsible for waste planning in Hertfordshire including Local Authority Collected (LAC) waste, Commercial and Industrial (C&I) and Construction and Demolition (C&D) waste.
- 12.44. Plans for provision of waste management and disposal are specified in the Waste Local Development Framework⁶⁵ which sets out the strategic vision, overall spatial strategy and development management policies for waste planning in Hertfordshire up to 2026. The two documents that form the framework are the Waste Core Strategy and Development Management Policies Document (adopted in 2012) and the Waste Site Allocations Document (adopted in 2014).
- 12.45. The vision set out by the Waste Core Strategy places significant emphasis on waste prevention, reduction, reuse and recycling, in line with national priorities. Measures are already in place to reduce the amount of waste produced and to reuse or recycle material wherever possible. However, HCC is working to introduce new, more sustainable ways of dealing with waste to reduce dependence on landfill.
- 12.46. Existing waste management facilities in Hertfordshire have insufficient capacity to secure the maximum recovery of waste. The Waste Core Strategy states that a number of new facilities will be needed to ensure a more sustainable approach to waste management. While landfill and landraise are the least preferred options, some provision is still required to deal with residual waste during the plan period.
- 12.47. Hertfordshire's Waste Development Framework aims to facilitate the provision of waste management facilities in Hertfordshire for both Local Authority Collected waste and Non-LAC waste with sufficient capacity to manage the quantity of waste that the county is expected to produce. In order to provide adequate and sustainable management of waste arisings over the plan period (2011-2026), the Waste Site Allocations document identifies Existing Strategic Sites, Allocated Sites and Employment Land Areas of Search.
- 12.48. There are currently five existing strategic sites which provide waste management. At present none are situated within the District. However, the Waste Core Strategy and Site Allocations documents identify an area covering the east of the District and Hatfield as an area of search for a waste treatment and transfer facility. The Waste Site Allocations document also identifies eight Allocated Sites which HCC considers to be the most suitable locations to manage the County's existing and future waste arisings during the plan period. This includes Roehyde at the edge of the District area.

12.49. Additionally, sixty Employment Land Areas of Search (ELAS) have been identified, which HCC considers may be compatible with waste management uses but currently have little immediate potential for redevelopment. Seven of the ELAS sites are located in the St Albans District.

- Colney Street Industrial/Warehousing Estate
- Acrewood Way
- Porters Wood/Soothouse Spring
- Council Depot and Adjoining Land (near Soothouse Spring)
- Brick Knoll Park
- North Orbital Trading Estate
- Riverside Estate

Impact of Planned Growth

12.50. The anticipated growth within the plan period will produce an increased amount of waste. The County Council as Waste Planning and Disposal Authority, encourages districts and boroughs to promote the sustainable management of waste generated by new development by having regard to this and by also encouraging the re-use of unavoidable waste where possible and the use of recycled materials where appropriate to the construction.

12.51. As the operator of the household waste collection service, the District Council looks to ensure adequate provision of space and facilities for waste / recycling collection. This is particularly important for developments of flats as provision can be overlooked. The Council offers guidance for new developments to ensure satisfactory provisions for the storage and collection of both refuse and recyclables.

12.52. For the Broad Location Sites, the following considerations are required:

East Hemel Hempstead (north and south combined)

At a strategic level new employment land at east Hemel Hempstead should provide opportunities for waste and recycling uses. The East Hemel Hempstead sites will be adjacent to identified Employment Land Area of Search (ELAS 168, ELAS 006) and falls within Area of Search A for LAC Organic Waste Recovery Facility.

East St Albans

There are currently no capacity issues. However, East of St. Albans is located near to ELAS122 Acrewood Way and falls within Area of Search C for Local Authority Collected (LAC) waste.

12.53. Future development in these areas will need to take account of the Waste Local Plan.

Waste Infrastructure	
Lead Agency	HCC SADC
Evidence Base	<ul style="list-style-type: none"> • Hertfordshire Waste Development Framework • Waste Core Strategy & Development Management Policies Development Plan Document 2011-2026 • Waste Site Allocations: Development Plan Document 2011-2026 • SADC Refuse Collection and Recycling Requirements for New Developments and Change of Use. • SADC Corporate Plan 2016
Existing Provision	Five existing strategic sites providing waste management (none within the District).
Gaps in Provision	Existing waste management facilities in Hertfordshire have insufficient capacity to secure the maximum recovery of waste. The Waste Core Strategy states that a number of new facilities will be needed to ensure a more sustainable approach to waste management.
Planned Provision	<p>HCC identify an area covering the east of the District and Hatfield as an area of search for a waste treatment and transfer.</p> <p>Eight Allocated Sites have been identified (including a site at Roehyde) and sixty Employment Land Areas of Search (ELAS), which HCC considers may be compatible with waste management uses (seven located in the St Albans District).</p> <p>Given the limited opportunities in the area (Green Belt and residential areas) there is likely to be a heavy reliance on existing employment areas and locations outside of the District.</p>
Impact of Development Proposals	<p>The anticipated growth within the plan period will produce an increased amount of waste. HCC encourages districts to promote the sustainable management of waste generated by new development and encouraging the re-use of unavoidable waste where possible and the use of recycled materials where appropriate to the construction.</p> <p>East of St. Albans is located near to ELAS122 Acrewood Way and falls within Area of Search C for Local Authority Collected (LAC) waste and East Hemel Hempstead (south and north) will be adjacent to identified Employment Land Area of Search (ELAS 168, ELAS 006) and falls within Area of Search A for</p>

	LAC Organic Waste Recovery Facility. Future development in these areas will need to take account of the Waste Local Plan.
Potential for Delivery	<p>Use of construction and demolition methods that minimise waste generation and reuse / recycle materials on site will be encouraged in all development.</p> <p>Development proposals should include well designed and efficient facilities that meet waste disposal and recycling needs in a way that supports the principles of the waste hierarchy.</p> <p>At a strategic level new employment land at east Hemel Hempstead should provide opportunities for waste and recycling uses.</p>
Delivery Mechanisms in the Local Plan	<p>Policy SLP29- Environmental Performance of New Development Including Sustainable Design and Construction</p> <p>SLP30 – Delivery of Infrastructure</p>

List of Key Data Sources

These are general sources referred to in the text and in some cases referenced as specific sources. Web references are provided where relevant.

- A. Hertfordshire Planning Obligations Toolkit: HCC, 2008. Further information available at <http://www.hertsdirect.org/infobase/docs/pdfstore/planobsjan8.pdf>
- B. SADC Annual Monitoring Review: Further information available at <http://www.stalbans.gov.uk/planning/Planningpolicy/library/localplan.aspx>
- C. Hertfordshire Infrastructure and Planning Partnership: Further information available at <http://www.hertsdirect.org/services/envplan/plan/hccdevplan/HIPP/>
- D. LEP Strategic Economic Plan: Further information available at <http://www.hertfordshirelep.com/growthplan.aspx>
- E. Local Transport Body: Further information available at <http://www.hertsdirect.org/services/transtreets/hertsltb/>
- F. Hertfordshire Local Nature Partnership: Further information available at <http://www.hertswildlifetrust.org.uk/local-nature-partnership>
- G. St Albans and District Strategic Partnership: Further information available at www.stalbanslsp.org.uk.
- H. Hertfordshire County Council School Planning: Further information on current forecasts available www.hertsdirect.org/mrd
- I. St Albans City and District Parks and open spaces Management Plan and open space Management and action plans: Further information available at <http://www.stalbans.gov.uk/leisure-and-culture/parks-and-green-space/GSMP.aspx>
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15. Everybody's Business: The Police and Crime Plan for Hertfordshire. 2015-2020: Hertfordshire Constabulary, 2015.
16. Community Directorate Corporate Plan 2013 – 2018: HCC, 2013
17. Dacorum and St Albans District Plan 2015/16: Hertfordshire Fire and Rescue Service, 2014
18. Integrated Risk Management Plan (IRMP) 2014-18: Hertfordshire Fire and Rescue Service, 2014

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19. St Albans City & District Sport and Recreation Facilities Strategy 2005: PMP, 2005
 20. St Albans City and District Council Corporate Plan 2016-21: SADC, 2016.
 21. St Albans City & District Playing Pitch Strategy 2005: PMP, 2005
 22. St Albans City Vision 2009: Urban Practitioners, 2009.
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 24. Inspiring Libraries: A new strategy for Hertfordshire Libraries 2014-2024: HCC, 2014
 25. HCC Public Health, Localism And Libraries Cabinet Panel Report: Co-Locating Four Libraries With Retained Fire Stations: HCC, 2016
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Appendices