

# **Three Rivers District Council**

## Local Development Framework

### **Infrastructure Delivery Plan**

May 2010



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## Introduction

This draft Infrastructure Delivery Plan (IDP) seeks to establish what additional infrastructure is required to support the planned increase in new homes and jobs, and the projected population growth within the District up to 2026. It includes a review of existing provision for social infrastructure, (such as health and education facilities), physical infrastructure, (such as transport and utilities) and green infrastructure, (such as parks and open spaces). The Plan provides an analysis of the nature of future provision, and where known, where it will be provided, when it will be provided, how it will be funded and who will be responsible for the delivery.

The draft IDP has been informed by information from a range of County and District Council services, (such as education, libraries, highways etc), the Local Strategic Partnership and infrastructure providers external to the Council (such as the Primary Care Trust, emergency services and utility companies). It focuses on key infrastructure needs derived from various plans and strategies of each of these partners. Ongoing dialogue with infrastructure providers is essential to plan for infrastructure needs and this document, alongside the Core Strategy informs other business plans and strategies of all partners to help to shape and influence the District.

The draft IDP is accompanied by an Infrastructure Delivery Schedule which sets out those schemes that are currently proposed to take place during the Core Strategy plan period to 2026.

The IDP is not a policy document and information contained within it does not override or supersede the Core Strategy, policies and commitments contained within the formal suite of LDF documents. It provides a key piece of evidence base and will further provide a robust basis on which the Council will seek to influence public, private and agency funding and priorities. The IDP also begins to provide the intelligence that will serve as a basis for establishing new Council policies on Community Infrastructure Levy, (CIL), albeit that more detailed work will be required to establish appropriate charging regimes.

This report provides an assessment of the key infrastructure areas within the District and outlines the potential gaps in provision, what new infrastructure is being planned and how the LDF could mitigate against some of the potential effects of the levels of development being proposed.

The IDP is a living document. This is the first version of the IDP and therefore subsequent versions will include updates to the proposals and information contained within each of the service-based sections. This allows the infrastructure planning process to take account of any further updates to the various plans and strategies on which this IDP is based. It is intended that the IDP will be updated annually alongside the Annual Monitoring Report.

## Policy Background

Local infrastructure provision is a key element of the spatial planning approach as outlined in Planning Policy Statement 12: Local Spatial Planning with the LDF playing a key role in co-ordinating the level of infrastructure and services in a local area to ensure that it meets current and future demands in amount and distribution.

In order to achieve this Local Planning Authorities are required to set out within their Core Strategies the infrastructure that is needed to support the level of development being proposed within their Local Development Framework. However, PPS12 clearly states that 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 the cost of delivery, the phasing of delivery, how it will be funded and who is responsible for delivery.

## Methodology

The methodology was developed using guidance from the Communities of Local Government, (CLG), the Planning Advisory Service, (PAS) and other best practise guidance. The draft IDP was produced by the Council in consultation with a number of service providers. The methodology used involved the identification of relevant agencies/bodies providing infrastructure and seeking a representative from each. An analysis was then undertaken of the relevant strategies and plans of each provider to establish the capital infrastructure projects that were being planned. Workshops and meetings were also held with the infrastructure providers. Where this was not possible telephone and email conversations took place.

The aims of this initial engagement were to establish existing infrastructure capacity as well as future requirements to accommodate the levels of growth being proposed. Providers were asked how future provision is planned and delivered and what standards are used to assess future needs. This engagement also sought to inform providers of the spatial strategy contained within the Core Strategy so that they were aware of this in planning future infrastructure and developing their strategies and programmes.

The Hertfordshire Infrastructure and Investment Strategy provides information about the infrastructure that will be required across the County in future years and further information on the HIIS is set out later in this document.

## Limitations of the Study

A number of infrastructure service providers only plan on a 3-5 years time cycle, others such as some of the utility providers tend to react when proposals are at the planning application stage. This has obvious limitations in terms of planning ahead within the LDF timeframe of 2026. 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.

Engaging some providers was sometimes problematic; others were unable to provide the detail of information required for the IDP; this is noted within the relevant section of the Report.

## Local Strategic Partnership

The Local Strategic Partnership (LSP) Board was set up in 2002 to produce the Community Strategy for Three Rivers which identify the following five priorities:

1. Anti-social behaviour, crime and fear of crime
2. Access to services
3. Improving the environment
4. Children and Young People's access to education, skills and training
5. Access to affordable housing

The Board is made up of representatives from public, private and voluntary and community sector organisations, which are based in and around the District, and aims to build on the successful partnership working which already existed. Membership is set at senior politician, board or chief officer level to ensure that members have the necessary authority to speak for their organisations and to commit the resources needed to turn the vision into a reality.

The following organisations have representatives on the LSP Board:

- Hertfordshire County Council

- Three Rivers District Council
- Hertfordshire Police Authority
- Centre for Voluntary Services
- Three Rivers Parish Councils
- Hertfordshire Constabulary
- West Hertfordshire Primary Care Trust
- Hertfordshire Chamber of Commerce
- Watford Enterprise Agency

## Hertfordshire Infrastructure & Investment Strategy

The Hertfordshire Infrastructure & Investment Strategy (HIIS) was commissioned by the ten Hertfordshire District Councils and the County Council to address the infrastructure implications of the East of England (RSS) which identifies significant growth for Hertfordshire for the period up to 2031. The HIIS looked at the strategic infrastructure that would be required to accommodate growth in the County and concentrated on the growth areas and the Key Centres for Development and Change as detailed in the East of England Plan. It stated that there were no strategic infrastructure required in Three Rivers that would prevent growth but recognised that there were some local issues that could be addressed through the Local Development Framework.

### Summary of Findings

There are no elements of the infrastructure framework within the District that would be considered as so essential that will prevent the development outlined in the Core Strategy from occurring. However, that does not mean that there are no gaps in infrastructure that will need to be addressed in order to meet the long-term needs of the District.

The significant gap in terms of infrastructure that will need to be addressed over the next 5 years is the provision of sufficient primary and secondary school places to accommodate the additional demand that is being created.

Hertfordshire County Council has committed to a new secondary school in the District and will also be looking at increasing primary school provision either by extension of existing primary schools or the provision of a new primary school.

In order to meet the demand for infrastructure created by new development the Council will continue to work with providers and developers to ensure that the demand is met in the right locations and at the right time. To achieve this, we will:

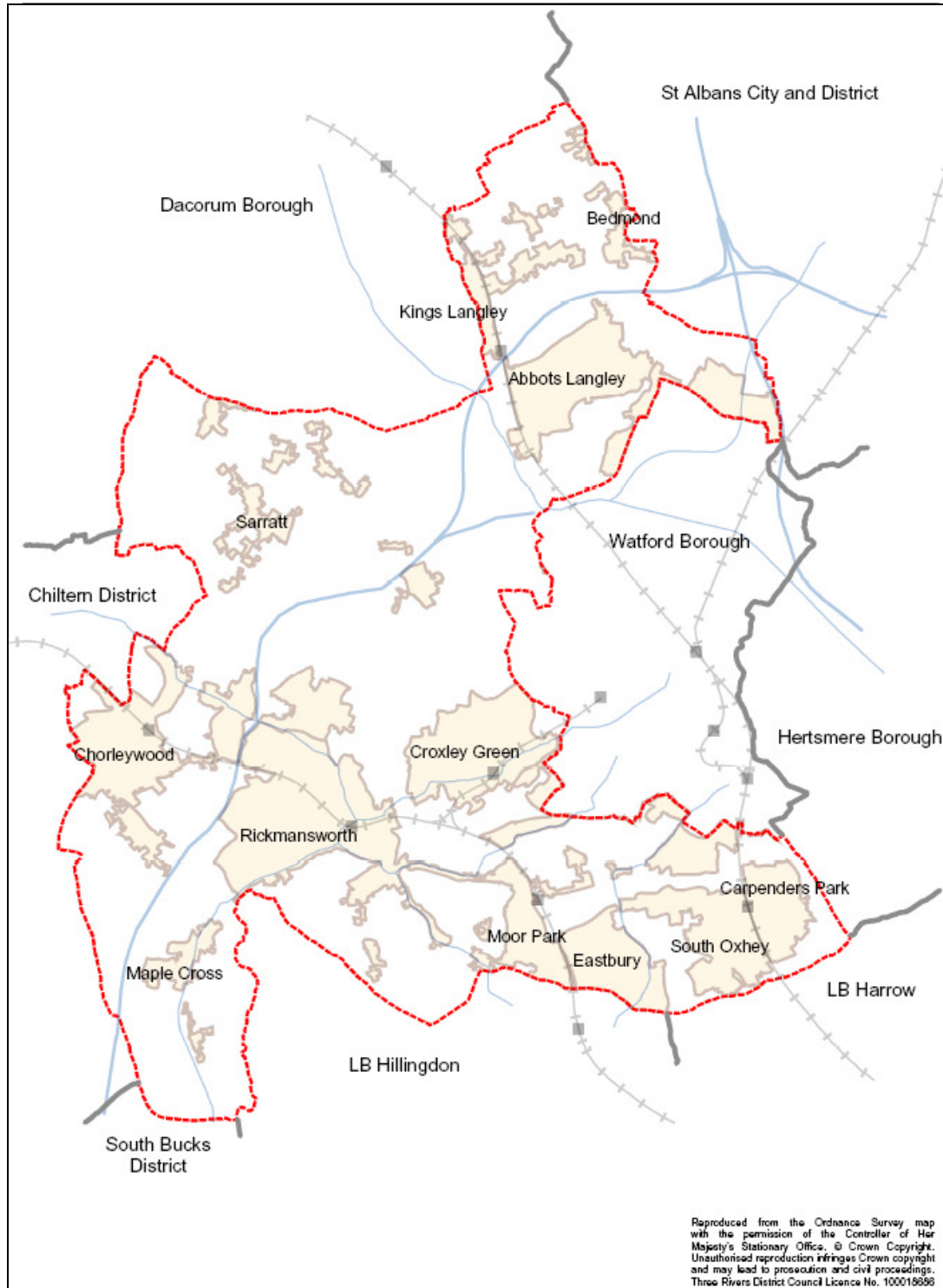
- continue with a partnership approach to infrastructure delivery that involves key stakeholders
- ensure the Infrastructure & Obligations Supplementary Planning Document is able to ensure contributions from developers to help address the gaps in infrastructure provision
- maintain and review an Infrastructure Delivery Schedule which outlines the planned infrastructure, the organisations responsible for provision, costs, timings and funding.

### Three Rivers in Context

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 and updates of the IDP will allow flexibility in planning for any future trends. This section provides the local context in which future infrastructure needs to be planned in the Borough.

### Location

Three Rivers is a sub-urban District of 88.8 square kilometres located in south-west Hertfordshire, at the extreme south west of the Eastern Region. It borders Watford and Hertsmere boroughs to the east, Buckinghamshire County (Chiltern and South Bucks Districts) to the west, St Albans City & District and Dacorum Borough to the north, and the London Boroughs of Hillingdon and Harrow to the south.



## Population

Three Rivers has a population of 87,700<sup>1</sup>. There is an ageing population with a higher proportion of older residents than the County average. 21.2% of Three Rivers residents are over 60 compared to a county average of 19.7%. This trend is forecast to continue; with a 49% increase expected in households aged 65 and over by 2031<sup>2</sup>, while the population of people aged under 50 is expected to fall.

Population of Three Rivers Settlements (Source: Census 2001)

Settlement	Approx. Population	Parish Area
Rickmansworth	15,000	Unparished
South Oxhey	12,000	Watford Rural
Croxley Green <sup>1</sup>	12,000	Croxley Green
Abbots Langley <sup>3</sup>	11,000	Abbots Langley
Chorleywood <sup>1</sup>	7,000	Chorleywood
Carpenders Park	5,000	Watford Rural
Oxhey Hall	3,000	Watford Rural
Eastbury	3,000	Unparished
Maple Cross	2,000	Unparished

Three Rivers needs to accommodate a minimum of 4,000 new dwellings between 2001-2021 which equates to a target of 200 homes per year. Until the East of England Plan is reviewed, it is assumed that the 200 homes per year target will continue to 2026 and, therefore, an additional 1,000 dwellings will need to be provided from 2021-2026.

The current housing supply situation and progress towards meeting East of England Plan targets is set out below:

<b>East of England Plan Housing Requirement 2001-2026</b>	<b>5,000 dwellings</b>
Net Completions 2001-2009	1,926 dwellings
Sites Under Construction	113 dwellings
Sites with Full Planning Permission	425 dwellings
Sites with Outline Planning Permission	27 dwellings
<b>Total Supply</b>	<b>2,492 dwellings</b>
<b>Number of Houses that Need to be Found Land for</b>	<b>2,508 dwellings</b>

It is anticipated that new development will be directed towards previously developed land and appropriate infilling opportunities within the urban areas of the District which have been identified in the Core Strategy as being the most sustainable locations in the District. Limited development to meet local housing needs will take place in the villages of Bedmond and Sarratt, recognising the need to sustain these more rural areas.

To meet development needs, it will be necessary to review the boundaries of the Green Belt at the edge of existing settlements within Three Rivers. Specific Green Belt sites and indicative phasing for development will be identified through the Site Allocations Development Plan Document, and release will be informed by regular monitoring. Sufficient land will be identified to meet development requirements throughout the plan period. Green Belt sites may be either previously developed or greenfield (or include elements of both) and will be identified at the most sustainable locations on the edge of the principal town, key centres and secondary centres as defined in the settlement hierarchy.

## General Transport

<sup>1</sup> ONS (2009) Mid-2008 Population Estimate.

<sup>2</sup> CLG (2009) Household Estimates and Projections 2006-2031

<http://www.communities.gov.uk/documents/housing/xls/table414.xls>

<sup>3</sup> The population of the wider parish areas are significantly higher than the population of the settlements alone

The District is on the outer fringe of London and benefits from excellent road and rail connections. Heathrow and Luton airports are in close proximity and Gatwick and Stansted are about an hour away.

The M1 and M25 motorways run through the District, work is ongoing to widen the M25 to increase capacity to cope with high levels of traffic. This work is due to be completed in 2012.

The West Coast main line, the Chiltern Line and the London Underground Metropolitan line railways all serve the District, providing links to London and the north, as well as more local connections. Demand for rail services remains high, although access to and parking at stations are a pressure.

Bus networks provide an important service in the District, particularly for more rural areas. However, these routes are often uneconomic to operate and networks in the District are shrinking. These services require support to maintain access to essential services for people without access to a car. Limited services between Abbots Langley and Watford General Hospital, and South Oxhey and Watford General Hospital have also been identified as an issue.

Car ownership in the District is high; 84% of households had at least one car or van. This is above the Hertfordshire (82%) and England (73%) levels. In the more rural wards, car ownership levels are even higher, with 92% of households in Sarratt and 94% of households in Chorleywood East having access to at least one car or van. Traffic levels in Three Rivers are forecast to grow 21% by 2021, and there are existing problems of local congestion.

## Assessment of Infrastructure Capacity

The range of infrastructure assessed in the Plan is wide ranging. Information has been gathered for the services and facilities detailed in the following table:

Sector	Infrastructure Type
Health	GPs, Hospitals/Acute Provision, Dentists
Education	Primary and Secondary Education
Emergency Services	Police, Fire
Cultural Services	Libraries, Cemeteries
Strategic Transport	Croxley Rail Link M25 Widening
Local Transport	Traffic Management & Highway Improvements Bus Services Cycle Facilities
Green Infrastructure	Parks, Open Spaces and Play Areas,
Water Infrastructure	Sourcing, treatment, distribution, waste water
Energy Infrastructure	Electricity distribution, Gas Distribution

## Health

The East and North Hertfordshire PCT and West Hertfordshire PCT are supported by a single management team. They have the overall responsibility for health care in Hertfordshire and have produce a joint Strategic Plan for Hertfordshire covering a five year period.

The WatCom Locality Cluster group is a Practise Based Commissioning consortium of 28 GP Practices covering the Watford and Three Rivers Area. Together they work with the East and North Hertfordshire PCT to commission Health Services for around 188,000 local people. They have produced an Estates Plan following discussions with Three Rivers District Council and Watford Borough Council concerning health infrastructure that will be required over the planning period of the respective Core Strategies.

## GPs

Within Three Rivers the key piece of health provision is local GP provision as there are no strategic health facilities within the District.

WatCom state that future development is likely to generate further demand on existing health and social infrastructure but individual sites may be too small to enable the development of new or extended provision.

This report concludes that at the WatCom PBC group level GP capacity is broadly sufficient and that local practices operate out of a total floor space appropriate for the size of the population. However there is a significant inequity between the quality of the best to the worst accommodation and staffing levels across the PBC area which to a certain extent mirrors health and income deprivation.

The planned growth is considered moderate and at a rate comparable with recent years. The PBC group will seek to engage with local planners considering redevelopment/regeneration of the **South Oxhey** central area as an opportunity to address health inequalities in the area through better integrated services.

It is anticipated that **Abbotts Langley** will take the largest share of the growth. However, in addition to two practices in Abbotts Langley (The Vine House Surgery and Abbotts Wood) two Watford Practices (Garston Medical Centre and Coach House) are within close proximity to the area. Capacity here should be considered in conjunction with Watford's proposals in Woodside Ward adding approximately 900 additional registrations. In total the Abbotts Langley and Woodside areas may need up to 1.5 additional whole time GPs and associated staff over the plan period. The Abbotts Wood Surgery in Katharine's Place Abbotts Langley is best placed in terms of accommodation to meet this demand.

It is anticipated that demand for GP services from future development in the **Croxley Green** area could be supported by Baldwins Lane Surgery. If the current building was utilised to the PBC average it would create an additional 200 registrations. However, if additional space could be found the current workforce could register an additional 450 patients. The New Road Surgery is constrained by premises and has reached an optimum list size per doctor and is unlikely to contribute additional registrations without additional premises investment.

Future development in the **Rickmansworth** area may generate an additional 590 registrations over the plan period. There are two centrally based surgeries serving the area, Gade Surgery and the Colne Practice which have sufficient floor space to manage the combined list and expected growth if additional Doctors were recruited at the Colne.

Local Health Care (GPs)	
<b>Lead Agency</b>	West Herts PCT/
<b>Evidence Base</b>	WatCom Locality Commissioning Group – WatCom Estates Plan 2009 East & North Hertfordshire and West Hertfordshire PCTs Strategic Plan 2009/2010 – 2013/2014
<b>Existing Provision</b>	14 GP practices. 62 GPs
<b>Gaps in Provision</b>	At present there are no gaps in provision within the District
<b>Planned Provision</b>	There are no planned increases or improvements in provision of local health care facilities.
<b>Impact of Development Proposals</b>	Regeneration of South Oxhey would provide an opportunity to address health inequalities in the area through better integrated services. Equivalent of 1.5 full time GP will be required at Katherine's Place Surgery to accommodate future demand in Abbotts Langley Area.

	Investment in premises at Baldwins Lane Surgery to accommodate future patients or re-location or substantial investment in the New Road Surgery. Additional GPs will be required in Rickmansworth at the Colne Surgery.
<b>Potential for Delivery</b>	At present local health services do not receive money from developer contributions but considering the lack of funding available from the PCT it is unlikely that new local health facilities will be provided in the short term. Longer term need could be addressed through developer contributions.
<b>Delivery Mechanisms in LDF</b>	The Infrastructure and Obligations SPD could provide further support for improved health facilities.

### Local Strategic Partnership Projects

The Three Rivers Local Strategic Partnership (LSP) is party to the Herts Local Area Agreement (LAA), a set of local priority targets agreed between Central Government and local public services.

In advance of the Performance Reward Grant (PRG) which was awarded following the success of the LAA for 2006-2009, the Council budgeted in advance to fund partnership projects as soon as possible.

The LSP Board has agreed the following projects which will provide additional healthcare provision in the District subject to the Primary Care Trusts agreement:

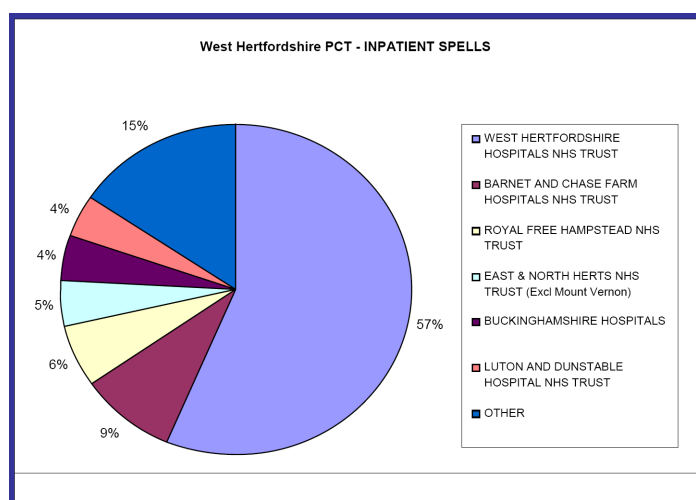
- A Satellite Clinic to be provided in the Maple Cross Club to enable the following outreach services to be provided: Community/Heart Nurses, Health Promotion, Baby & Diabetes Clinic, and Health Checks for over 60's
- A Branch Surgery to be provided in a room at Mill End Community Centre to enable Health Promotion Schemes to take place.
- A Step-Up Project to be provided in South Oxhey to enable counselling, advice and learning services for people with mental health issues.

### Hospitals/Acute Provision

There are currently 4 major acute hospitals in Hertfordshire. Whilst these provide over 60% of acute care for the population residents can access services at several other acute hospitals outside Hertfordshire.

If people require acute care, nearly 98% of Hertfordshire residents, based on modelled travel times, live within 30 minutes by car from an acute hospital.

Hertfordshire patients currently access services at a wide number of hospitals. The chart below demonstrates the flow of inpatient and outpatient activity from the West Hertfordshire PCT to the top 6 providers by volume (2008/09).



The East & North Hertfordshire and West Hertfordshire PCTs Strategic Plan detail the planned provision of Acute Services. Within West Hertfordshire acute services will be centralised at Watford General Hospital which will include:

- A new Acute Admissions Unit & Children's Emergency Department
- The provision of an Urgent Care Centre adjacent to the A&E Department
- In conjunction with local partners including the local football club and District Councils, the West Hertfordshire Hospitals Trust are planning a major campus development resulting in a new hospital by 2015/2016

Financial constraints and drives for efficiency in the health service are also changing the way that health services are and will be delivered with potential changes including:

- Shift of acute services to local community hospitals;
- Improved prevention and primary care to reduce demand for secondary care;
- Improved tertiary services that allow people to be released from hospital earlier and supported locally.

Locally a key issue for Three Rivers' residents is the difficulty in accessing hospitals via public transport. This is a particular issue for older residents.

Strategic Health Care (Hospitals)	
<b>Lead Agency</b>	West Herts PCT/
<b>Evidence Base</b>	East & North Hertfordshire and West Hertfordshire PCTs Strategic Plan 2009/2010 – 2013/2014
<b>Existing Provision</b>	No hospitals within Three Rivers. West Hertfordshire Hospitals NHS Trust provides the majority of acute services; however other NHS Trusts are also used.
<b>Gaps in Provision</b>	These will be determined on a countywide basis.
<b>Planned Provision</b>	The Council is unaware of any new strategic health facilities planned for the District.
<b>Impact of Development Proposals</b>	Growth in residential development in Three Rivers and across Hertfordshire will see increasing pressure being placed on strategic health services. However, changes in the way services are provided and the provision of a new Acute Centre in Watford will mean that there is unlikely to be any need for any strategic health infrastructure within the District.
<b>Potential for Delivery</b>	Not Applicable
<b>Delivery</b>	Not Applicable

<b>Mechanisms in LDF</b>	
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## Dentists

Independent Dental Practices provide the majority of NHS dental care under contract. At the time of writing the Watford area has 16 General and Specialist Dental Practices and there are a further 18 in the Three Rivers area across the main settlement areas. Like other areas in England the West Hertfordshire PCT area has seen a decline in the numbers treated under the new NHS dental contract. The PCT has more dentists per head of population than regional and national averages.

Unlike NHS dental services General Dental Practitioners are not NHS employees but like GPs are independent contractors. The reimbursement framework for Dentists under the current contract terms provides a single income stream for an agreed volume of NHS work.

The contract sum contains a notional element for premises and staffing but these are not reimbursed or identified separately. Dentists are not precluded for mixing a considerable private income with an NHS contract in the way that GPs are.

This single rolled up payment makes it hard to strategically plan dental infrastructure outside of the NHS. For a commercial dentist the choice of premises may be as much guided by the potential residual value of a property as its suitability for a wide patient group. Location may be more influenced by the likelihood of a good private income as meeting an unmet health need. This has led to many independent dental practices being in hard to access premises, for example converted domestic homes or above retail units.

In considering future requirements the PCT's Strategic Plan focuses on increasing the number of people accessing NHS dentistry as one of their key performance outcomes and will be concentrating on:

- setting standards for service for NHS Dentists in Hertfordshire
- consistency of delivery of the full range of NHS Dentistry
- targeting investment to tackle patient needs
- undertake marketing campaign to enable Hertfordshire population to identify available NHS dentistry option
- developing a closer relationship with NHS Dentists

<b>Local Health Care (Dentists)</b>	
<b>Lead Agency</b>	West Herts PCT/
<b>Evidence Base</b>	WatCom Locality Commissioning Group – WatCom Estates Plan 2009 East & North Hertfordshire and West Hertfordshire PCTs Strategic Plan 2009/2010 – 2013/2014
<b>Existing Provision</b>	18 Dentists
<b>Gaps in Provision</b>	At present there are no gaps in provision. WatCom have concluded in their report that more information will need to be gathered to map local hot spots of dental deprivation and when considering new infrastructure developments Commissioners should discuss the latest position with regards to Dental activity with PCT leads.
<b>Planned Provision</b>	The Council is currently unaware of any planned provision.
<b>Impact of Development Proposals</b>	An increase in dwellings both locally and in neighbouring districts could require additional provision of NHS Dentists.

<b>Potential for Delivery</b>	At present local health services do not receive money from developer contributions but considering the lack of funding available from the PCT it is unlikely that new local health facilities will be provided in the short term. Longer term need could be addressed through developer contributions.
<b>Delivery Mechanisms in LDF</b>	The Infrastructure and Obligations SPD could provide further support for improved health facilities.

## Education and Schools

The Government's approach to Education provision has been one based on improving the choice of parents and using competition between schools to drive up standards. However, they have also recognised the need to improve school infrastructure and continue to invest in new school buildings through Building Schools for the Future (BSF) and the Academies programme. The Government has focused on improving school buildings in the most deprived areas of the Country meaning that more affluent areas such as Three Rivers have not been a priority for funding through programmes such as BSF.

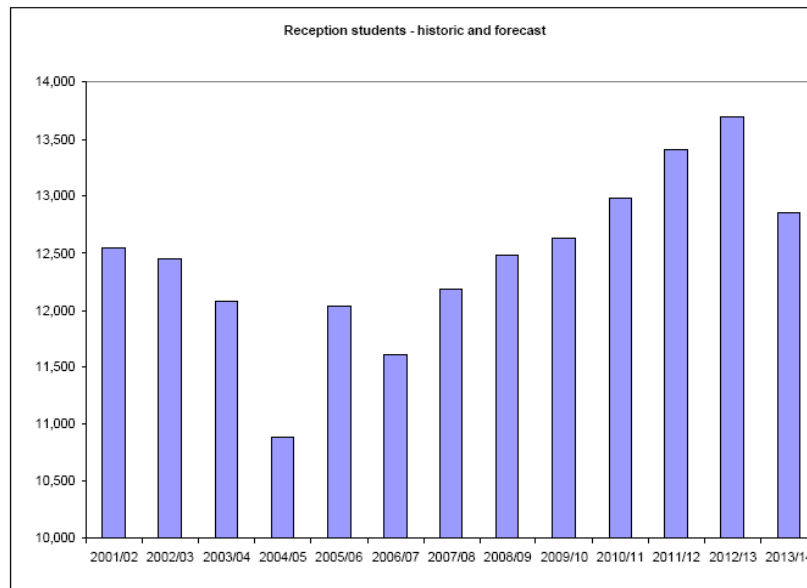
What is happening in Hertfordshire is similar to the picture nationally where there has been a substantial increase in demand for school places, largely resulting from increasing numbers of births. Live births in England and Wales increased for the sixth successive year in 2007. There were 690,013 live births in 2007 compared with 669,601 in 2006, an increase of 3.0 per cent. The number of live births has been increasing since 2001 and has now reached the highest level since 1991.

This growth is not uniform and some areas are seeing changes in demographic and other factors which have resulted in a sharp increase in reception age pupil numbers in 2008. The Government also projects further cumulative increases for at least the next few years based on historic growth in births.

### Primary School

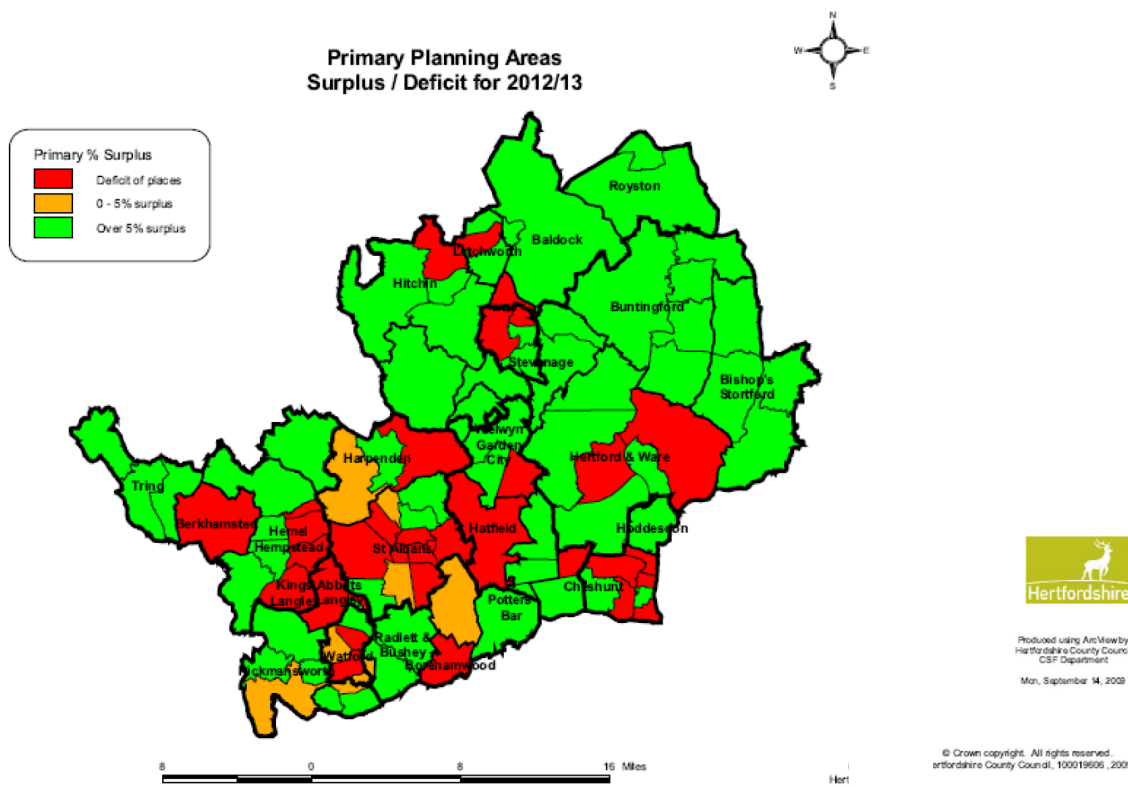
In line with national trends, Hertfordshire experienced a period of falling demand for primary school places between 2000 and 2007 during which it reduced provision in line with Audit Commission guidance. Hertfordshire has actively managed this process to ensure that schools are best placed to maintain standards. Primary places have been removed from schools and several schools closed across the County where this has been necessary to protect standards and the quality of education. In Three Rivers, Little Furze School in South Oxhey was closed due to an oversupply of Primary School places in the area. Across the County some school sites and buildings have been retained to facilitate the County Council's response to future changes in demand.

At a county-wide level, 2009/10 is the third year of growth in reception class numbers. This increase is expected to continue to 2012/13, as set out in the graph below. However, recent forecasts suggest that this trend is likely to come to an end in 2013/14 county-wide, though continue in some local areas.



This implies that reception numbers will fall in 2013/14 after 7 years of continuous growth. However, it is impossible to tell with any degree of certainty yet whether or not numbers will rebound the following year (as happened in 2005/06) or whether this will be the start of a period of decline.

Hertfordshire County Council forecast that demand for Reception places will rise by 8% county-wide over the next three years. This growth is not consistent across Hertfordshire and in individual local areas changes can be rapid, substantial and unpredictable. At a local level the County's forecasts still show continuing growth in 2013/14 in a number of areas.



The above diagram shows that there is a surplus/deficit of Primary provision across Hertfordshire in 2012/2013. It shows that it is anticipated that there will be a deficit in the Abbots Langley and the

surrounding area. Hertfordshire County Council outlined the following for **Abbots Langley** with regards to the forecast deficit:

**Total number of reception places currently available =195**

Forecast	2010/11	2011/12	2012/13	2013/14
% surplus/ shortage	-4.1%	-1.0%	-12.8%	-13.3%
Demand	203	197	220	221

A shortage of places is forecast for Abbots Langley. This increases to approximately 1 form entry (30 places) from 2012-13

### Action taken

2006: Tanners Wood Primary School's PAN (Published Admission Number) reduced from 56 to 45 in line with forecasts at that time which did not indicate a need for the places. The new PAN ensured that the school could manage class sizes efficiently and within Key Stage 1 legislation.

2009/11: The school attracts pupils from a wide area, where there are sufficient places available to manage the forecast demand up to 2012/13 and so no change has been proposed to date.

### Next steps

The forecast of demand increases by over 10% from 2012/13.

- Tanners Wood primary school is the only school with potential to expand, but by 0.5 form entry (15 places) only, for which additional accommodation would be required.
- Forecasts will be monitored to establish whether additional capacity is required to meet demand for places from local children.

Hertfordshire County Council to look at feasibility of extending existing schools in the area and of possibility of a new primary school.

### Rickmansworth Area

Hertfordshire County Council has identified that there will be a shortfall of primary school places in the Rickmansworth Area in the mid term.

### Next steps

Hertfordshire County Council to look at feasibility of extending existing schools in the area and of possibility of a new primary school.

### South Oxhey Area

Hertfordshire County Council has identified that is a need to provide reserve capacity of 0.7fe and there may be a need for an additional 0.6fe to cater for the needs of new development.

### Next steps

Hertfordshire County Council to look at feasibility of expanding primary school provision in the area.

### Croxley Green Area

Hertfordshire County Council has identified a small margin of capacity exists in the short term, however beyond 2015/16 there is a need to establish a reserve capacity of 0.5fe, and there may be a need to provide a further 0.4fe to cater for the needs of new development. Capacity exists within

existing schools to raise provision by 1fe which would meet requirements, however there is an issue of a high number of temporary buildings at most existing schools.

### **Next steps**

Hertfordshire County Council to look at feasibility of expanding primary school provision in the area.

### **Carpenders Park Area**

Hertfordshire County Council has identified the school is oversubscribed and that any additional demand would require expansion of the school by 0.5fe.

### **Next steps**

Hertfordshire County Council to look at feasibility of expanding primary school provision in the area.

### **Kings Langley Area**

Hertfordshire County Council has identified growth in Three Rivers and Dacorum is likely to result in the requirement for an additional 1fe.

### **Next steps**

Hertfordshire County Council to look at feasibility of expanding primary schools in the area. It is anticipated that the most likely location of a new school would be within the Dacorum area.

### **Bricket Wood Area**

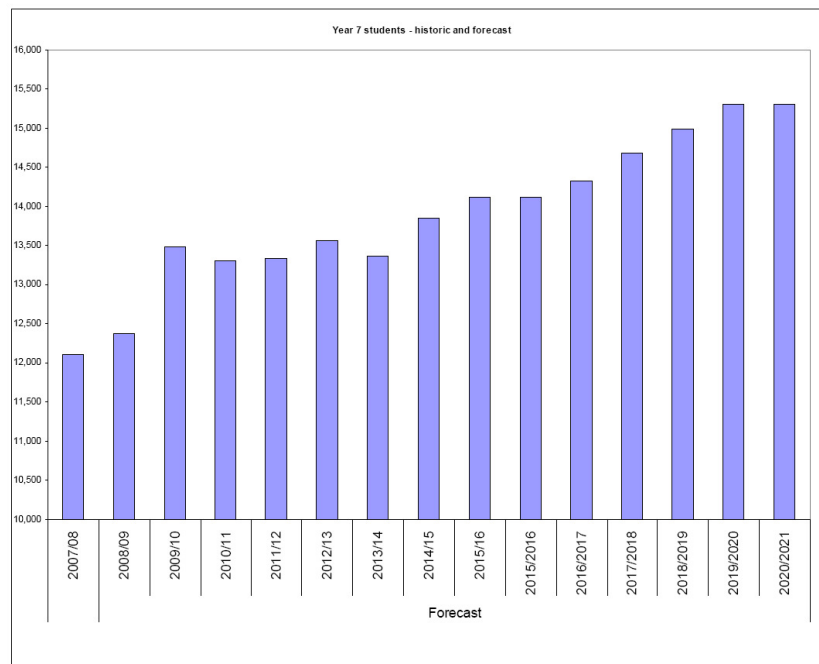
Hertfordshire County Council has identified that as four district boundaries meet here, provision needs to be carefully considered, and there may be a need for expansion of schools.

### **Next steps**

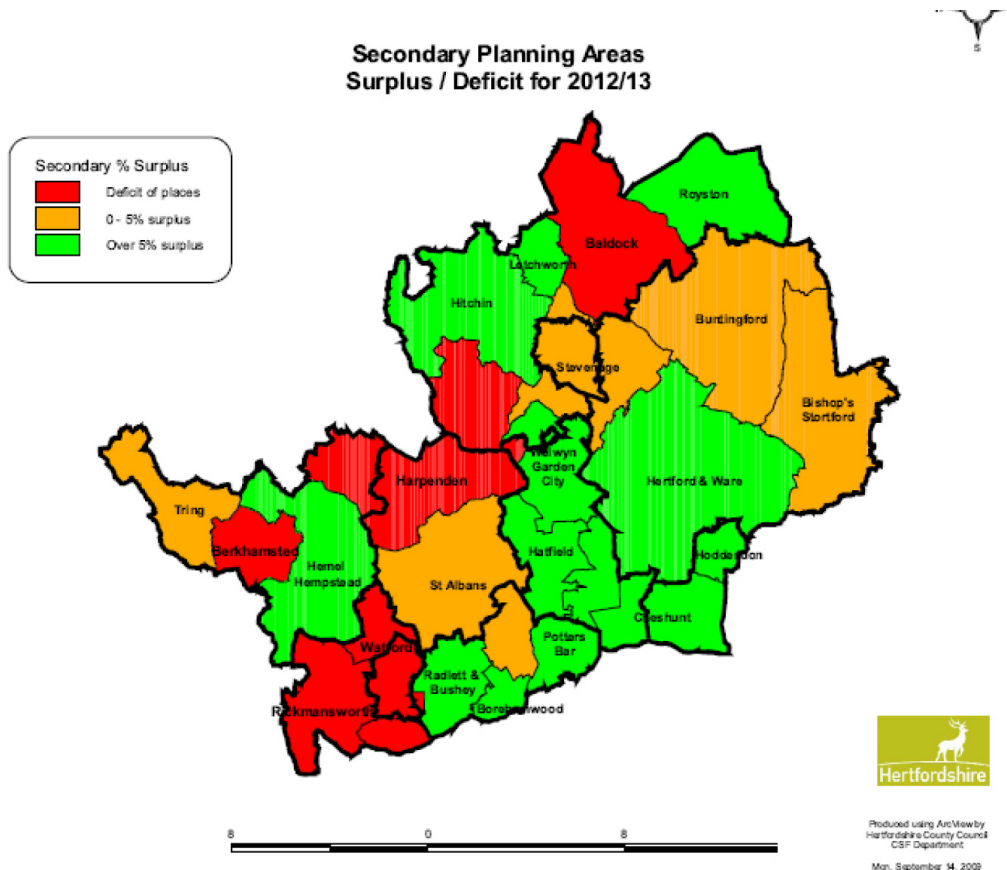
Hertfordshire County Council to look at feasibility of expanding primary school provision in the area.

### **Secondary Schools**

Inevitably, after a time-lag rising rolls in primary schools translate to rising rolls in secondary. Set out below is a graph presenting most recent projections, showing 2014/15 as the start of a likely long period of sustained growth.



The pattern of growth over time is more consistent than in the primary sector, because over the longer time period the effects of growing dwelling numbers have a proportionately greater effect. Because of the greater degree of predictability of secondary age pupil numbers five or more years in advance, the planning of expansions to meet demand is a more certain process.



The above diagram shows that there is a deficit of Secondary provision across Three Rivers District and Watford Borough. Hertfordshire County Council outlined the following for **Rickmansworth** and **Watford** which, because of catchment areas, should be considered together.

### Rickmansworth Area

Total number of Year 7 places currently available: 603

Forecast	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2020/ 2021
Predicted surplus	-3.65%	-5.31%	-6.30%	-2.82%	-6.97%	-9.95%	-8.79%	-12.94%
Predicted demand	625	635	641	620	645	663	656	681

### Action taken

2007: Increase of the admission number at St Clement Danes from 178 to 208

There is a relationship for school places between Rickmansworth and Watford as parts of those areas are geographically close. See Watford below.

### Next steps

Feasibility work is required to ascertain the most appropriate long term solution to create the required additional capacity across Rickmansworth. This could be through establishing new provision, the expansion of existing schools, or a combination of both.

### Watford Area

Total number of Year 7 places currently available: 1,134

Forecast	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2020/ 2021
% surplus/ shortage	2.20%	-0.26%	-1.15%	1.68%	-3.00%	-6.44%	-8.29%	-15.96%
Demand	1109	1137	1147	1115	1168	1207	1228	1315

A shortage of school places is forecast from 2011/12. There is a relationship between Watford and Rickmansworth as parts of those areas are geographically close (see Rickmansworth above). There is also a relationship between Watford and Bushey, in which there are currently 72 places available. The planning of school places is therefore complex across all three areas. It is anticipated that, together with some surplus places to allow for parental satisfaction, 12 form entries (360 places) will be required up to 2021 across Watford and Rickmansworth.

### Next steps

Feasibility work is required to ascertain the most appropriate long term solution to create the required additional capacity across Watford and Rickmansworth. This could be through establishing new provision, the expansion of existing schools, or a combination of both.

Primary and Secondary Education	
<b>Lead Agency</b>	Hertfordshire Education Authority - Hertfordshire County Council
<b>Evidence Base</b>	Meeting the rising demand for school places December 2009 – Hertfordshire County Council Building Schools for the Future Programme

	<p>Primary Capital Programme – Strategy for Change – Hertfordshire County Council 2008</p> <p>Regular meetings with Hertfordshire County Council and correspondence London Borough of Hillingdon</p>
<b>Existing Provision</b>	<p>There are 27 primary schools, six secondary schools and a further five private schools, providing primary and secondary education in the District</p>
<b>Gaps in Provision</b>	<p>The forecasts show that there is some pressure on secondary places in Watford and Rickmansworth during the period 2010/2011 to 2013/2014 and that from 2014/2015 onwards this pressure will become much more acute.</p> <p>The forecasts also show that there will be a need for 1 f.e for Primary places in the Abbots Langley Area from 2012/2013 – but Tanners Wood will only be able to accommodate 0.5 f.e and that's with expansion.</p> <p>There may also be a need to make additional provision in the South Oxhey, Croxley Green, Carpenders Park, Kings Langley and Bricket Wood areas.</p>
<b>Planned Provision</b>	<p>The need to provide the additional forms of entry has been recognised within the County's 'Meeting the rising demand for school places' and regular discussions with Hertfordshire County Council.</p> <p>Work is now underway to seek to identify ways of expanding capacity serving these areas on a permanent basis from 2014/2015 by either expansion of existing schools or provision of a new secondary school in the Rickmansworth Area and a new primary school in the Abbots Langley area. However, no decision has been made as to where these additional forms of entry will be provided. The possibility of a new secondary school is being examined but no detailed planning has yet to take place. Any growth in the next 5 years will be accommodated in existing schools and temporary buildings.</p>
<b>Impact of Development Proposals</b>	<p>New housing will contribute to the increase in the number of children and young people and the need for school places. Hertfordshire County Council has taken account of predicted housing growth in their plans and recognises that these will have to be reviewed on an on-going basis due to the difficulty in predicting the number of places that will be required.</p>
<b>Potential for Delivery</b>	<p>Due to the current funding levels and Hertfordshire County Council's status as a floor authority, investment demands to meet the predicted demands in both primary and secondary school places cannot be met from the Dedicated Schools Grant and so funding for implementing their strategy will need to be considered through their Integrated Planning Process. The Department for Children, Schools and Family (DCSF) will continue to make additional investment available for primary schools through the Primary Capital Programme. The County Council also rely on developer contributions.</p>
<b>Delivery Mechanisms in LDF</b>	<p>The Core Strategy will identify areas of search for a new secondary school provision in the Rickmansworth Area.</p> <p>The Infrastructure and Obligations SPD could provide further support for additional education facilities.</p>

## EMERGENCY SERVICES

### Police

The Hertfordshire Constabulary is responsible for policing the District and the Hertfordshire Police Authority (HPA) ensure that it delivers the most efficient and effective policing in Hertfordshire. The need for the HPA to review how and where it operates its services is dependant on a number of factors i.e.

- population growth
- type and design of any new developments
- supporting infrastructure such as a road network etc.
- need to reflect operational changes in delivering service i.e. changes in technology

There are also changes to the way policing works in relation to a growing emphasis on community policing through the Safer Neighbourhoods programme, changing crime patterns, a need to modernise its working environments, provide effective flexible space to respond to the changes in the Police force and a move towards more effective joint-working with other agencies.

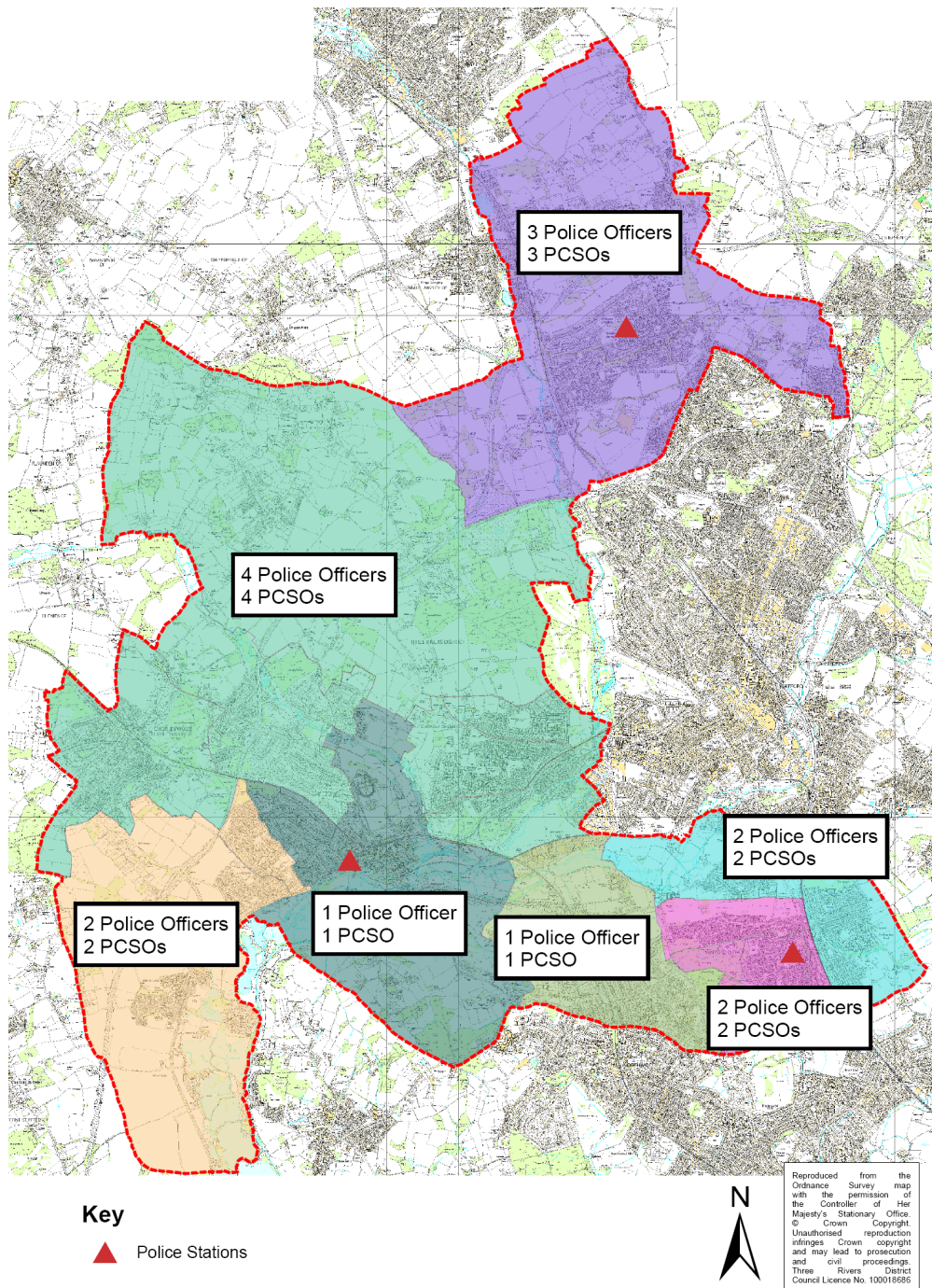
The HPA's Policing Plan which aligns with Hertfordshire's Local Area Agreement sets out their policing priorities for 2010/2013 as:

- Reduce the most serious violent, organised and acquisitive crimes
- Protect vulnerable people, including victims of sexual offences
- Detect more offences and bring more serious offenders to justice
- Improve community confidence in police services
- promote public safety with a particular emphasis on young people
- Protect the County from terrorism and violent domestic extremism

Hertfordshire is divided into three policing areas which have their own dedicated command teams. The Constabulary headquarters is based in Welwyn Garden City and provides a support and administrative function to these areas. There are more locally based Neighbourhood Teams which work in local partnerships at ward and District level.

Each of these teams is led by a Neighbourhood Sergeant who oversees a team of Constables, Police Community Support Officers (PCSOs), Special Constables and volunteers; these personnel are based in the Abbots Langley, South Oxhey and Rickmansworth Police Stations. There is also a Neighbourhood Inspector responsible for all three teams who are based at the District HQ at Rickmansworth Police Station.

Safer Neighbourhoods is a partnership between police, Three Rivers District Council, residents, businesses and local agencies to tackle the issues that matter to communities. At the time of writing there are seven Neighbourhood Teams in Three Rivers which are made up of Ward Police Officers and Police Community Support Officers. The map below shows the current policing levels in the District.



The number of staff needed to police an area is not based on population but on criminality, which is influenced by the type of housing, population density, housing quality and whether there is a stable population. It is, therefore, difficult to assess future demand for police services as a result of housing growth.

The Community Safety Unit based at Rickmansworth Police Station provides district wide services and support to the Neighbourhood teams and includes a licensing officer, Anti-social Behaviour officer, Crime Prevention Officer Etc.

The 24 hour immediate response capability is provided by Intervention Officers who operate from Rickmansworth Police Station. They cover the whole district with patrol plans, tasking and briefing used to place these officers in the right place at the right times and to respond to incidents on an intelligence led basis. They are supported by Specialist Uniformed teams on a 24 hour basis including the Western Area Road Policing Unit, Armed Response Vehicles and Dog Handlers.

The main custody facility is at Watford Police Station with cells available at Rickmansworth Police Station for local operations.

There is also a Local Crime Unit comprised of detectives and uniformed officers at Rickmansworth Police Station. There is also an Area (Western) Crime Unit and Case Investigation Team based at Watford with full force support from units/personnel based at Police HQ in Welwyn Garden City.

The Hertfordshire Constabulary have stated that a larger Neighbourhood Team and an enlarged facility, to accommodate that team, would be required in the Abbots Langley area should the housing growth detailed in the Core Strategy go ahead. They have also stated that they would be looking for developer contributions to fund this operational need.

The HPA is currently putting together a formula to justify a charge on development. This has been commissioned by the Association of Chief Police Officers and the Association of Police Authorities and is being developed nationally. It is likely to be adopted nationally later in 2010. The formula is based on needs being population, not housing, driven.

This formula is, as yet, still in draft and there are several issues that would need to be reviewed to ensure that it is consistent with the information used by other service providers. However, the recommendation is that planning contributions are assumed to have to meet the full cost of growth needs. This is because the capital needs of the Police are comparatively small and also because the pressure on local authority capital budgets is likely to become increasingly severe.

Police	
<b>Lead Agency</b>	Hertfordshire Police Authority
<b>Evidence Base</b>	Policing Plan 2009/2012 – (HPA) Policing Priorities 2010 – 2013 (HPA) Hertfordshire Infrastructure & Investment Strategy 2009 Hertfordshire Constabulary, Estates & Facilities
<b>Existing Provision</b>	There are 3 part-time Police Stations, 15 Police Officers, 15 Police Community Support Officers and a Neighbourhood Team led by the Chief Inspector.
<b>Gaps in Provision</b>	There are no current gaps in provision.
<b>Planned Provision</b>	There are no current plans for further provision.
<b>Impact of Development Proposals</b>	Hertfordshire Constabulary have identified the need for a larger Neighbourhood Team and facility in the Abbots Langley Area.
<b>Potential for Delivery</b>	It is anticipated that the Constabulary and HPA will identify the most cost effective method of supplying any necessary infrastructure.
<b>Delivery Mechanisms in LDF</b>	Policies that maintain the quality of the local built environment and ensure that design incorporates ‘Designing Out Crime’ criteria to reduce the potential need for an increased police presence. The Infrastructure and Obligations SPD could provide further support for policing from developer contributions.

## Fire

Hertfordshire Fire and Rescue Service (HFRS) are responsible in providing the fire and rescue service in Three Rivers.

There are about 580 full time personnel, of which approximately 400 are operational Firefighters working from the sixteen fire stations staffed around the clock, a further 250 retained Firefighters

operating from part-time fire stations, 125 support staff and a further 30 work at the Command and Control Centre answering in excess of 125,000 calls per year.

The Hertfordshire Fire & Rescue Service is split into the following five areas each of which have a District Plan:

- Dacorum & St Albans
- East Herts & Broxbourne
- Hertsmere Welwyn Hatfield
- Stevenage & North Herts
- Watford & Three Rivers

The HFRS has two main functions:

- to reduce the number of deaths, injuries and property losses from fire by delivering community fire safety initiatives across the County
- to respond to emergency calls to fires, road traffic collisions and other emergencies.

Fire services now plan their services using a local risk management approach rather than one standard based on population size and general response times. Services are located and provided in a way that best manages risk which has led to significant changes in the way fire services have allocated funding and the location of their infrastructure across the County. There is also greater attention paid to reducing the incidence of fire and accidents rather than the reactive fire and rescue services.

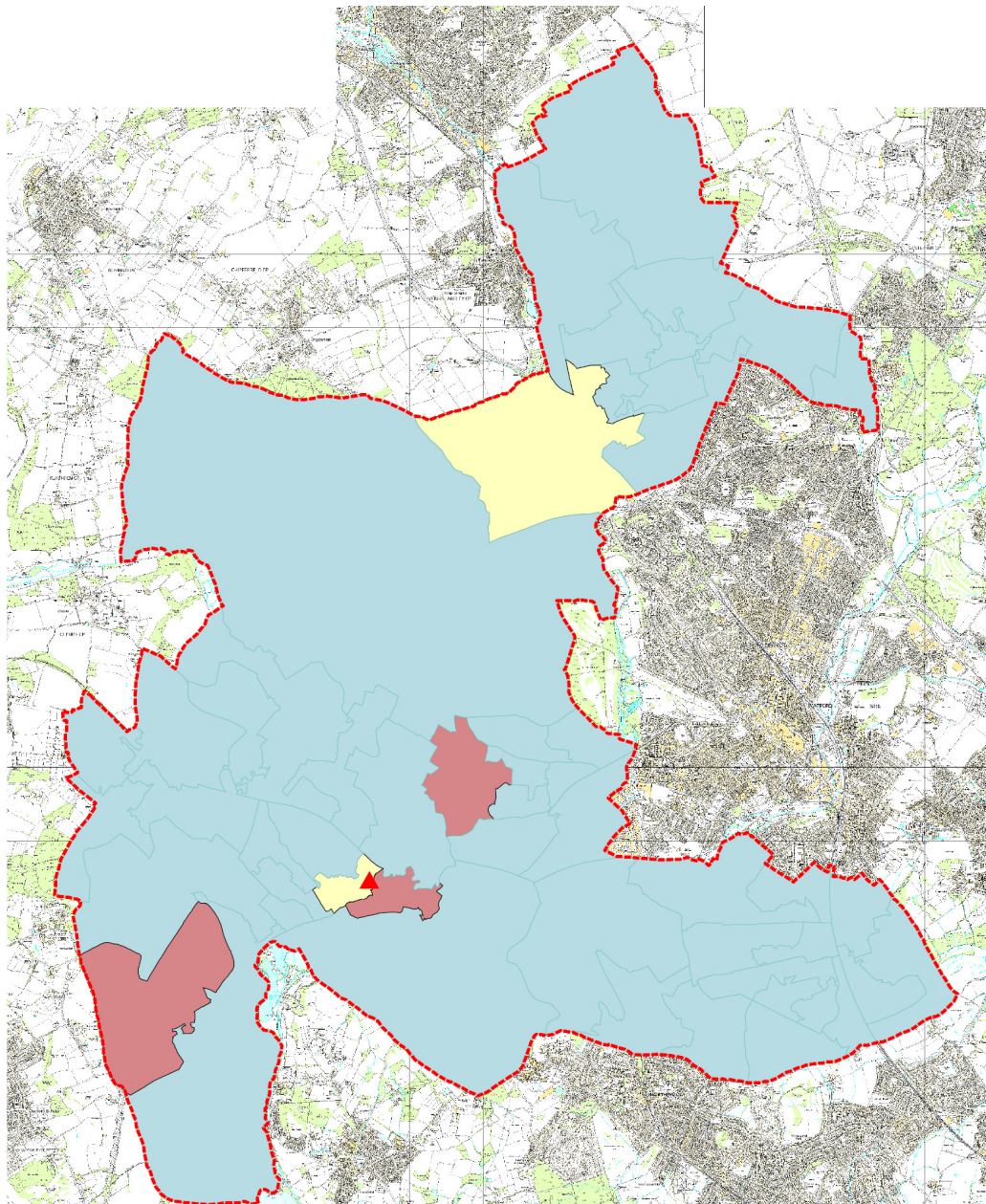
### **Deliberate Fires**

There has been a steady reduction in deliberate fires in the District over the period 2006/07 – 2008/9. The reduction in deliberate fires is a result of a series of arson reduction initiatives in the area. The most affected ward in the District was Northwick and the Council has worked in partnership with the Operational crews to identify and remove arson risks.

**Primary Fires** (fires in buildings, vehicles and outdoor structures and any fires involving casualties or rescues)

The most affected Ward for primary fires in Three Rivers was Maple Cross & Mill End due to a number of vehicle fires on the M25 a section of which is within its boundaries.

The HFRS have used incident data and predictive elements to produce a risk profile of Three Rivers and the following diagram has classified super output areas according to risk of fire and indicates where community safety initiatives should continue to be concentrated in the future.



**Key**

- ▲ Fire Station
- Low Risk
- Medium Risk
- High Risk



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Fire & Rescue Service	
<b>Lead Agency</b>	Hertfordshire County Council Fire Authority
<b>Evidence Base</b>	Herts Fire & Rescue Service Watford & Three Rivers District Plan 2009 Herts County Council Fire Authority Community Safety Plan 2009/12
<b>Strategic Context</b>	The HFRA
<b>Existing Provision</b>	Fire Station at Rickmansworth
<b>Gaps in Provision</b>	No indicated gaps in provision for Three Rivers at present.
<b>Planned</b>	No additional services are planned for the District and no reduction in physical

<b>Provision</b>	infrastructure is planned at the moment but risk management could lead to increased or decreased provision over the next 15 years.
<b>Impact of Development Proposals</b>	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.
<b>Potential for Delivery</b>	N/A
<b>Delivery Mechanisms in LDF</b>	Policies in LDF to ensure that developers provide sufficient access for emergency vehicles.

## CULTURAL SERVICES

### Libraries

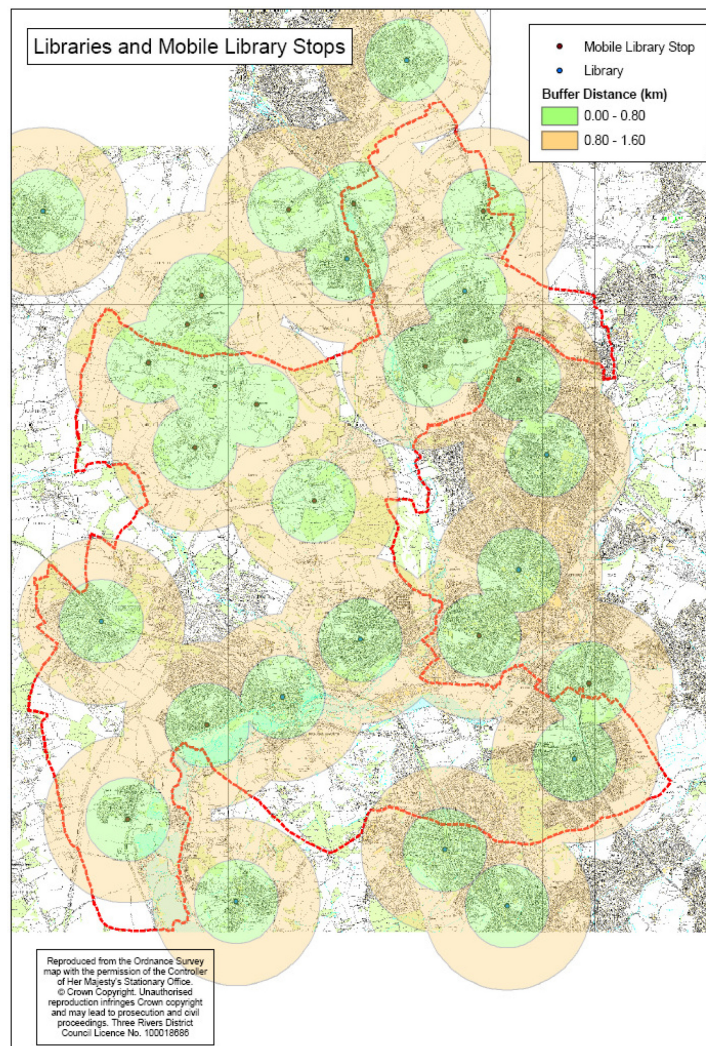
The Government's vision for library services is detailed in the Department for Culture Media and Sport 'Modernisation Review of Public Libraries' (2010). This refreshed the Government's strategy 'Framework for the Future' (2003) which emphasised the increasing role of libraries as gateways to knowledge, information and learning and digital citizenship.

Hertfordshire County Council has responsibility for the delivery of Library services within Three Rivers and there are five libraries in Three Rivers at the following locations:

- Abbots Langley
- Chorleywood
- Croxley Green
- Oxhey
- Rickmansworth

In addition, there are mobile library services which greatly increase the accessibility of library services within the District. The mobile library services include regular stops at locations such as: Bedmond, Belsize, Bucks Hill, Chandlers Cross, Commonwood, Hunton Bridge, Maple Cross, Mill End and Sarratt.

The 'Implementing the Hertfordshire Vision for Libraries in the 21<sup>st</sup> Century' document (2006) sets out Hertfordshire County Council's plans for improving the service and concentrates on extending opening times and on a replacement and refurbishment programme across the County. As a result of this, the Oxhey Library underwent a major refurbishment in 2009 with a consequent significant increase to the number of items borrowed and visits to the library. There are no plans to increase the provision of libraries in Three Rivers; instead resources will be concentrated on improving existing library facilities, such as the provision of ICT equipment, and opening times.



Libraries	
<b>Lead Agency</b>	Hertfordshire County Council
<b>Evidence Base</b>	Hertfordshire County Council Modernisation Review of Public Libraries, DCMS Framework for the Future, DCMS Libraries for the 21 <sup>st</sup> Century Change for Excellence 2005 – 2015 (HCC) Implementing the Hertfordshire Vision for Libraries in the 21 <sup>st</sup> Century (HCC)
<b>Existing Provision</b>	There are five static libraries in the main towns in the District, plus mobile library services provided to outlying villages.
<b>Gaps in Provision</b>	There are no existing gaps in library provision in the District.
<b>Planned Provision</b>	There is no planned provision for a new library in the District. Hertfordshire County Council will continue to look to the enhancement to existing stock and ICT facilities at the libraries
<b>Impact of Development Proposals</b>	Increased residential development may place pressure on library services and require the need for refurbishment of some libraries, in particular in terms of ICT.
<b>Potential for Delivery</b>	Not applicable
<b>Delivery Mechanisms in LDF</b>	The LDF will protect the loss of community facilities such as libraries.  The Infrastructure and Obligations SPD could provide further support for additional library facilities.

## Cemeteries

Three Rivers District Council is responsible for the cemetery provision and maintenance within the District and all administration is carried out by the Environmental Services Section. There are two cemeteries in the District at Chorleywood Road and Woodcock Hill offering a traditional and environmentally friendly woodland cemetery.

The Council encourages natural burials in the woodland part of Woodcock Hill Cemetery but there is still a demand for the traditional burial. It is anticipated that there will be a need for a new cemetery by 2014 should the number of traditional burials remain constant at approximately 100 per annum. The anticipated increase in population over the plan period is likely to increase this demand although not significantly.

The Council will consider whether to provide a new cemetery or to allocate part of the woodland burial area for traditional burials later this year.

Cemeteries	
<b>Lead Agency</b>	Three Rivers District Council
<b>Evidence Base</b>	Environmental Services Section
<b>Existing Provision</b>	Two cemeteries at Chorleywood Road and Woodcock Hill
<b>Gaps in Provision</b>	A new cemetery will be required by 2014
<b>Planned Provision</b>	A report will be considered by the Council later in 2010
<b>Impact of Development Proposals</b>	Population increase is likely to result in a higher annual demand in burial space
<b>Potential for Delivery</b>	Potential for delivery is high as there are options for provision but funding will come from the Council's Capital budget
<b>Delivery Mechanisms in LDF</b>	Not applicable

## WASTE

### Composting Facility

Planning Policy Statement 10: Planning for Sustainable Waste Management sets out the Government's policy to be taken into account by waste planning authorities. The overall objective of Government policy on waste is to protect human health and the environment by producing less waste and by using it as a resource wherever possible.

Hertfordshire County Council are responsible for waste planning in Hertfordshire. Plans for provision for waste management and disposal are set out in the emerging Waste Development Framework which provides the spatial framework for the delivery of the Hertfordshire Municipal Waste Strategy 2009.

There is currently no facility for composting in the west of the county (Dacorum, Three Rivers and Watford districts), and a need has been identified for a new In Vessel Composting facility with capacity for around 50,000 tonnes in the Hemel Hempstead/ Watford corridor by 2014.

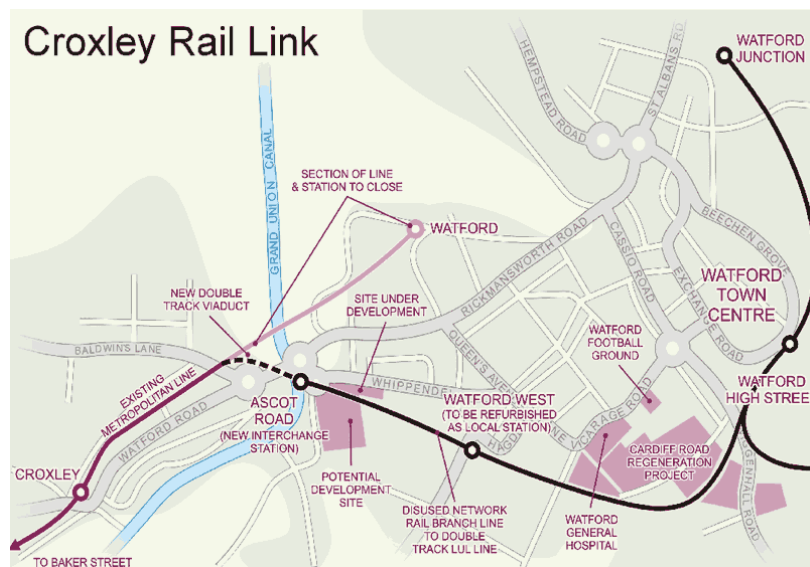
Composting Facility	
<b>Lead Agency</b>	Hertfordshire County Council
<b>Evidence Base</b>	Hertfordshire County Council Hertfordshire Municipal Waste Strategy 2009 (HCC) Hertfordshire Waste Development Framework (HCC)
<b>Existing Provision</b>	There is no composting facility in the western part of the county (Dacorum, Watford and Three Rivers districts)
<b>Gaps in Provision</b>	The Waste Disposal Authority considers that a new In Vessel Composting facility with capacity for around 50,000 tonnes in the Hemel Hempstead/Watford corridor by 2014
<b>Planned Provision</b>	The Waste Disposal Authority has identified an area of search for a new In Vessel Composting facility to be provided, and will now seek a site to meet need
<b>Impact of Development Proposals</b>	Increased residential development may place pressure on waste management and disposal services and require the need for additional capacity
<b>Potential for Delivery</b>	Hertfordshire County Council will identify sites and make provision
<b>Delivery Mechanisms in LDF</b>	The LDF (alongside those of Dacorum and Watford) will consider the need to allocate land for waste.  The Infrastructure and Obligations SPD could provide further support for additional waste facilities.

## Strategic Transport

### Croxley Rail Link

Transport for London and Hertfordshire County Council are developing plans to re-route and extend the Metropolitan Line to Watford Junction. This is being done in order to:

- Improve access to public transport
- Improve access to facilities in Watford
- Reduce traffic congestion
- Improve transport links to London and
- Provide future opportunities for services from Watford to Rickmansworth and beyond



<http://www.tfl.gov.uk/assets/downloads/corporate/croxley-map.GIF>

At the time of writing the funding for the Croxley Rail Link has still yet to be finalised but the Department of Transport is expected to issue a Transport & Works Act Order allowing the construction of the railway during 2010, allowing a start on-site during 2011 with completion before 2013.

Croxley Rail Link	
<b>Lead Agency</b>	Transport for London, Hertfordshire County Council, Department of Transport
<b>Evidence Base</b>	Transport for London 'Croxley Rail Link' Transport for London Funding Programme Hertfordshire County Council Highways and Transport Cabinet Panel Hertfordshire Infrastructure and Investment Strategy 2009
<b>Existing Provision</b>	N/A
<b>Gaps in Provision</b>	N/A
<b>Planned Provision</b>	Extension of Metropolitan Line
<b>Impact of Development Proposals</b>	The planned new housing is unlikely to have an effect on the rail network.
<b>Potential for Delivery</b>	Potential for delivery is high with the Department of Transport expected to issue a Transport & Works Act Order in 2010.
<b>Delivery Mechanisms in LDF</b>	The Core Strategy will need to contain spatial policies that locate development in areas that are close to strategic public transport links.

## M25 Widening

The London Orbital Multi Modal Study (ORBIT) was commissioned by the Government Office for the South East and made its final report in November 2002. The intention of the study was to identify causes of congestion along and approaching the M25, and recommend a preferred strategy of possible solutions to alleviate the impact of congestion on the M25.

The final Orbit study report recommended strategic measures to alleviate medium to long-term congestion problems. The report identified a number of sections and junctions of the M25 that would need widening or improvements to increase capacity for future growth. As a result the Highways Agency is to widen approximately 102 kilometres of the M25 by adding a lane in each direction to make a generally 4 lane motorway.

- Section 1: From Junctions 16 to 23
- Section 2: From Junctions 5 to 7
- Section 3: From Junctions 27 to 30
- Section 5: From Junctions 23 to 27

Junctions 17 to 20 are in Three Rivers and widening works started in 2009 and are expected to be completed by 2013. The estimated cost associated with these junctions is £76.2m (HIIS). Works are being procured through a Private Finance Initiative (PFI) contract and will be funded by borrowings from the private sector which are recovered from the Highways Agency out of availability payments over the life of the contract.

## M25 Widening

<b>Lead Agency</b>	Highways Agency
<b>Evidence Base</b>	Highways Agency M25 Junctions 16 to 23 Widening Highways Agency M25 Junctions 16 to 23 Widening Timetable Hertfordshire Infrastructure & Investment Strategy
<b>Strategic Context</b>	M25 is the London Orbital
<b>Existing Provision</b>	N/A
<b>Gaps in Provision</b>	Insufficient capacity identified in the ORBIT report in 2002 and is being addressed through a widening scheme.
<b>Planned Provision</b>	The widening of the M25 to a four lane motorway, between junctions 16 to 23, is in progress.
<b>Impact of Development Proposals</b>	Planned growth may increase the number of car journeys but will not significantly impact the traffic on M25.
<b>Potential for Delivery</b>	Responsibility of Highways Agency
<b>Delivery Mechanisms in LDF</b>	The Core Strategy will need to contain spatial policies that locate development in areas that are close to strategic public transport links to encourage more people not to use their cars.

## Local Transport

Within Hertfordshire, Three Rivers, Watford and Hertsmere are covered by the **South-West Herts Transportation Strategy (SWHTS)**. This Strategy sets an overall approach to meeting Local Transport Plan objectives and contains measures designed to address congestion, improve transport infrastructure and promote alternatives to journeys by car. These schemes are on-going and funded by the County Council. There are currently no schemes identified within Three Rivers but this will be reviewed as the plan is updated.

The objectives of the South-West Herts Transportation Strategy are to develop a package of integrated transportation measures to:

- Improve quality of life by addressing transport-related environmental issues
- Assist in maintaining the vitality and viability of commercial centres
- Promote and develop a transport system in conjunction with land use patterns
- Allow proper assessment of the impacts of any future development proposals
- Address future demands.

The Council's Transport Background Paper (2007) provides information on transport issues in Three Rivers. In essence:

- Three Rivers is well served by communications links. The M25 and M1 motorways both run through the District. There are four underground stations on the Metropolitan Line and two stations on the West Coast Mainline. The Grand Union Canal also runs through the District
- Car ownership levels in Three Rivers are higher than the regional and national averages; at the 2001 Census, 84% of households had at least one car or van. This has led to car usage increasingly dominating patterns of movement within the District. Traffic levels in Three Rivers are forecast to grow by 21% by 2021 (Local Transport Plan, 2006/07-2010/11). Existing congestion hot spots are shown on the Transport Strategy Map (Map 7)
- The predicted increase in congestion and car-dominated environment could undermine the economic growth of the District and detract from its environmental quality and social well-being. High volumes of car use continue to make walking, cycling and bus use less attractive options despite many journeys being short in distance

- Demand for rail services remains high but access to, and parking at, stations are additional pressures. However, bus networks are shrinking, reducing the potential for use of buses rather than cars and reducing accessibility for people without access to a car
- There are a variety of cycle routes within Three Rivers, including the Ebury Way, a 3.5 mile (5.6km) traffic free section of route 6/61 of the National Cycle Network, signposted routes and designated on-road cycle lanes
- The pedestrian network is extensive but facilities for pedestrians are often provided alongside roads, where high traffic levels adjacent may make walking a less attractive option.

The Council agrees a Transport Programme once a year which is designed to help achieve the Council's aims of making our communities safer and more sustainable and schemes are developed in consultation with Hertfordshire Highways and the Hertfordshire Passenger Transport Unit.

### Traffic Management and Highway Improvements

The level of growth planned for the District to 2026 will not require any major improvements to the existing road network. Although the number of trips on the road within the District is expected to increase, the existing road network is expected to be able to cope. Congestion is likely to increase at peak hours though this is not expected to be considerable or add significantly to journey times at peak hours.

Hertfordshire County Council is responsible for the maintenance and repair of the road network; however the District Council also promotes a limited number of highway improvements each year where safety issues have been identified by local residents, community groups or elected Members. There are currently two schemes prioritised:

- A pedestrian crossing on College Road, Abbots Langley
- Traffic calming and draining measures on Shirley Road, Abbots Langley

In addition to the above schemes the following have also been identified as priorities for local communities and it is hoped that they will be included in the Infrastructure Delivery Plan in future years.

- Junction improvements at Leavesden Park (A41)
- Transport management improvements to C76 (from Station Road, Kings Langley to Barnacres Lane, Dacorum District)
- Transport management improvements to C77 (Bedmond Road, Bedmond)
- Transport management improvements to A404 (Rickmansworth Road/ Chenies Road, Chorleywood close to St Clement Danes School)
- Transport management improvements to A4125 (Hampermill Lane, South Oxhey)
- Transport management improvements to A412 (Park Road, Rickmansworth)
- Transport management improvements and junction improvements to A412 (Denham Way, Maple Cross).

Traffic Management/Highway Improvements	
<b>Lead Agency</b>	Hertfordshire Highways TRDC
<b>Evidence Base</b>	South West Herts Transportation Strategy Transport Background Paper 2007

	Local Transport Plan 2006-2011 Hertfordshire Infrastructure & Investment Strategy
<b>Existing Provision</b>	
<b>Gaps in Provision</b>	As stated there are several improvement schemes that have been identified around the District.
<b>Planned Provision</b>	A pedestrian crossing on College Road, Abbots Langley and traffic calming and draining measures on Shirley Road, Abbots Langley HCC will continue to manage their improvement programme on a priority basis.
<b>Impact of Development Proposals</b>	The total number of trips on the road network within the District is expected to increase. However, the existing road network is expected to be able to cope with these increases. Congestion is likely to increase at peak hours though this is not expected to be considerable or add significantly to journey times.
<b>Potential for Delivery</b>	Monies collected through planning contributions to provide improvements to the road network are available as part of the local Transport Plan to support improvements once a programme of work has been agreed.
<b>Delivery Mechanisms in LDF</b>	The Core Strategy will look to reduce the need to travel within its policies through ensuring more sustainable location of development and through encouraging a greater use of public transport. The Infrastructure and Obligations SPD could provide further support for the local road network.

## Bus Network

As part of the South-West Herts Transportation Strategy, further work has been commissioned on developing a network of high frequency radial bus services in the area that will link the main retail, commercial and service areas in the south-west Hertfordshire areas. Bus priority measures, smartcard ticketing systems and the creation of a network of 'MobiHubs' are also being investigated. MobiHubs involve the creation of a series of neighbourhood hubs in urban and rural areas with improved facilities for users, offering real-time traveller information and covered waiting areas. They are located along bus routes and would integrate with cycle and footpath networks and taxi services.

Each year the Council provides financial support for bus services which would otherwise be uneconomic for the bus companies to continue. The Council does this to ensure that rural locations are served by buses and to maintain access to facilities and services within and outside the District. The following priorities based on services already supported by the Council were put forward in the Council's Transport Programme 2010/2011.

- Service "318 Flyer" Abbots Langley to Watford town centre. Mullaney's took over from Metroline with support from TRDC, Watford BC and Herts CC. There is possible scope to expand the service in the north of the District but this is a commercial decision for Mullaney's.
- Arriva 8 (Mount Vernon to Woodside/Abbots Langley). The Council has provided funding to ensure that the whole service between Mount Vernon Hospital and Abbots Langley is retained.
- W50 Watford – South Oxhey/Carpenters Park station. An improvement package was proposed in 2009/10, but Watford BC withdrew its funding and introduction of the new service has been delayed until April 2010. HCC advises that TRDC improving W50 might make it more sustainable (There are currently 71,000 passenger journeys a year of which 57,000 are concessionary). It is recommended that this service be supported as it serves a large catchment of residents many of whom do not have easy access to a car. It also provides opportunity for integrating bus and rail services at Carpenters Park station with opportunities to encourage public transport as first choice.

- Service R8 Chipperfield to Abbots Langley and Watford. This service had to be reviewed because Dacorum withdrew funding. TRDC has supported the service as a shopper shuttle between Kings Langley station/Abbots Langley village and Asda/Sainsburys in North Watford.
- R16 (Watford superstores – South Oxhey circular). It is recommended that this service continues to be supported to provide a service for people without car access and to encourage a switch to the bus.
- R19 Abbots Langley to Chipperfield via Kings Langley station. Services R8 and R19 have been supported to retain and promote services between Abbots Langley village and Kings Langley railway station – another opportunity for integrating bus and rail services.
- R21 Uxbridge to Mount Vernon Hospital to retain an evening service.

The revenue budget available in 2010/11 is £136,000, and discussions are required with the Passenger Transport Unit once priorities have been set by this Council.

In addition to the above schemes the following have also been identified as priorities for local communities and it is hoped that they will be included in the Infrastructure Delivery Plan in future years.

- Improved bus service and frequency between northern and eastern parts of the District (Abbots Langley, South Oxhey) and Watford General Hospital
- Improved bus service and frequency between Rickmansworth Town Centre and surrounding centres, notably Sarratt, Abbots Langley and South Oxhey
- Better service penetration and frequencies into housing estates/areas of Chorleywood (bottom of Dog Kennel Lane), Eastbury, Croxley Green (Byewaters Estate), Oxhey Hall, Maple Cross and Rickmansworth (Upper Cedars Estate)
- Improved shuttle service between Leavesden Park and key centres including Rickmansworth, Watford Town Centre and Watford Junction Transport Interchange
- Improved bus service and frequency between Maple Cross and Rickmansworth
- Improved bus service frequency between Kings Langley Employment Area and key centres in the District
- Bus corridor improvements on routes 500 (between Hemel Hempstead and Watford, W5/6 (between Maple Cross and Hemel Hempstead), W8/10 (between North Watford and Northwood), and 724 (Harlow to Heathrow)
- Supporting uneconomic services for trips to hospitals or to shops/post offices from Sarratt and Bedmond and other rural settlements to cater for the elderly and people with special needs or without access to a car.

<b>Bus Network</b>	
<b>Lead Agency</b>	Bus Companies Hertfordshire County Council TRDC
<b>Evidence Base</b>	South West Herts Transportation Strategy Transport Background Paper 2007 Local Transport Plan 2006-2011 Hertfordshire Infrastructure & Investment Strategy
<b>Existing</b>	There is a relatively good bus service of 15 minute intervals within the main built

<b>Provision</b>	up areas between the main centres and Watford. There is a poorer provision in the rural areas and those of a lower housing density.
<b>Gaps in Provision</b>	There are some limited bus services across the District and consultation has indicated that most communities would like to see improvements made in the bus service.
<b>Planned Provision</b>	To continue to financially support the bus services that serve the District but are uneconomical for the bus companies. These include the following buses: 318 Flyer, Arriva 8, W50, R8, R16, R19 and R21
<b>Impact of Development Proposals</b>	New development will look to reduce the reliance on the car and look to supporting more use of public transport, walking and cycling. Therefore it is planned that there will be an increase in demand for bus services where these are available.
<b>Potential for Delivery</b>	Potential for delivery in future years is questionable as the Council's budgets are reduced. It is anticipated that further/additional funding should come from Developer contributions.
<b>Delivery Mechanisms in LDF</b>	The Infrastructure and Obligations SPD could provide further support for improved bus services. Policies in the Core Strategy should look to support a more sustainable pattern of transport use.

## Cycling Facilities

The Three Rivers Cycling Strategy sets out how the Council can achieve its aims to:

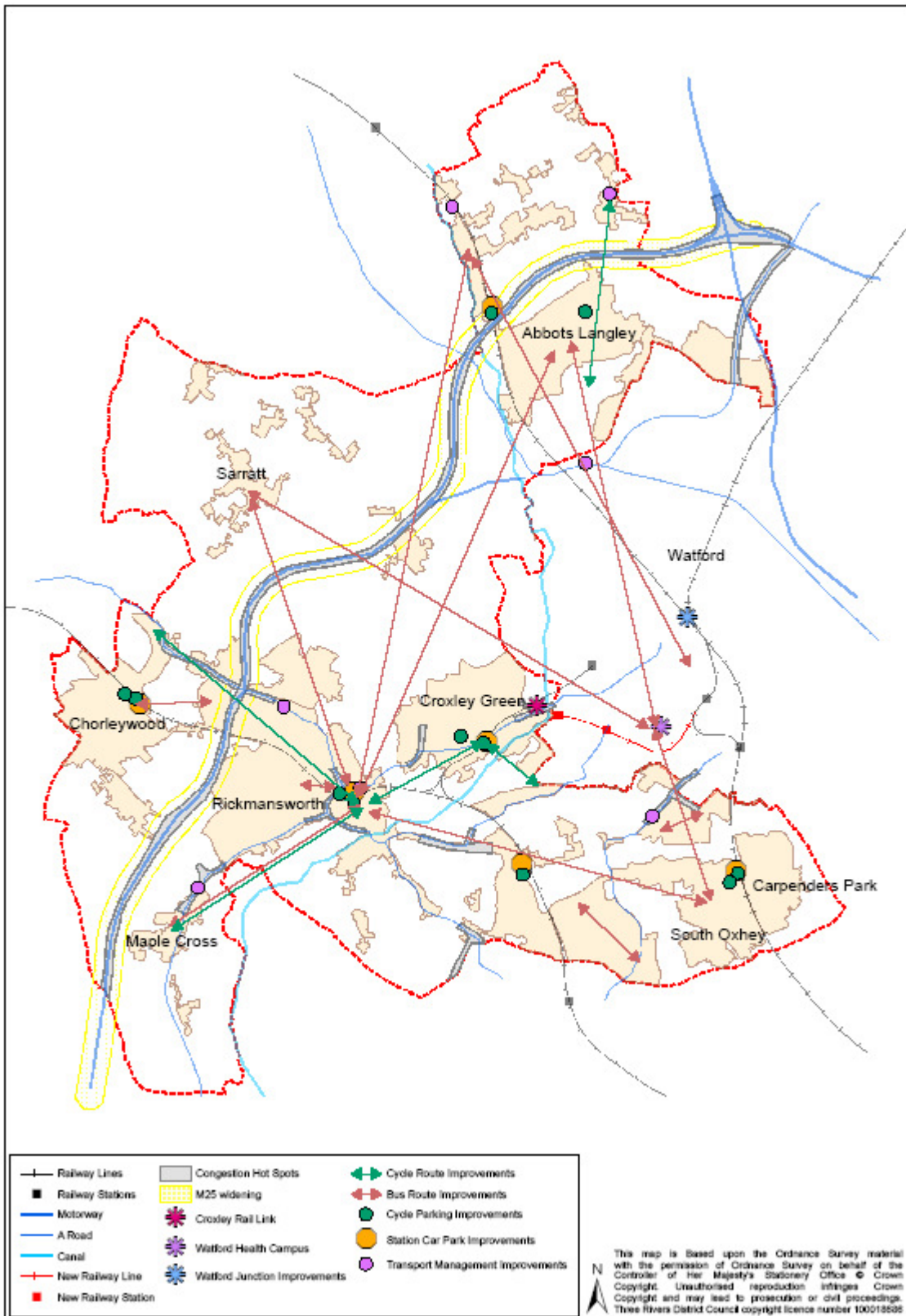
- Maximise the use of cycles as a mode of transport, in order to reduce reliance on the use of private cars
- Develop a cycle network which is safe, convenient, attractive and efficient, and so encouraging and enabling cycling
- Ensure that the needs of cyclists are represented in transport, land use, health, education, leisure and environmental proposals.

In helping to deliver the Spatial Strategy the following specific measures and schemes are identified as priorities:

- Complete the cycle route between Rickmansworth Town Centre and Green Street, Chorleywood (The first phase of this route from St Clement Danes School to Chorleywood Village via Green Street has already been completed).
- Completion of cycle route between Maple Cross and Rickmansworth Town Centre
- New cycle route between Croxley Green and Rickmansworth Town Centre
- New cycle route between Croxley Station and the Ebury Way (via Byewaters estate)
- New cycle route from Bedmond to South Way via Abbots Langley village centre

Cycling Facilities	
<b>Lead Agency</b>	TRDC, Hertfordshire County Council
<b>Evidence Base</b>	South West Herts Transportation Strategy Transport Background Paper 2007 Three Rivers Cycling Strategy Local Transport Plan 2006-2011 Hertfordshire Infrastructure & Investment Strategy
<b>Existing Provision</b>	There is a network of cycle routes within the District.
<b>Gaps in</b>	There are gaps in the cycle network which the Council will seek to improve on

<b>Provision</b>	a priority basis.
<b>Planned Provision</b>	Complete the cycle route between Rickmansworth and Chorleywood Completion of cycle route between Maple Cross and Rickmansworth Town Centre Cycle route between Croxley Green and Rickmansworth Town Centre New cycle route from Bedmond to South Way via Abbots Langley New cycle route between Croxley Station and the Ebury Way
<b>Impact of Development Proposals</b>	An increase in dwellings could require additional cycling facilities being provided across the District including the provision of cycle parking at stations and shopping centres.
<b>Potential for Delivery</b>	Delivery of schemes is reliant on the Capital Budget and Developer contributions therefore schemes have to be programmed and prioritised.
<b>Delivery Mechanisms in LDF</b>	The Infrastructure and Obligations SPD could provide further support for improved and new cycling facilities. Policies in the Core Strategy should encourage integration of development with existing cycle network, cycling parking facilities and other sustainable modes of transport.



Map showing key transport needs and schemes in Three Rivers, and the linkages with the surrounding area.

## Green Infrastructure

### Open Spaces, Parks & Gardens and Amenity Greenspace

A detailed assessment of existing provision of open spaces is contained in the Open Space Sport & Recreation Study 2005 and in the Open Space Update 2010 which were undertaken in accordance with Planning Policy Guidance 17. Both documents use the open space typologies as set out in 'Assessing Needs and Opportunities: A Companion Guide to PPG17'.

Where these studies have identified a shortfall in provision in any of the typologies, these are listed below:

#### Parks & Gardens

There are six sites classified as publicly accessible parks and gardens totalling just over 20 hectares across the District with the majority provided by Leavesden Country Park which serves a large catchment area. The study identified that there were no parks and gardens in Sarratt and Chorleywood areas but recognised that because of their relatively low population density and the large catchment area of Leavesden Country Park's catchment area, the need/priority of formal parks and gardens in these areas was not a priority.

#### Natural and Semi-Natural Green Space

There are 129 sites classified as natural and semi-natural green spaces in Three Rivers totalling over 1,296 ha. Of these 37 sites have closed access and are therefore not publicly accessible. Although the study identified small gaps in provision these are not considered significant in terms of population density. Therefore the priority should be to increase access to existing provision as opposed to seeking new provision.

#### Amenity Greenspace

There are 22 sites classified as amenity green space totalling just over 38 hectares in Three Rivers. As the accessibility standard set for amenity Greenspace is relatively small the study highlighted a shortfall in provision in the more densely populated areas of Abbots Langley.

#### Provision for Children and Young People

There are 43 sites in the District totalling just less than 5 hectares. There is a generally good distribution of provision for children and young people across the District and most provision is located in Abbots Langley and Watford Rural areas, both in terms of numbers and hectares per 1,000 population.

The study identified gaps in provision in terms of population density in Abbots Langley, Croxley Green, Chorleywood and Watford Rural areas and recognises that the continuing programme of upgrading LAP provision will help to meet these identified gaps. The table below details the Council's planned provision for these areas.

Open Spaces, Parks & Gardens and Amenity Greenspace	
<b>Lead Agency</b>	
<b>Evidence Base</b>	Open Space, Sport & recreation Study 2005 and Open Space Update 2010
<b>Existing Provision</b>	6 Parks & Gardens, 129 Natural & Semi-Natural Greenspaces, 22 Amenity Greenspaces, 43 play areas for children and young people.
<b>Gaps in</b>	Amenity Greenspace in Abbots Langley Area

<b>Provision</b>	Provision for Children and Young People in Abbots Langley, Croxley Green, South Oxhey and Chorleywood areas.
<b>Planned Provision</b>	Provision for Children and Young People – refurbishment of Langleybury and Southway play areas, provision of a new play area in Croxley Green new play area in the Ashridge Ward of South Oxhey and a new play area in Chorleywood.
<b>Impact of Development Proposals</b>	Increase in housing development will contribute some additional pressure on open, space, sport and recreational facilities. An increase in population
<b>Potential for Delivery</b>	Improvements to existing facilities and the provision of new facilities will mostly be funded by developer contributions and through the Council's Capital Budget.
<b>Delivery Mechanisms in LDF</b>	The LDF will seek to protect parks and gardens to ensure that they are not eroded by new development. Infrastructure and Planning Obligations SPD and Open Space, Amenity and Children's Playspace SPD will provide further support for developer contributions.

## Water Infrastructure

The Water Cycle Study Scoping Report (2010) provides the evidence base for this section. The study covers the following Local Planning Authority areas:

- Three Rivers District Council (TRDC)
- Watford Borough Council (WBC)
- Dacorum Borough Council (DBC)
- St Albans City & District Council (SADC) and
- Welwyn Hatfield Borough Council (WHBC).

The following stakeholders were also involved in the study;

- Natural England
- Thames Water Utilities Ltd
- The Environment Agency
- Veolia Water

## Waste Water and Sewage

Thames Water Utilities Ltd (TWU) is the undertaker responsible for wastewater services for the study area and as such, has a duty to ensure that adequate sewer and treatment capacity is in place to accommodate development.

All of the District's sewage drains to Maple Lodge Wastewater Treatment Works (WwTW) (located in the District). This WwTW also serves the majority of the above Local Planning Authority areas with the exception of Bovingdon, Berkhamstead, Harpenden, Wheathampstead, Welwyn Garden City, Tring, Markyate and parts of Hatfield.

The District drains to a trunk sewer which serves a number of other Local Authority areas upstream before passing through Three Rivers District along the valley of the River Colne. Upstream of the District facilities exist to divert part of the existing to Blackbirds WwTW and the rest continues through the trunk sewer network for treatment at Maple Lodge WwTW and subsequent discharge to the Grand Union Canal.

As a result, the capacity of Maple Lodge WwTW to accommodate the increase in wastewater from development in Three Rivers to 2031 will be severely constrained by how much growth from DBC,

SADC, WBC and WHBC is allocated to the Maple Lodge catchment and how much of this is diverted to Blackbirds WwTW or another WwTW.

Water and sewerage undertakers also have limited powers under the Water Industry Act to prevent connection ahead of infrastructure upgrades, as developers have an automatic right to connect to the sewer system once their development has been granted planning permission.

Funding of new sewer upgrades needed to serve future developments will generally be funded by the developers. If it is necessary to lay off-site sewers to serve the developments then the normal procedure is for the developer to requisition a connection point under Section 98 of the Water Industry Act 1989. The water company will then design and construct a suitable sewer, which may include for enhancements to the downstream sewer system to cater for the proposed flows. All costs associated with the requisition will be recharged to the developer.

If a strategic system is required to serve more than one development then the water company may choose to design the system to cater for the future flows. The developer will then be required to pay for the proportion of costs associated with that development with the remainder paid for by the water company who will recharge those costs as the other developments progress.

The investment plans of water companies are based on a five year cycle. In general, Thames Water infrastructure funding comes from investment through the business plan process whereby OfWat sets customers bills. Due to the funding regime, there is little certainty regarding funding of projects beyond the business plan cycle.

Indicative guidance from water companies suggests the following planning and construction timeframes for wastewater infrastructure:

- Network improvements – up to three years
- Significant new network and upgraded processes capability at WwTW – up to five years and
- Major upgrade of WwTW or construction of a new WwTW – up to ten years

## Water Supply

The Three Rivers area is supplied by potable water by Veolia Water Central (VWC). The supply to the area is well reinforced with a number of reservoirs and strategic transfers in place to maintain an adequate security to supply.

Veolia Water Central have strategies in place to accommodate the potential increase in demand due to future RSS growth targets whilst managing the limited water resources and accounting for future climate change. They predict no major constraints to supplying these sites with potable water. These strategies rely partially on increased water efficiency in both new and existing dwellings.

The Water Industry Act 1989 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 they charge developers for the requisition of new mains which is based on the total cost of the mains off-site pipework and any necessary upgrades downstream.

## Recommendation

Three Rivers District Council and the other Local Planning Authorities will need to continue to consult with Thames Water about the phasing and planning of future development within the Maple

Lodge WwTW catchment area to ensure they can investigate, plan and construct the necessary infrastructure.

Water, Waste and Supply	
<b>Lead Agency</b>	Thames Water Utilities Veolia Water Central
<b>Evidence Base</b>	Water Cycle Study 2010 Thames Water Five Year Plan 2010 – 2015
<b>Existing Provision</b>	Provision of water supply is through Veolia Water. Wastewater sewers treatment is supplied by Thames Water Utilities and the Maple Lodge Wastewater Treatment Works
<b>Gaps in Provision</b>	There are no deficiencies in the existing water supply. Maple Lodge Wastewater Treatment Works will need additional capacity if development in the wider area is to be covered by this treatment works.
<b>Planned Provision</b>	Any improvements to the Maple Lodge WwTW are likely to be considered in their next plan period. 2015-2020
<b>Impact of Development Proposals</b>	Development in Three Rivers is largely incremental with no additional infrastructure required. However, future development across the catchment area of the Maple Lodge WwTW will require further investigation by Thames Water.
<b>Potential for Delivery</b>	Any additional infrastructure required to enable development will be funded by the developer and improvements will be funded by providers if necessary.
<b>Delivery Mechanisms in LDF</b>	The Core Strategy will need to address water conservation through the promotion of water efficiency measures/design in development and the promotion of Sustainable Drainage Systems.

## Energy Infrastructure

### Electricity Transmission

National Grid owns, operates and maintains the 400kV and 275kV national electricity transmission network across the Country and transmits both electricity and gas to distribution companies that provide these utilities in Three Rivers.

To facilitate competition in the supply and generation of electricity, National Grid must offer a connection to any proposed power station/wind farm, major industry or distribution network operator who wishes to generate electricity or require a high voltage electricity supply.

National Grid substations (exit points) at Elstree and Watford South support the delivery of electricity in Three Rivers.

### Electricity Distribution

EDF Energy Networks (EDFE), deal with the local distribution network in Three Rivers at 132kV and below. They take their supply off various exit points from higher voltage networks that the National Grid are responsible for.

There are Grid (132kV) substations at Hatch End, Bushey Mill and Holywell. These supply Primary (33kV) Substations at:

- Hatch End
- Westbury
- Grove Mill
- Rickmansworth
- Abbots Central

which feed 11kV circuits to the many secondary substations serving individual streets and local areas.

Electrical supply planning is reactive although demand is modelled to an extent on 'natural growth' in energy demand. EDF's modelling is updated annually and gives an estimate of the future loads in the network and indicates where and when the network may reach capacity and whether further works, such as upgrading of a sub-station, will be required.

EDF Energy has indicated that up-grading of existing substations will cope with any additional demand of future growth as long as it is incremental, but has not identified the need for any specific infrastructure to support the anticipated levels of growth and no infrastructure investment is planned within the District itself over this time. However, specific requests for large additional loads may require individual new infrastructure.

## Gas Transmission

National Grid Gas plc owns and operates the high pressure gas transmission system in the country and has a duty to develop and maintain an efficient co-ordinated and economical transmission system for the conveyance of gas and respond to requests for new gas supplies in certain circumstances.

New gas transmission infrastructure (pipeline) developments are periodically required to meet increases in demand and changes in patterns of supply. Generally network developments to provide supplies to the local gas distribution network are a result of overall demand in a region rather than site specific developments.

## Gas Distribution

National Grid also owns and operates lower-pressure distribution gas mains in the East of England. It does not supply gas, but provides the networks through which it flows. Reinforcements and developments of the local distribution network are generally as a result of overall demand.

The cost of the network infrastructure both on-site and off-site will be borne by developers. The gas company 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. Ofgem, the gas and electricity regulator will not accept the practice of speculative main laying as this would be seen as anti-competitive and against the interests of the consumer.

Energy – Gas & Electricity	
<b>Lead Agency</b>	National Grid EDF Energy Networks
<b>Evidence Base</b>	EDF Energy Networks plc EDF Energy Networks (EDFE) plc Long Term Development statement (2009) National Grid
<b>Existing Provision</b>	There are 6 primary substations and three grid substations supports delivery of electricity in Three Rivers. The gas network is supported by a range of local and regional infrastructure.
<b>Gaps in Provision</b>	There are no gaps in existing provision.
<b>Planned Provision</b>	No planned provision
<b>Impact of Development Proposals</b>	Future developments are phased and on a relatively small scale and are unlikely to have an impact on the supply of gas or electricity.
<b>Potential for Delivery</b>	Any additional infrastructure required to enable development will be funded by the developer and improvements will be funded by providers if necessary.
<b>Delivery Mechanisms in LDF</b>	Policies on energy efficiency and renewable energy (including Combined Heat & Power) will look to reduce the potential impact of new development on energy consumption.

## INFRASTRUCTURE DELIVERY SCHEDULE

The Draft Infrastructure Delivery Plan (IDP) seeks to establish what additional infrastructure is required to support the planned increase in new homes and jobs, and the projected population growth within the District up to 2026. It includes a review of existing provision for social infrastructure, (such as health and education facilities), physical infrastructure, (such as transport and utilities) and green infrastructure, (such as parks and open spaces). The Plan provides an analysis of the nature of future provision and, where known, where it will be provided, when it will be provided, how it will be funded and who will be responsible for the delivery.

The draft IDP is accompanied by this Infrastructure Delivery Schedule (IDS) which sets out those schemes that are currently proposed to take place during the Core Strategy plan period to 2026.

The list of projects included within the Infrastructure Delivery Plan and Schedule is not intended to be exhaustive, as the process of implementation will constantly be responding to local circumstances and utilising new avenues and drivers to prioritise spend over the life of the Core Strategy. It is intended that the IDP will be updated annually alongside the Annual Monitoring Report.

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Health Provision</b>							
<b>GP Facilities</b>	Increase in equivalent to 1.5 GP provision in Abbots Langley Area	To provide adequate GPs for Abbots Langley	2015/2016	Not identified	Strategic Capital Funding streams and LIFT	West Herts PCT	
	Increase in GP provision in Rickmansworth Area	To provide adequate GPs for Rickmansworth	2015/2016	Not identified	Strategic Capital Funding streams and LIFT	West Herts PCT	
	Investment in existing GP premises or provision of new premises in Croxley Green Area	To provide adequate floor space to accommodate additional registrations	2015/2016	Not identified	Developer contributions	West Herts PCT	
<b>Satellite Clinic</b>	Enlargement and redevelopment of Maple Cross Club	To enable the following outreach services to be provided: Community/Heart Nurses, Health Promotion (smoking cessation) Baby& Diabetes clinics, Health Checks for over 60s	2010/2011 to 2012/2013	£338,000	Maple Cross Club LSP Capital & Revenue Performance Reward Grant	West Herts PCT Maple Cross Club	West Herts PCT yet to confirm provision of services
<b>Branch Surgery</b>	Refurbishment of a room at Mill End Community Centre	To enable health promotion schemes to take place	2010/2011 to 2012/2013	£7,057	LSP Capital & Revenue Performance Reward Grant	West Herts PCT Mill End & District Community Association	West Herts PCT yet to confirm provision of services

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Health Provision Continued</b>							
<b>Step-Up Project</b>	Renovation of suitable building in South Oxhey	Provision of counselling, advice and learning services for people with mental health issues.	2010/2011 to 2012/2013	£330,000	LSP Capital & Revenue Performance Reward Grant ASCEND, Herts Mind Network, Turning Point	ASCEND, Herts Mind Network, Turning Point	
<b>Education</b>							
<b>Primary education provision</b>	Expansion of Tanners Wood Primary School, Abbots Langley	To accommodate future demand by increasing school by 0.5 form entry	2012/2013	£1m	HCC Primary Capital Programme DCSF Developer contributions	Hertfordshire County Council	
	Feasibility study of expanding an existing primary school in the Rickmansworth Area	To accommodate future demand	2012/2013	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of provision of a new Primary school in the Rickmansworth Area	To accommodate future demand	2012/2013	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of provision of a new Primary school in the Abbots Langley, Leavesden and Bedmond area	To accommodate future demand	2012/2013	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of expanding primary school provision in South Oxhey area	To accommodate future demand	2014/15	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of expanding primary school provision in Croxley Green area	To accommodate future demand	2015/16	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of expanding primary school provision in Carpenders Park area	To accommodate future demand	Not identified	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/Risks
<b>Primary education provision continued</b>	Feasibility study of expanding primary school provision in Kings Langley area	To accommodate future demand	Not identified	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
	Feasibility study of expanding primary school provision in Bricket Wood area	To accommodate future demand	Not identified	Not identified	HCC Primary Capital Programme	Hertfordshire County Council	
<b>Secondary education provision</b>	New Secondary School provision the expansion of existing schools, or a combination of both in the Rickmansworth Area	To meet the demand for secondary school places	2014/2015	Not Identified	HCC Primary Capital Programme DCSF Developer contributions	Hertfordshire County Council	
<b>Emergency Services</b>							
<b>Police</b>	Additional Neighbourhood Police in Abbots Langley Area	To provide additional Neighbourhood Policing in area	2015/2016	Not identified	Developer contributions	Hertfordshire Constabulary/Hertfordshire Police Authority	
	Enlargement of existing facility to accommodate larger team of Neighbourhood Police in Abbots Langley Area	To provide accommodation for additional Neighbourhood Police	2015/2016	Not identified	Developer contributions	Hertfordshire Constabulary/Hertfordshire Police Authority	
<b>Cultural Services</b>							
<b>Library Facilities</b>	Refurbishment of, and enhancement of existing facilities particularly ICT in libraries across the District	To improve facilities	2010/2026	Not identified	Developer contributions	Hertfordshire County Council	
<b>Cemeteries</b>	New cemetery provision	To accommodate future demand for traditional burials	2014/2015	Not identified	Capital	TRDC Faith groups	
<b>Waste</b>							
<b>Composting Facility</b>	In Vessel Composting facility with capacity for around 50,000 tonnes in the Hemel Hempstead/Watford corridor	To accommodate future needs	2014/15	Not identified	Private Finance Initiative	Hertfordshire County Council	

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Strategic Transport</b>							
<b>Croxley Rail Link</b>	Metropolitan Line link to Watford Junction	Improved access to public transport, to facilities in Watford, reduce traffic congestion, improve transport links to London to provide future opportunities for services from Watford to Rickmansworth and beyond.	2013 – 2020	£136.4m	Regional Funding Allocation	Transport for London Department of Transport	
<b>M25 Widening J16-23</b>	Widening of M25. Junctions 17 to 20	To accommodate future travel demands Relieve congestion Improve safety of motorway	2009 – 2013	£76.2m	Private Finance Initiative Contract	Highways Agency Department of Transport	
<b>Local Transport</b>							
<b>Traffic Management and Highway Improvements</b>	College Road, Abbots Langley Pedestrian Crossing Scheme	To improve safety for people crossing the road	2010/2011	£75,000	£65,000 HCC Capital £10,000 TRDC Capital	Hertfordshire County Council	
	Traffic calming and drainage measures in Shirley Road, Abbots Langley	To improve road safety	2010/2011	£74,000	Capital	TRDC	

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Local Transport Continued</b>							
<b>Better Buses</b>	Continue financial support for "318 Flyer" Abbots Langley to Watford town centre	To allow the retention and enhancement of uneconomic bus routes that serve rural communities and provide transport to facilities and services	2010/2011	Unspecified	£136,000 contribution from TRDC to be shared between all schemes Additional funding from Herts Passenger Transport Unit	Herts PTU Relevant Bus Company TRDC Watford Council	
	Continue financial support for Arriva 8 (Mount Vernon to Woodside/Abbots Langley).					Herts Passenger Transport Unit Relevant Bus Company TRDC	
	Continue financial support for W50 Watford – South Oxhey/Carpenders Park station						
	Continue financial support for R8 Chipperfield to Abbots Langley and Watford.						
	Continue financial support for R16 (Watford –South Oxhey circular).						
	Continue financial support for R19 Abbots Langley to Chipperfield via Kings Langley station						
	Continue financial support for R21 Uxbridge to Mount Vernon Hospital						

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Cycling Network Improvements</b>	<b>Extension of the cycle route between Rickmansworth and Chorleywood</b>	To provide an integrated network of safe cycling routes around the District	2011/2012	Unidentified	Capital Developer contributions	TRDC	
	Completion of cycle route between Maple Cross and Rickmansworth Town Centre	To provide an integrated network of safe cycling routes around the District	2010/2011	£50,000	Capital Developer contributions	TRDC	
	Cycle route between Croxley Green and Rickmansworth Town Centre	To provide an integrated network of safe cycling routes around the District	2012/2013	£50,000	Capital Developer Contributions	TRDC	
	New cycle route from Bedmond to South Way via Abbots Langley	To provide an integrated network of safe cycling routes around the District	2011/2012	£50,000	Capital Developer Contributions	TRDC	
	A new cycle route from Croxley Green Station to Ebury Way via Byewaters Estate	To provide an integrated network of safe cycling routes around the District	2013/2014	Unidentified	Capital Developer contributions	TRDC	

	Infrastructure Project	Reason for Project	Indicative Delivery Phasing	Estimated Cost	Funding Arrangements	Lead Delivery Agency	Contingency Planning Required?/ Risks
<b>Green Infrastructure</b>							
<b>Provision for Children and Young People</b>	Refurbishment of Langleybury Play Area (Langleybury)	Upgrading of LAP provision	2011/2012	£35,000	Developer Contributions	TRDC	
	Refurbishment of South Way Play Area (Abbots Langley)	Upgrading of LAP provision	2011/2012	£35,000	Developer Contributions	TRDC	
	New play area in Croxley Green	New LEAP	2013/2014	£35,000	Developer Contributions	TRDC	
	Refurbishment of Oulton Way Play Area (Carpenders Park)	Improvement of provision	2010/2011	£105,300	Capital	TRDC	
	Refurbishment of Hayling Road Play Area (South Oxhey)	Improvement of provision	2010/2011	£192,300	Capital	TRDC	
	Refurbishment of Ashburnham Play Area (South Oxhey)	Improvement of provision	2010/2011	£97,000	Capital	TRDC	
	New Play Area in Ashridge Ward (South Oxhey)	New LEAP	2012/2013	£95,000	Capital	TRDC	Suitable site to be found
	New Play Area in Chorleywood	New LEAP	2011/2012	£95,000	Capital	TRDC	Suitable site to be found
	Refurbishment of Baldwins Lane Play Area (Croxley Green)	Improvement of provision	2011/2012	£95,000	Capital	TRDC	
	Refurbishment of Scotsbridge Play Area (Rickmansworth)	Improvement of provision	2011/2012	£95,000	Capital	TRDC	
	Regeneration of South Oxhey Youth Facility	Provision of BMX track or Street Gym	2010/2011	£37,440	Capital	TRDC	Final provision dependent on consultation
	New Outdoor Gym at West Hyde Youth Centre (West Hyde)	Provision of new Outdoor Gym facility	2010/2011	£27,100	Capital	TRDC	
	Refurbishment of Baldwins Lane Skate Park (Croxley Green)	Resurfacing of Skate Park	2010/2011	£100,000	Capital	TRDC	Feasibility Study to be undertaken to ascertain life span of surface area.

## GLOSSARY AND ABBREVIATIONS

Glossary and Abbreviations	
<b>Accessibility</b>	The ability of everybody to go conveniently where they want particularly in relation to services and facilities.
<b>Affordable Housing</b>	Affordable housing includes social rented and intermediate housing, provided to specific eligible households whose needs are not met by the market. (Planning Policy Statement 3). It does not include low-cost market housing.
<b>AMR</b>	Annual Monitoring Report (AMR) assesses the Council's progress in producing the Local Development Documents and implementing policies.
<b>ASCEND</b>	ASCEND is located in the All Saints' Church Centre, South Oxhey. Founded by local people to counteract the problems of unemployment, social deprivation and learning disabilities.
<b>Brownfield Land</b>	Brownfield land (or Previously Developed Land) – land that is, or has been occupied by a permanent structure and associated fixed surface infrastructure. Agricultural and forestry buildings are excluded.
<b>Building Schools for the Future</b>	A strategic approach to capital investment in school buildings to create the environment for the Government's agenda of educational transformation.
<b>Capital</b>	Capital refers to the budget that funds acquisition of a fixed asset.
<b>CIL</b>	Community Infrastructure Levy (CIL) – will be a new charge to be introduced in the Spring 2010, which local authorities in England will be empowered but not required to charge on most types of development in their area. CIL charges will be based on a simple formula and the proceeds of the levy will be spent on local and sub-regional infrastructure to support the development of that area.
<b>CLG</b>	Communities of Local Government
<b>Combined Heat and Power</b>	Combined Heat and Power (CHP) is the simultaneous generation of useable heat and power (usually electricity) in a single process. It is a form of decentralised energy technology and typically installed on-site, supplying customers with heat and power directly at the point of use.
<b>Core Strategy</b>	A Local Development Document setting out the long term spatial vision and strategic objectives for the Local Planning Authority area. It includes a spatial strategy, core policies and a monitoring and implementation framework for achieving the plan. The Core Strategy has the status of a Development Plan Document.
<b>Development Plan Document</b>	A spatial planning document that sets out policies and proposals for development and use of land and buildings within the area of a local planning authority. Part of the Local Development Framework (LDF).
<b>East of England Plan</b>	The Regional Spatial Strategy (RSS) prepared by the East of England Regional Authority
<b>Education Authority</b>	A local government body responsible for providing education for pupils of school age in the area of that local government body.
<b>Energy Efficiency</b>	Using the minimum amount of energy needed to produce a given result.
<b>Environment Agency</b>	Also known as the EA. It is a public body with the responsibility for preventing or minimising the effects of pollution on the environment and which issues permits to monitor and control activities that handle or produce waste.

<b>Glossary and Abbreviations</b>	
<b>HA</b>	Highways Authority (HA) responsible for the strategic road network such as the M25.
<b>Hectare</b>	A unit of land area equivalent to 10,000 square metres or 0.01 of a square kilometre. One Hectare is approximately equal to 2.5 acres.
<b>Hertfordshire County Council</b>	
<b>Herts Mind Network</b>	Herts Mind Network is a mental health organisation providing a diverse range of recovery orientated services in Hertfordshire.
<b>HFRS</b>	Hertfordshire Fire and Rescue Service
<b>HIIS</b>	Hertfordshire Infrastructure & Investment Strategy
<b>HPA</b>	Hertfordshire Police Authority
<b>IDP</b>	Infrastructure Delivery
<b>Infrastructure</b>	Collective term for physical structures, facilities and services needed by the community, for example, buildings, roads, power supplies, affordable housing, health, sports, leisure and educational facilities, village halls, doctor's surgeries, churches and open space.
<b>Infrastructure &amp; Planning Obligations Supplementary Planning Document</b>	Will set out the key infrastructure requirements for District covering Transport, Education, Health, Emergency Services and Community facilities and guidance for seeking contributions from new development.
<b>Key Centre for Development and Change</b>	Key Centre for Development and Change (KCDC) – an area identified by the Regional Spatial Strategy – for regional focus for housing, employment, retail, leisure, tourism, cultural and educational development
<b>LAP</b>	Local Area for Play (LAP) a small area of unsupervised open space specifically designed for younger children mainly between the ages of 4-6 years.
<b>Local Area Agreements</b>	Local Area Agreements (LAAs) set out the priorities for a local area between central government and a local area (the local authority and Local Strategic Partnership) and other key partners.
<b>LDF</b>	Local Development Framework – the portfolio or folder of Local Development Documents, which set out the planning policy framework for the District.
<b>LEAP</b>	Local Equipped Area for Play (LEAP) – is a piece of open space that is designated and equipped for children of early school age.
<b>LIFT</b>	Local Improvement Finance Trust (LIFT) is an NHS funding vehicle for improving and developing frontline primary and community care facilities, allowing PCTs to invest in new premises.
<b>Local Development Document</b>	Local Development Document – comprising two main types: Development Plan Documents and Supplementary Planning Documents, which together form the Local Development Framework.

Glossary and Abbreviations	
<b>LSP</b>	Local Strategic Partnership (LSP). The Three Rivers Local Strategic Partnership is an umbrella partnership that brings together public and private organisations and community groups, allowing different initiatives and services to support one another so that they can work more effectively together. One of its main tasks is to prepare and implement the Sustainable Community Strategy.
<b>National Cycle Network</b>	A co-ordinated national network of cycle routes planned and partially developed by Sustrains, a sustainable transport charity.
<b>OSS</b>	Open Space Sport and Recreation Study (OSS). A strategy covering open space, playing pitches and sport and recreational facilities to guide future provision and management of existing resources in the District as required by PPG17.
<b>PAS</b>	Planning Advisory Service
<b>PCSO</b>	Police Community Support Officers
<b>PCT</b>	Primary Care Trust (PCTs) – cover all parts of England and take control of local health care. Hertfordshire and West Hertfordshire Primary Care Trust cover Three Rivers.
<b>PDL</b>	Previously Developed Land (or Brownfield land) – land that is, or has been occupied by a permanent structure and associated fixed surface infrastructure. Agricultural and forestry buildings are excluded.
<b>Performance Reward Grant</b>	A performance related grant awarded by the CLG to Local Strategic Partnerships on their achievement of their LAAs.
<b>PPG</b>	Planning Policy Guidance (PPG) – Guidance produced by the Government setting out national planning policy (being replaced by Planning Policy Statements).
<b>PPS</b>	Planning Policy Statement (PPS) – Guidance produced by the Government setting out national planning policy (gradually replacing Planning Policy Guidance).
<b>Private Finance Initiative Contract</b>	Private Finance Initiative Contract (PFI) relates to the contract between the Highways Authority and private companies who contribute to the cost of and carry out works involved in the widening of the M25. It provides a way of funding major capital investments without immediate recourse to the public sector.
<b>Renewable technology</b>	Collective term for domestic and non-domestic renewable energy technologies such as solar thermal, solar photovoltaics, wind turbines, District Heating Systems such as Combined Heat and Power.
<b>Revenue</b>	Revenue refers to the budget that funds the on going costs of a fixed asset or service.
<b>RSS</b>	Regional Spatial Strategy (RSS) (also known as the East of England Plan) – sets out the broad spatial strategy for the region prepared by East of England Regional Assembly.

<b>Glossary and Abbreviations</b>	
<b>SCS</b>	Sustainable Community Strategy – the Council’s strategy prepared by the Local Strategic Partnership which takes a partnership approach to improving services, thereby improving quality of life.
<b>SPD</b>	Supplementary Planning Document (SPD) – Elaborates on policies or proposals in Development Plan Documents and gives additional guidance. Successor to Supplementary Planning Guidance.
<b>Spatial Planning</b>	System to integrate land use planning policies with the policies of other plans, programmes and strategies which also influence the nature of places and how they function. Also about an integrated and partnership approach towards delivery of development.
<b>Street Gym</b>	Street Gym is a set of equipment that mirrors an indoor gym with cross trainers, bikes, chest presses etc and is usually located in open spaces.
<b>Sustainable Development</b>	In broad terms this means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The Government has set out the following five guiding principles, in its strategy for sustainable development, “Securing the Future” to be achieved simultaneously: Living within environmental limits: Ensuring a strong healthy and just society: Achieving a sustainable economy: Promoting good governance: and using sound science responsibly.
<b>Sustainable Drainage System</b>	A drainage system designed to control and improve the quality of run off from development, enhance nature conservation, landscape and amenity value of the site and its surroundings. Also known as SUDS.
<b>TRDC</b>	Three Rivers District Council (TRDC).
<b>Turning Point</b>	Turning Point is a social care organisation providing services for people with complex needs, including those affected by drug and alcohol misuse, mental health problems and learning disabilities.
<b>Windfall</b>	Windfall refers to a site not specifically allocated for development in a development plan, but which unexpectedly becomes available for development during the lifetime of a plan. Most “windfalls” are referred to in a housing context. They tend to be very small sites.

## BACKGROUND PAPERS

Building Schools for the Future Programme (Hertfordshire County Council's web site)  
East & North Hertfordshire and West Hertfordshire PCTs Strategic Plan 2009/2010 – 2013/2014  
EDF Energy Networks plc  
EDF Energy Networks (EDFE) plc Long Term Development statement (2009)  
Framework for the Future (Department for Culture, Media and Sport)  
Hertfordshire Constabulary, Estates & Facilities  
Hertfordshire County Council Fire Authority Community Safety Plan 2009/12  
Hertfordshire County Council Highways and Transport Cabinet Panel (Sept 2009)  
Hertfordshire Fire & Rescue Service Watford & Three Rivers District Plan 2009  
Hertfordshire Infrastructure & Investment Strategy 2009  
Highways Agency M25 Junctions 16 to 23 Widening (Highways Agency's Web Site)  
Highways Agency M25 Junctions 16 to 23 Widening Timetable (Highways Agency's Web Site)  
Implementing the Hertfordshire Vision for Libraries in the 21<sup>st</sup> Century (Hertfordshire County Council)  
Libraries for the 21<sup>st</sup> Century Change for Excellence 2005-2015 (Hertfordshire County Council)  
Local Transport Plan 2006-2011  
Meeting the rising demand for school places December 2009 (Hertfordshire County Council)  
Modernisation Review of Public Libraries 2010 (DCMS)  
National Grid  
Open Space, Sport & Recreation Study 2005 (Three Rivers District Council)  
Open Space, Sport & Recreation Study Update 2010 (Three Rivers District Council)  
Policing Plan 2010/2013 (Hertfordshire Police Authority)  
Policing Priorities 2010 – 2013 (HPA)  
Primary Capital Programme, Strategy for Change (2008) (Hertfordshire County Council)  
South West Herts Transportation Strategy  
Thames Water Five Year Plan 2010 – 2015  
Three Rivers Local Strategic Partnership Performance Reward Grant Projects and Expenditure Report (Jan 2010)  
Three Rivers Transport Background Paper (2007)  
Transport for London 'Croxley Rail Link' (Transport for London Web Site)  
Transport for London Funding Programme (Transport for London Web Site)  
WatCom Estates Plan 2009 (WatCom Locality Commissioning Group)  
Water Cycle Study 2010