

**THREE RIVERS TRANSPORT BACKGROUND STUDY UPDATE  
FEBRUARY 2011**

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## **1 INTRODUCTION**

In March 2007, a transport background study was carried out to assess European, national, regional and local policy context for the development of transport policies in Three Rivers, and to assess the current levels of provision and usage of different transport modes.

This update paper incorporates changes to the policy context, and new information that has become available since the original assessment to provide evidence for the Local Development Framework.

Over the past 50 years, the need to travel has become greater and more complex as society has become organised around the car and facilities have become concentrated in larger units. The provision of good transport is essential for economic and social success through supplying access to local services and employment. However impacts of vehicle emissions on the environment, for example in contributing to climate change, are a growing concern. Negative economic impacts through congestion on the roads, and the effect on social amenity of stress, noise and reduced air quality, have increased with growth in motor vehicle use. Transport is an issue for everybody.

Within Three Rivers, bus and rail companies provide transport services, although maintenance of track and rail services is carried out by Network Rail. The Highways Agency has responsibility for motorways and trunk roads within Three Rivers, and Hertfordshire County Council has responsibility for scheme design and road maintenance, apart from a few private estate roads. The County Council also has responsibility for developing and implementing the Local Transport Plan.

The responsibility of Three Rivers District Council for transport services is limited to the provision of parking facilities and contributions to bus travel within the district, but the identification of transport issues and priorities, and the task of ensuring new development is situated in accessible locations is also a key role.

## **2 POLICY BACKGROUND**

There are a number of documents at a range of spatial scales that have significance for transport, and planning for transport within Three Rivers. Those considered to be key are set out below.

### **2.1 EUROPEAN CONTEXT**

#### **2.1.1 A SUSTAINABLE FUTURE FOR TRANSPORT<sup>1</sup>**

In 2009, the European Union published 'A Sustainable Future for Transport: Towards an integrated, technology-led and user-friendly system' which defines the vision for the future of transport, and asks for views on how to translate this vision into concrete policy options which will contribute to the preparation in 2010 of a new White Paper that will outline European transport policy for the next decade.

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<sup>1</sup> [http://ec.europa.eu/transport/strategies/2001\\_white\\_paper\\_en.htm](http://ec.europa.eu/transport/strategies/2001_white_paper_en.htm)

The 2001 EU White Paper 'European transport policy for 2010: time to decide' aimed to strike a balance between economic development and the quality and safety demands made by society to develop a modern sustainable transport system. It proposed 60 or so measures to develop a modern sustainable transport system capable of shifting the balance between modes of transport. The policy was underpinned by the principles of sustainable development and aimed to revitalise the railways, promote transport by sea and inland waterway and control growth in air transport.

## **2.2 NATIONAL CONTEXT**

### **2.2.1 TOWARDS A SUSTAINABLE TRANSPORT SYSTEM (OCTOBER 2007)<sup>2</sup>**

'Towards a Sustainable Transport System' was published in response to the Eddington Study and the Stern Review and describes how the Government intends to improve transport's contribution to economic growth and productivity, and how it is ensuring that transport will play its part in delivering reductions in carbon emissions as recommended by the Stern Review. It also sets out policy and investment plans to 2013-14, and proposes a new approach to longer-term transport strategy.

### **2.2.2 DELIVERING A SUSTAINABLE TRANSPORT SYSTEM (NOVEMBER 2008)<sup>3</sup>**

In 'Delivering a Sustainable Transport System', the Department for Transport outline how the approach to long-term transport planning set out in the 'Towards a Sustainable Transport System' publication will be put into action to both tackle immediate problems and shape transport systems to meet the longer term transport challenges critical for our prosperity and way of life.

The five goals for transport focus on the challenge of delivering strong economic growth whilst reducing greenhouse gas emissions. The goals are to:

- ❖ Support national economic competitiveness and growth by delivering reliable and efficient transport networks
- ❖ Reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change
- ❖ Contribute to better safety, security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health
- ❖ Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society
- ❖ Improve quality of life for transport users and non-transport users and to promote a healthy natural environment.

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<sup>2</sup> <http://www.dft.gov.uk/about/strategy/transportstrategy/pdfsustaintranssystem.pdf>

<sup>3</sup> <http://www.dft.gov.uk/about/strategy/transportstrategy/dasts/>

### 2.2.3 PLANNING POLICY GUIDANCE 13: TRANSPORT<sup>4</sup>

PPG13 sets out the Government's priorities for a safe, efficient and integrated transport system. The objectives are to integrate transport at the national, regional, strategic and local level in order to: promote more sustainable transport choices for people and freight; promote accessibility to jobs, shopping, leisure facilities, and services by public transport, walking and cycling; and to reduce the need to travel, particularly by car.

Local authorities need to ensure that strategies in development plans and local transport plans are complementary.

### 2.2.4 NATIONAL CYCLING STRATEGY<sup>5</sup>

The National Cycling Strategy (1996) aimed to create the opportunity for more people to choose to cycle, and to quadruple cycle use between 1996 and 2012. This increase should be implemented through local target setting to contribute towards central targets. The review of the National Cycle Strategy in 2005 accepts that the target of quadrupling cycle journeys by 2012 will not be achieved, and that local success in increasing levels depends on measures meeting individual local circumstances.

### 2.2.5 WALKING AND CYCLING: AN ACTION PLAN<sup>6</sup>

The Department for Transport Walking and Cycling Action Plan aims to increase levels of walking and cycling through creating places that people want to walk and cycle in; providing high quality facilities for safe walking and cycling; influencing travel behaviour through education, training, marketing and promotion; and building skills and capacity. Actions will be taken by the Department for Transport, in conjunction with other key stakeholders and delivery agents such as local authorities and primary care trusts to achieve these objectives.

## 2.3 REGIONAL CONTEXT

### 2.3.1 REGIONAL SPATIAL STRATEGY<sup>7</sup>

The East of England Plan was published in May 2008 and sets out regional policy to 2021. It sets the vision and objectives for the East of England for the longer term. In particular it seeks to reduce the region's impact on, and exposure to, the effects of climate change and to put in place a development strategy with the potential to support continued sustainable growth beyond 2021. It provides the spatial framework to inform Local Development Frameworks, Local Transport Plans, Sustainable Community Strategies and other strategies with a bearing on land-use activities such as health and learning and skills strategies.

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<sup>4</sup><http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicyguidance/ppg13/>

<sup>5</sup><http://www.dft.gov.uk/pgr/sustainable/cycling/deliveryofthenationalcycling5738>

<sup>6</sup><http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/walking/actionplan/ingandcyclingdocumentinp5802.pdf>

<sup>7</sup>[http://www.go-east.gov.uk/goee/docs/Planning/Regional Planning/Regional Spatial Strategy/EE Plan1.pdf](http://www.go-east.gov.uk/goee/docs/Planning/Regional%20Planning/Regional%20Spatial%20Strategy/EE%20Plan1.pdf)

The East of England Plan strategy for the Watford Key Centre for Development and Change includes better connectivity and more integrated operational planning with the London public transport network and the enhancement of the town as an interchange centre linking the strategic rail network to services serving nearby suburban areas.

In May 2010, the Government announced its intention to revoke Regional Strategies.

### 2.3.2 REGIONAL TRANSPORT STRATEGY<sup>8</sup>

The Regional Transport Strategy (RTS) is part of the Regional Spatial Strategy, and provides a regional framework for the delivery of transport investment and policy priorities to support the aims of the spatial strategy.

The objectives of the RTS give a clear priority to increase passenger and freight movements by more sustainable modes, while reflecting the functionality required of the region's transport networks. The objectives of the RTS are:

- ❖ To manage travel behaviour and the demand for transport to reduce the rate of road traffic growth and ensure the transport sector makes an appropriate contribution to reducing greenhouse gas emissions;
- ❖ To encourage efficient use of existing transport infrastructure;
- ❖ To enable the provision of the infrastructure and transport services necessary to support existing communities and development proposed in the spatial strategy;
- ❖ To improve access to jobs, services and leisure facilities.

The aim of these objectives is to ensure that the East of England benefits from increased mobility and access, whilst minimising the impact on the environment and inhabitants of the region. Successful achievement of the objectives will lead to the following outcomes:

- ❖ Improved journey reliability as a result of tackling congestion;
- ❖ Increased proportion of the region's movements by public transport, walking and cycling;
- ❖ Sustainable access to areas of new development and regeneration;
- ❖ Safe, efficient and sustainable movement between homes and workplaces, education, town centres, health provision and other key destinations;
- ❖ Increased proportion of freight movement by rail;
- ❖ Safe, efficient and sustainable movement of passengers and freight to and from the region's international gateways;
- ❖ Economic growth without a concomitant growth in travel;
- ❖ Improved air quality; and
- ❖ Reduced greenhouse gas emissions.

## 2.4 HERTFORDSHIRE CONTEXT

### 2.4.1 COUNTY STRUCTURE PLAN<sup>9</sup>

The majority of policies contained within the Structure Plan have now been superseded, with the exception of policies 3, 15, 24, 35 and 52, which will remain in place until they are

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<sup>8</sup> <http://www.eera.gov.uk/What-we-do/developing-regional-strategies/east-of-england-plan/transport/>

<sup>9</sup> <http://www.hertsdirect.org/envroads/environment/plan/buildinghomes/structureplansavedpolicies/>

replaced by Local Development Framework policies. Policy 24 relates to the encouragement of 'environmental traffic zones' which may take the form of:

- ❖ areas of complete pedestrian/ cycle priority and, where appropriate, equestrian priority, where all vehicular traffic is excluded; these areas will include measures to avoid conflict between cyclists and pedestrians;
- ❖ areas where general motor traffic is excluded, but for practical reasons it is necessary to give access to particular types of vehicles at limited periods;
- ❖ areas where it is desirable to minimise the effect of traffic by management e.g. by traffic calming, highway safety measures, removing unnecessary traffic and excluding certain types of vehicle as appropriate.

Policy 35 relates to 'county transport schemes', of which none fall within the Three Rivers area.

#### 2.4.2 LOCAL TRANSPORT PLAN<sup>10</sup>

The Local Transport Plan (LTP) 2006/07-2011/12 is the second Hertfordshire transport plan. The Plan sets out how transport across the county will be improved and the vision for transport in Hertfordshire over the next 20 years is:

*'to provide a safe, efficient and affordable transport system that allows access for all to everyday facilities. Everyone will have the opportunity and information to choose the most appropriate form of transport and time of travel. By making best use of the existing network we will work towards a transport system that balances economic prosperity with personal health and environmental well being'.*

The nine objectives of the LTP are:

- ❖ to improve safety for all by giving the highest priority to minimising the number of collisions and injuries occurring as a result of the transport system;
- ❖ to obtain the best use of the existing network through effective design, maintenance and management;
- ❖ to manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time;
- ❖ to develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources;
- ❖ to develop a transport system that provides access to employment, shopping, education, leisure and health facilities for all, including those without a car and those with impaired mobility;
- ❖ to ensure that the transport system contributes towards improving the efficiency of commerce and industry and the provision of sustainable economic development in appropriate locations;
- ❖ to mitigate the effect of the transport system on the built and natural environment and on personal health;
- ❖ to raise awareness and encourage use of more sustainable modes of transport through effective promotion, publicity, information and education;
- ❖ and to reduce the need for the movement of people and goods through integrated land use planning, the promotion of sustainable distribution and the use of telecommunications.

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<sup>10</sup> <http://www.hertsdirect.org/envroads/roadstrans/transplan/ltpl/>

The LTP objectives are monitored through a variety of indicators, progress against which is reported through the LTP progress report.

- ❖ Mandatory Indicators are: principal road condition, non-principal classified road condition, unclassified road condition, footway condition, total killed and seriously injured, children killed and seriously injured, total slight casualties, public transport patronage, bus service user satisfaction, bus punctuality, accessibility, change in area wide traffic mileage, cycling trips, mode share of journeys to school, change in peak period traffic flow, congestion, and air quality.
- ❖ Non-mandatory Indicators are: passenger transport user satisfaction, rights of way indicator, school travel plans, speed limit compliance, and Abbey Line indicator.

The LTP encompasses a suite of 'daughter documents' providing more detailed strategy information. These documents consist of the Bus Strategy, Rail Strategy, Rights of Way Improvement Plan, Road Safety Plan and Accessibility Strategy. Consultation on a third Local Transport Plan is due to begin in the summer of 2010.

### 2.4.3 BUS STRATEGY

The Bus Strategy 2006/07-2010/11 covers Hertfordshire and seeks to contribute to Local Transport Plan objectives through: provision of an effective and efficient network of bus services as a travel mode; ensuring resources are used to best effect; improving bus punctuality through commercial partnerships and better management of the highway network; developing accessibility to employment, shopping, education, leisure and health facilities through effective design, considering alternative approaches and securing maximum funding; improving vehicle quality and associated infrastructure at bus stops and interchanges to increase access to the network by those with impaired mobility; and raising awareness and encouraging the use of bus services through improved information, marketing and branding.

Bus passenger numbers have declined since the 1980's. Recent decline has been attributed to reduced service frequencies and significant fare increases. Many people see bus travel as a mode of last resort and services will require attractive and reliable improvements to encourage modal shift. For other people though, buses provide the only source of transport, either permanently or at certain times of the day, highlighting the importance of the bus network. The challenge for the Bus Strategy is to achieve improvements in quality and accessibility while keeping the network sustainable and affordable.

The Bus Strategy includes measures to halt the decline in use through:

- |                                |   |
|--------------------------------|---|
| ❖ network and service design   | ❖ infrastructure                                    |
| ❖ Park & Ride services         | ❖ bus priority                                      |
| ❖ demand responsive transport  | ❖ interchanges                                      |
| ❖ network reviews              | ❖ integration with other modes                      |
| ❖ vehicle standards            | ❖ accessibility of the network and social inclusion |
| ❖ staff and customer standards | ❖ environmental issues                              |
| ❖ fares and ticketing          | ❖ serving new developments                          |
| ❖ concessionary fares schemes  | ❖ working in partnership                            |
| ❖ school transport             |   |
| ❖ passenger information        |   |



#### 2.4.4 RAIL STRATEGY

The Hertfordshire Rail Strategy 2006/07-2010/11 sets out the role of the rail network in meeting the transport needs of Hertfordshire. Although the County Council helps to set the strategic context in which rail services operate, with the exception of one case, the Council has no direct influence over service specification or operation. It does have influence over facilities and improvements at stations, on the marketing and promotion of services, and on the integration of bus and rail networks where possible.

The Rail Strategy sets out intentions to meet transport needs in a sustainable way through:

- ❖ setting of basic service parameters;
- ❖ encouraging innovative approaches to fares and ticketing;
- ❖ improving access to stations by sustainable means;
- ❖ development of improvement schemes for station facilities;
- ❖ passenger information provision; and
- ❖ supporting the transfer of freight from road to rail.

The Rail Strategy also includes route strategies for the West Coast Main Line and Metropolitan Line which assess the roles and development of the services through ticketing, information and station facility improvements.

The West Coast Main Line strategy recognises projected major growth to the north of Hertfordshire and the consequences of this growth on future route capacity for Hertfordshire commuters. There is also concern that peak freight paths will import performance risk to Silverlink services. The Metropolitan Line strategy places major emphasis on the development of Watford Junction as a regional railhead and of the Croxley Rail Link scheme.

#### 2.4.5 RIGHTS OF WAY IMPROVEMENT PLAN

The Hertfordshire County Council Rights of Way Improvement Plan 2006/07-2010/11 provides the context for future management of and investment in the rights of way network to meet the demands and needs of users. It is the means by which areas requiring improvement are identified, and plans for the implementation of improvement works are set out.

The main issues identified for the network are difficulty in accessing countryside without a car; insufficient off road routes linking communities and services; necessity of using, or crossing busy roads to link sections; inadequate provision for cycling and horse riding; uncontrolled dogs and fouling; insufficient circular routes with suitable start locations; inadequate information about the network; too many barriers and structures; the off road network fails to meet the needs of many potential users; and seasonal obstructions for example as a result of ploughing.

South West Hertfordshire, including Watford and Rickmansworth as well as the Colne Valley Regional Park is one of the nine areas identified for action. Subject to funding, plans were due to be prepared in 2007/08. The Plan recommends that the potential to provide additional routes through Creation Agreements or Creation Orders by the County Council and

regulation of this from a planning perspective should be recognised in the development of district-scale planning documents.

The core actions proposed are to:

- ❖ develop routes that cater for the needs of people with limited mobility;
- ❖ develop the network from significant public transport connections;
- ❖ reduce the number of unnecessary physical barriers on the network;
- ❖ promote Hertfordshire's countryside to residents and visitors;
- ❖ develop appropriate, well maintained links into the countryside;
- ❖ create and develop off road routes linking communities with places of work, schools and other local facilities;
- ❖ extend the network currently available to cyclists and horse-riders;
- ❖ help people wishing to improve or maintain their health by developing a range of circular off road routes;
- ❖ ensure that opportunities to protect, extend and enhance the off road network are included in proposals for new developments;
- ❖ where the off road network is affected by busy transport routes work to ensure that appropriate measures are taken to improve the safety and attractiveness of the routes for users;
- ❖ address problems of fly tipping, litter and dog-fouling in partnership with appropriate local and regional agencies; and
- ❖ identify and address potential demand for access to the countryside amongst those who currently do not use the network.

#### 2.4.6 ROAD SAFETY PLAN

The Road Safety Plan 2006-2010 aims to improve safety for all by giving priority to minimising the number of collisions and injuries occurring as a result of the transport network. Hertfordshire casualty reduction targets should also be met as a result of implementation of the plan.

The Plan identifies the means by which road safety will be improved through:

- ❖ increasing awareness of the need to wear seatbelts, and the consequences of not doing so;
- ❖ increasing compliance with speed limits;
- ❖ work related to powered two wheelers;
- ❖ assessment of pedestrian safety; and
- ❖ focusing on work-related safety.

#### 2.4.7 ACCESSIBILITY STRATEGY

The Accessibility Strategy 2006/07-2010/11 has the aim of providing a reasonable standard of access for all by appropriate transport to key services of health, learning, work, food shopping and leisure. Objectives of the strategy are to support those who are disadvantaged to achieve their potential and to access sustainable employment; to work in partnership with transport providers to achieve an efficient, affordable and enhanced transport system; and to develop a transport system that provides access to employment, shopping education, leisure and health facilities for all, including those without a car and those with disabilities.

The Strategy includes an audit of the accessibility of hospitals, GPs, dentists, opticians primary schools, secondary schools, FE colleges, libraries, employment and food shopping in Hertfordshire, and proposes actions to deal with identified issues. The only area within Three Rivers to be identified in the Strategy as having poor access to facilities is the super output area around Maple Cross. Specific actions are not proposed however as a result of a low population and the availability of non-commercial passenger transport.

#### 2.4.8 LONG TERM STRATEGY

The Local Transport Plan includes the Long Term Strategy (July 2005). This contains the Councils long term vision in 30 policies and strategies covering 10-15 years. It covers Area Plans, maintaining existing service levels, countywide themes and supporting policies.

The South West Hertfordshire Area Plan is based around the urban centres of Watford, Bushey and Rickmansworth. The mix of high density residential areas and industrial sites has created some of the worst transport problems in the county. To tackle the demand for transportation in South West Hertfordshire, a robust and balanced strategy was developed prior to the first Local Transport Plan (2001/02-2005/06).

The current transport strategy is based on three local objectives:

- ❖ to assist economic development;
- ❖ to improve the quality of life and environment; and
- ❖ to meet transport requirements efficiently in a sustainable manner.

The main strategies proposed to meet these objectives are:

- ❖ make modest improvements to existing rail network and maximise use of existing network;
- ❖ improve bus operations and passenger facilities with extra priorities and detection;
- ❖ develop a comprehensive cycle network;
- ❖ control urban traffic through traffic management, calming and parking management; and
- ❖ to undertake minor highway improvements to selectively reduce congestion and improve access.

Local objectives are complemented by a group of more strategic objectives:

- ❖ to enhance east-west passenger transport links across Hertfordshire and make journeys more seamless;
- ❖ to provide more sustainable links between Watford and north west London; and
- ❖ to address pressures for orbital movement around London in a sustainable manner.

The strategy contains more specific strategies for the Croxley Corridor (Including West Watford Transport Plan, Croxley Green Zone and Cassiobury Triangle); Croxley Rail Link; Cycling Strategy; Leavesden Transport Plan; Lower High Street/ Oxhey corridor; Safer Routes to School; Rural Plans; and Long Term Measures.

## 2.4.9 HERTFORDSHIRE INFRASTRUCTURE AND INVESTMENT STRATEGY

Hertfordshire County Council has led on a joint Infrastructure and Investment Strategy (HIIS) to define infrastructure requirements across Hertfordshire necessary to meet RSS growth targets. The study has assessed Hertfordshire's future infrastructure needs (including transport) and identified funding mechanisms to secure its provision.

The report identifies transport as the largest infrastructure item in terms of needs and costs, and there are a number of existing deficits that also need addressing.

### 2.4.9.1 HIIS BUS NETWORK

The Chorleywood-Rickmansworth-Watford corridor is identified as a principal area where access to bus services would benefit from improvement.

There are also a number of localised bus corridors which are identified as candidates for improvements to enhance accessibility and quality of services. Those which include areas within Three Rivers are:

- ❖ 500/550 Hemel Hempstead – Watford section;
- ❖ W5/6 Maple Cross – Watford – Hemel Hempstead;
- ❖ W8/10 North Watford – Watford – Northwood; and
- ❖ 724 Harlow – Heathrow Airport.

### 2.4.9.2 HIIS RAIL NETWORK

The main issue for rail in Hertfordshire is that despite having an extensive north-south rail network traversing the County, rail use is constrained by a lack of capacity. A lack of trains to satisfy demand especially for commuter trips into and out of London; platform capacity including at London stations; insufficient car parking at some station car parks and limited train paths have contributed to this lack of capacity.

### 2.4.9.3 HIIS ROAD NETWORK TO 2011

The main road capacity issues within Three Rivers are shown in Table 2.1.

**Table 2.1:** Road Capacity Issues

Location	Description	Corridor	RSS Class
Chorleywood	C-North Hill- Harewood	A404	Local
Croxley	C-Scotts Hill/ Watford	A412	Local
Croxley	C-Watford/ Baldwin roundabout	A412	Local
M25	J16-17 link capacity	M25	Strategic
M25	J17-18 link capacity	M25	Strategic
M25	J18-19 link capacity	M25	Strategic
M25	J19-20 link capacity	M25	Strategic
M25	J20-21 link capacity	M25	Strategic
Moor Farm	C-Moor/ Sandy Lodge	A4125	Local
Northwood	C-Batchworth/ White Hill	A404	Local
Rickmansworth	C-Uxbridge/ Riverside junction	A412	Local

Rickmansworth	C-Uxbridge/ Denham	A412	Local
Watford	C-Hampermill/ Brookdene	A412	Local

#### 2.4.9.4 HIIS FREIGHT

The trunk road network in Hertfordshire is identified as a major distributor of freight for the UK, while the West Coast Mainline is identified as a capacity gap limiting transport of freight by rail. It is suggested that rail freight initiatives along this corridor to cater for existing freight demands would not be practicable without route enhancements.

#### 2.4.9.5 HIIS PROGRAMMED INFRASTRUCTURE SCHEMES

Hertfordshire County Council has proposed Croxley Rail Link which has received active support from Transport for London. The link would divert Metropolitan Line Watford branch services east of Croxley station to Watford Junction via intermediate stations using a reopened section of presently disused track. This would make direct services into Watford Junction from Aylesbury possible, linking Watford to new development in Aylesbury and to the Chilterns, while also providing transport connections at Watford Junction to the North and other destinations.

Details of future infrastructure for the West Coast Mainline are anticipated to emerge from a study to deliver a new Route Utilisation Strategy covering lines on Strategic Route 18 which includes the West Coast Mainline.

#### 2.4.10 HERTFORDSHIRE BUS NETWORK STRATEGY REVIEW

The Hertfordshire Bus Network Strategy Review (2006) identifies priority routes for bus corridor improvements on the following strategic 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).

Improvements may take the form of investments in new and/or accessible vehicles; improved bus stop and shelter improvements; marketing measures to increase awareness of the service and charges, and the aim is to improve reliability, punctuality and service delivery.

## 2.5 LOCAL CONTEXT

### 2.5.1 SOUTH WEST HERTFORDSHIRE TRANSPORT PLAN: REVIEW AND ACTION PLAN<sup>11</sup>

In November 2008, a refresh of the original 1996 Transport Strategy for South West Hertfordshire was undertaken. This refresh considers changes in policy influences and the influence of changing traffic and travel patterns and presents an Action Plan for measures to be advanced over 2008-2013.

<sup>11</sup> <http://www.hertsdirect.org/infobase/docs/pdfstore/swhertsmain.pdf>

The Review is intended as a strategic level document that provides a direction for future transport schemes and initiatives in South West Hertfordshire, and the focus has been adjusted to address the pressing congestion issues that are dominant across the area.

The aim of the Plan is to develop a package of integrated transportation measures for the area which will:

- ❖ Improve the quality of life in areas where people live, work and play by addressing environmental issues relating to transportation;
- ❖ Assist in maintaining the vitality and viability of the commercial centres of South West Hertfordshire;
- ❖ Promote and develop a transport system in conjunction with land use patterns which provides for the movement of people and goods necessary for the economic and social well-being of South West Hertfordshire's residents;
- ❖ Allow a proper assessment to be made of the impact of any future development proposals and address future movement demands.

A number of initiatives which could contribute to addressing these objectives and meet the transport challenge are identified including:

- ❖ Major schemes
  - Watford Junction Improvement Scheme including Colonial Way Link Road;
  - Watford Ring Road two way operation;
  - Croxley Rail Link;
  - Abbey Line Community Rail;
- ❖ Better management of existing network
  - Ovaltine safety and traffic management scheme;
  - Brookdene Avenue Traffic Calming;
  - Bushey Hall Road/ Bushey Grove Road;
  - Sydney Road Traffic Calming;
  - Wiggshall Road/ Farraline Road Road Pedestrian Crossing;
  - Extension of Variable Message Signing, Watford Town Centre;
  - Establish road user hierarchy in SW Herts area;
  - Congestion/ traffic management study;
  - Bushey Arches-improvements in through routes for pedestrians and cyclists;
  - Bushey Arches-review of existing junctions arrangements and signal timings;
  - Area wide signing strategy;
  - VMS information signing on major routes;
- ❖ Sustainable transport and accessibility
  - A41 crossing;
  - Town Hall cycle link (Cassiobury Park to High Street);
  - Cowarch cycle link, Oxhey;
  - Clement Danes School Cycling Facility;
  - Parmiters cycle path;
  - Aldenham Road cycle route;
  - Field Schools safer routes to school;
  - Bikeability training/ cycling review study and implementation;
  - Pedestrian needs study and implementation;
  - Neighbourhood centre development and travel information centres;

- Transport hubs;
- School transport planning;
- ❖ Passenger transport proposals
  - Bus corridor improvements;
  - Automatic vehicle location;
- ❖ Innovation/ smarter choices
  - TravelSmart;
  - Employer Travel Plans; and
  - HCC Intelligent Transport Systems Strategy.

## 2.5.2 COMMUNITY STRATEGY

The Three Rivers Community Strategy 2006-2012 Priority 2 is 'Access to Services', recognising that some areas of the district experience difficulty in accessing services such as education, leisure, health, council services and food shops, and that some parts of the community are affected more than others. The elderly, the disabled, the young, and those without access to transport are affected the most.

## 2.5.3 THREE RIVERS LOCAL PLAN<sup>12</sup>

Until replacement with Local Development Framework policies, the Local Plan 1996-2011 (adopted 2001) sets out Council planning policies on transport. The Local Plan includes generic transport and parking provision policies, and detailed parking standards for new development. As the Council is concerned about the effects of road traffic on the environment and on the quality of life of residents of Three Rivers, policies in the Local Plan aim to discourage the use of the car and to increase accessibility by alternative modes of transport. The intention of the policies is to increase the effectiveness of the passenger transport system and cyclist and pedestrian networks. All proposals for development will be assessed in terms of their transport implications, including traffic generation, the extent to which journeys could be made by alternatives to the private car, and road safety.

Policy T1 encourages the development of transport interchanges where appropriate, seeks to improve access to stations for buses, cyclists and pedestrians, seeks to encourage closer integration of bus and rail services and other improvements which will promote more frequent use.

Policy T2 concerns passenger transport and new development. It requires proposed development outside the most accessible zones (as defined in policy GEN2) to demonstrate measures to minimise the use of cars by residents and employees. The Council may seek to enter into a planning obligation with the developer where the proposal would lead to increased traffic flows and congestion; or where it is desirable to increase the relative attractiveness of passenger transport over the private car. Major employment generating uses will also be required to submit and operate a 'Green Commuter Plan'.

Policy T3 sets out the Council's support for the proposed CrossRail and Croxley Rail Link schemes.

Policy T4 states that the Council will not support major new road schemes designed to increase capacity or reduce journey times, and instead encourage well planned schemes for traffic management and calming.

Policy T5 encourages the transfer of road freight to rail and water, as less environmentally disruptive transport modes, while policy T6 opposes any proposals for widening of the M25 or feeder roads.

Policies T7 and T8 set out the criteria for new development in terms of highways and parking provision. Under policy T9, development within Rickmansworth town centre and other built-up areas within 1km of railway stations, where parking provision is at a reduced level will be subject to a condition removing permitted development rights for the installation of hard standings.

Policy T10 encourages cycling in Three Rivers, while policy T11 encourages walking as a mode of transport. Policy D4 seeks to ensure new development is integrated with footpath and cycle route networks as walking and cycling are two of the most available forms of transport.

Policy L14 protects existing rights of way, and development which would involve the closure or diversion of a public right of way will be resisted.

Parking standards are set out in Appendix 3 of the Local Plan, and are reviewed in the Car Parking at New Development Supplementary Planning Guidance. The approach taken is one of setting out maximum standards, to which restraint may be applied where appropriate.

In July 2001 Three Rivers was designated a Special Parking Area. This brought parking enforcement under the Council's control. The Council has introduced CPZs in Rickmansworth and Chorleywood Town Centres. The Rickmansworth CPZ was implemented in April 2004, and actions are currently being assessed to tackle the issue of displaced commuter parking. The Chorleywood CPZ was reviewed in 2003/04 and has led to amendments to increase short stay shopper parking and to prevent commuter parking in residential roads around the centre.

Where a future need for controlled parking can be attributed to a new development, financial contributions will be expected from developers including revenue funding for CPZ implementation.

#### 2.5.4 THREE RIVERS CYCLING STRATEGY<sup>13</sup>

In 2004, Supplementary Planning Guidance (SPG) was adopted extending Local Plan policy T10 and setting out proposed cycle routes and cycle parking standards in the District. The SPG aims to maximise the use of cycles as a mode of transport to reduce reliance on the use of private cars; to develop a cycle network which is safe, convenient, attractive and efficient, thereby encouraging and enabling cycling; and to ensure that the needs of cyclists

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<sup>12</sup> <http://www.threerivers.gov.uk/Default.aspx/Web/LocalPlan>

<sup>13</sup> <http://www.threerivers.gov.uk/Default.aspx/Web/LocalPlan>



are represented in transport, land use, health, education, leisure and environmental proposals.

### 3 TRANSPORT IN THREE RIVERS

#### 3.1 ROAD NETWORK

Three Rivers is well served by communications links. The M25 and M1 motorways both run through the District, providing access to the strategic road network. Works are ongoing to widen the M25 to four lanes each way between junctions 16-23 and are scheduled for completion in the summer of 2012.

Congestion is an area of concern, particularly at peak times, and Hertfordshire County Council have identified a number of congestion hotspots<sup>14</sup>.

#### 3.2 RAIL NETWORK

Three Rivers rail connections are provided by the West Coast Main Line and rural branch; the Watford DC line; and the London Underground Metropolitan Line. These provide good rail access for the District to London and to the north. There are four Underground stations on the Metropolitan line (Chorleywood, Croxley, Moor Park and Rickmansworth), and two stations on the West Coast Main Line (Carpenders Park and Kings Langley). Table 3.1 shows passenger numbers using these stations.

Demand for rail services remains high, but access to and parking at stations are additional pressures. Improvement works have been completed at Chorleywood Station to develop bus/rail interchange facilities, and new parking arrangements have also been implemented.

**Table 3.1:** Station Service Providers and Passenger Figures

	Service Provider (s)	Annual Passengers
Chorleywood	LU and Chiltern Railways	0.86 million <sup>15</sup>
Croxley	LU	0.75 million <sup>15</sup>
Moor Park	LU	0.76million <sup>15</sup>
Rickmansworth	LU and Chiltern Railways	1.9 million <sup>15</sup>
Kings Langley	London Midland	0.596 million <sup>16</sup>
Carpenders Park	London Overground	0.420 million <sup>16</sup>

The railway operates within an overall transport system and as such should integrate with other modes such as buses, cycling and walking as well as the private car.

<sup>14</sup> <http://www.hertsdirect.org/envroads/roadstrans/congestion/tackcong/>

<sup>15</sup> Entry and exits from station, London Underground, 2008  
<http://www.tfl.gov.uk/tfl/corporate/modesoftransport/tube/performance/default.asp?onload=entryexit>

<sup>16</sup> Ticket Sales originating or ending at station, Office of Rail Regulation, 2007/08 [http://www.rail-reg.gov.uk/upload/xls/station\\_usage\\_0708.xls](http://www.rail-reg.gov.uk/upload/xls/station_usage_0708.xls)

### **3.3 BUS NETWORK**

The role of the bus is largely complementary to other parts of the transport system. It is an inherently local rather than long distance trip provider, though some routes may have a county-wide dimension. It serves a volume market, but needs of individuals and interfaces with individual transport mechanisms such as taxis and community transport are important.

The largest provider of bus services in Three Rivers is Arriva. Additional services are provided by Red Rose Travel, Carousel, Unò, Z&S International, Tiger Line, Mullany's Buses and Sullivan Buses. School services are provided by a variety of suppliers. Bus routes in the district provide links within Three Rivers for residents to major centres of Watford, Hemel Hempstead, Borehamwood, Northwood, St Albans, Luton, Tring, and Amersham. There are also bus services to Heathrow and Luton Airports from the district. Non-commercial bus routes are subsidised, for example the 336 between Chorleywood and Watford which is much used by elderly people. The Leavesden Park development provides a free shuttle bus service for employees between Leavesden Park and Watford Junction Station, running between the hours of 6.45am and 7.30pm.

The National Concessionary Fares Scheme entitles all residents aged 60 or over and residents that are 'eligible disabled' to free off peak local bus travel within England. In addition, Hertfordshire pass holders are also able to travel at any time on bus services across Hertfordshire.

Bus services in Three Rivers are covered by the Local Transport Plan Bus Strategy. Progress has been made in accordance with the Strategy through improvements to vehicles and bus shelters in the county; development of new routes; installation of electronic journey planners and customer information systems. Even with improvements, Hertfordshire as a whole did not achieve bus patronage targets for 2001/02-2005/06, following the national trend of decline in bus passenger journeys outside of London.

The PlusBus scheme operates from Carpenders Park rail station. One ticket covers the rail journey and unlimited bus travel at either end of the journey within a set area.

### **3.4 CYCLE NETWORK**

Increasing the numbers of people cycling regularly provides a cost effective way of reducing road congestion and pollution levels, improving public health and fitness and reducing demand for car parking space. Cycling is particularly suited to short and medium length journeys, but is constrained by the availability and suitability of appropriate routes, by safety and security considerations, and by physical and equipment suitability to meet the demands of routes.

There are a variety of cycle routes within the district, including the Ebury Way, a 3.5 mile (5.6km) traffic free section of routes 6/61 of the National Cycle Network, signposted routes, and designated on road cycle lanes. The Three Rivers Local Plan contains proposed cycle routes, some of which have now been implemented, including routes between Maple Cross and Mill End; between South Way, Leavesden and Gallows Hill Lane, Abbots Langley; and

the extension of the Abbots Langley route to Bedmond. A cycle counter on the Ebury Way recorded an average of 124 cyclists a day between April 2008 and January 2009.

A Cycling Strategy SPG was adopted April 2004 and sets out the Council's intentions to create a cycle-friendly environment. It should form a material consideration in decisions on new development. The SPG also provides an opportunity to help secure funds for development through Section 106 agreements.

Cycle parking standards are included in Appendix 3 of the Local Plan and the 'Parking at New Development' SPG with the aim of encouraging people to cycle by providing safe places to leave bicycles reducing the risk of theft which may otherwise deter cyclists. This will cover provision at new development, however existing buildings are not covered, and these often have unsuitable or no provision for cycle parking facilities.

Although Three Rivers District Council is not the highways authority and therefore does not have responsibility for creation and maintenance of cycle routes (this falls to Hertfordshire County Council), funds will be allocated as appropriate for the progression of cycling facilities in the district, and the council will support measures to improve conditions on public highways and to make conditions safer for cyclists through carriageway modifications and traffic speed control measures. Improvements that have already been undertaken include surface improvements and provision of a new river bridge on the Ebury Way.

### **3.5 PEDESTRIAN NETWORK**

Within Three Rivers there are a variety of opportunities for walking and leisure, for example routes along the River Chess and Grand Union Canal. However, walking should also be promoted as a sustainable form of day to day travel, enabling residents to reach employment and services easily and safely. Often facilities for pedestrians in Three Rivers are provided alongside roads where high traffic levels may make walking a less attractive option because of safety concerns, noise and fumes.

Measures have been put in place to improve crossing safety and accessibility, such as dropped kerbs and raised crossings. There have been improvements to school crossing patrols, and the Chorleywood Revitalisation scheme improves access for people with disabilities through provision of tactile paving, new ramps and better lighting.

### **3.6 WATERWAYS NETWORK**

The Grand Union Canal runs through the District and in the past the canal was extensively used for the transport of freight, although this has now declined and the canal is now more used for recreation.

There may be potential for the Grand Union Canal to be re-utilised for freight transport. British Waterways and Transport for London looked at the potential for waterborne freight on the West London Canal Network, and the study showed that canals may offer a cost effective and greener alternative to road haulage and may help to reduce congestion on the roads. It concludes that through butting lorry miles by increasing waterborne freight; carbon emissions, congestion and accidents involving HGVs will be reduced. Although the canal in

Three Rivers was not specifically assessed as part of the study, and there are 12 locks on the stretches of canal running through the district, the findings may still be relevant, and any regeneration occurring within the West London Canal Network may be expected to have knock-on impacts on the Three Rivers stretch as canal traffic increases and origins and destinations for freight transport increase.

**3.7 AIR TRANSPORT**

Air travel has capacity for both freight and passengers, and Three Rivers has good access to several airports; London Heathrow; London Luton; London City; London Stansted; and London Gatwick Airports are all within 60km of Three Rivers.

The Government expects future demand for air travel to increase dramatically. Forecasts predict an increase of passengers in the southeast from 130million to 300million by 2030. As a result of this, a white paper; ‘The Future of Air Transport’ was published in 2003 which outlines the long-term strategy for air travel in the UK and the framework for development of air transport to 2030, and sets out the Governments position on development at each of the airports above. The priority for the southeast is to make best use of existing runways at major airports. Beyond that, the building of two new runways in the period to 2030 is supported. A second runway at Stansted is supported where noise is strictly controlled, and loss of heritage and countryside is kept to a minimum. Development at Heathrow, including a new runway is supported provided strict environmental limits can be met. Land at Gatwick should be safeguarded for a new wide-spaced runway, but the agreement preventing a second runway before 2019 should not be overturned. Growth to maximum capacity at Luton is supported, though a second runway is not. The potential scope for London City to help meet demand is recognised. The case for creating a second hub in the southeast is not supported.

In 2006, the Government published a progress report reaffirming its commitment to the strategy set out in the White Paper and the importance of responding to the environmental challenges of aviation

**3.8 TRANSPORT STATISTICS**

**3.8.1 CAR OWNERSHIP**

Car ownership levels in Three Rivers are higher than the regional and national averages. At the 2001 Census, 83.8% of households in Three Rivers have access to at least one car or van.

**Table 3.2:** Car or Van Ownership (Census, 2001)

	Percentage of Households in Category				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4 or more</b>
<b>Three Rivers</b>	16.2	39.0	34.5	7.7	2.7
<b>Hertfordshire</b>	17.7	42.0	31.6	6.6	2.2
<b>East of England</b>	19.8	44.1	28.3	5.9	1.9
<b>England</b>	26.8	43.7	23.6	4.5	1.4

**Table 3.3: Car or Van Ownership by Ward (Census, 2001)**

	Percentage of Households in Category				
	0	1	2	3	4 or more
<b>Abbots Langley</b>	18.3	37.8	34.0	7.6	2.5
<b>Ashridge</b>	26.1	44.7	23.7	4.7	0.8
<b>Bedmond and Primrose Hill</b>	9.7	43.8	34.8	8.0	3.7
<b>Carpenders Park</b>	14.8	44.6	33.3	5.3	2.0
<b>Chorleywood East</b>	6.6	27.5	44.3	16.1	6.0
<b>Chorleywood West</b>	11.1	39.1	37.4	9.5	3.0
<b>Croxley Green</b>	16.9	40.1	32.4	7.2	3.4
<b>Croxley Green North</b>	16.4	38.5	36.6	6.4	2.2
<b>Croxley Green South</b>	11.6	40.9	37.2	8.4	1.4
<b>Hayling</b>	31.0	40.6	24.2	3.4	0.8
<b>Langleybury</b>	20.6	38.0	33.0	6.8	1.6
<b>Leavesden</b>	9.2	38.1	43.1	7.1	2.4
<b>Maple Cross and Mill End</b>	18.8	39.3	32.8	7.1	2.0
<b>Moor Park and Eastbury</b>	2.7	30.5	46.7	14.2	5.9
<b>Northwick</b>	36.3	41.6	18.9	2.6	0.5
<b>Oxhey Hall</b>	11.3	35.4	41.7	8.9	2.8
<b>Penn</b>	14.1	44.7	33.7	5.9	1.7
<b>Rickmansworth</b>	19.1	43.8	28.2	6.1	2.8
<b>Rickmansworth West</b>	10.0	34.5	42.0	10.4	3.2
<b>Sarratt</b>	8.6	36.3	41.4	12.6	7.0

Although overall car ownership in Three Rivers is high, there are variations between wards, and there may still be issues surrounding access to services. For example in Northwick ward, 36.3% of households do not have access to a car or van, and in Hayling ward 31.0% of households do not have access to a car or van.

### 3.8.2 TRAVEL TO WORK

The Census, 2001 showed the dominant mode of travel to work in Three Rivers was the private car (60.9%), although again there are variations between areas. Three Rivers has a higher proportion of people travelling to work by rail and underground than Hertfordshire, the East of England and England, but the proportion travelling by bus is much lower.

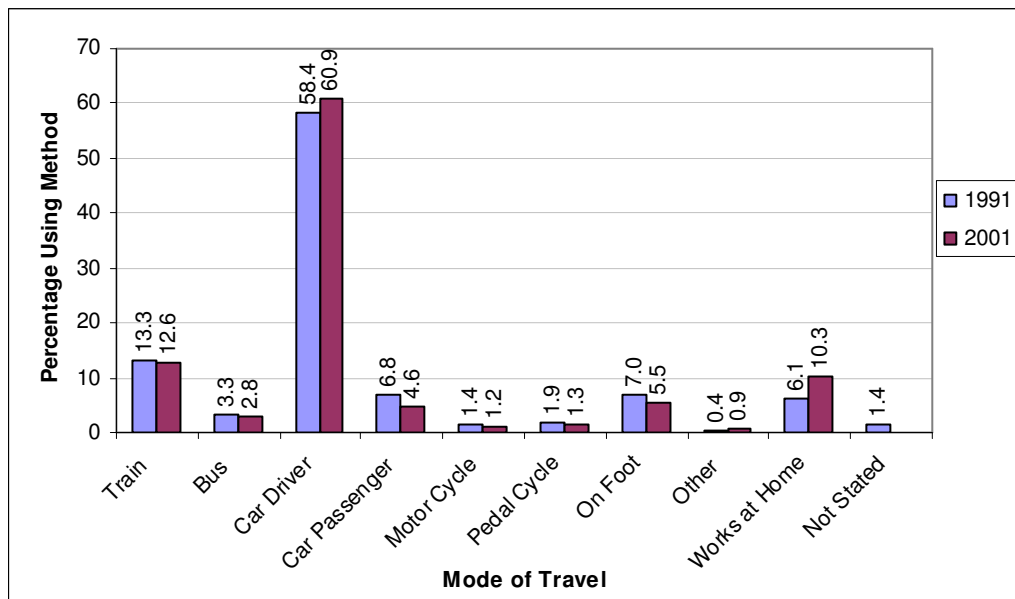
**Table 3.3: Mode of Travel to Work**

	Percentage of people aged 16-74 in employment, travelling by mode										
	Work at Home	Under ground	Rail	Bus	Motorbike	Drive a car	Passenger in a car	Taxi	Bicycle	On Foot	Other
<b>Three Rivers</b>	10.2	8.1	4.6	2.8	1.2	60.9	4.6	0.5	1.3	5.5	0.4
<b>Hertfordshire</b>	9.4	1.6	8.9	3.2	1.1	59.3	5.1	0.5	1.8	8.8	0.3
<b>East of England</b>	9.4	0.8	6.1	4.0	1.1	58.9	5.8	0.5	3.9	9.1	0.5
<b>England</b>	9.2	3.2	4.2	7.5	1.1	54.9	6.1	0.5	2.8	10.0	0.5

**Table 3.4: Mode of Travel to Work by Ward**

	Percentage of people aged 16-74 in employment, travelling by mode										
	Work at Home	Under ground	Rail	Bus	Motorbike	Drive a car	Passenger in a car	Taxi	Bicycle	On Foot	Other
<b>Abbots Langley</b>	9.3	1.3	5.4	3.3	1.2	67.0	5.5	0.4	1.2	5.1	0.3
<b>Ashridge</b>	8.2	4.6	6.6	5.6	2.0	57.4	7.3	1.1	1.6	5.2	0.3
<b>Bedmond and Primrose Hill</b>	13.3	1.3	5.3	1.7	1.2	66.2	5.0	0.2	1.1	4.4	0.3
<b>Carpenders Park</b>	10.3	4.3	9.0	1.8	1.8	62.2	4.5	1.5	0.8	3.6	0.2
<b>Chorleywood East</b>	17.4	11.9	4.0	0.6	0.4	59.3	3.1	0.4	0.3	1.8	0.8
<b>Chorleywood West</b>	13.5	13.9	7.2	0.7	0.6	54.6	2.2	0.2	0.7	6.0	0.4
<b>Croxley Green</b>	8.8	10.9	1.9	3.2	1.0	60.6	4.4	0.3	2.0	6.5	0.5
<b>Croxley Green North</b>	7.5	8.0	2.5	2.6	1.0	65.8	5.1	0.4	2.4	4.6	0.2
<b>Croxley Green South</b>	8.2	13.0	1.6	2.7	1.4	61.5	3.6	0.2	1.7	5.7	0.5
<b>Hayling</b>	7.8	3.9	6.3	5.0	2.7	59.1	7.1	0.7	1.2	5.8	0.2
<b>Langleybury</b>	8.7	1.2	5.4	3.9	1.4	66.9	5.5	0.3	1.8	4.8	0.2
<b>Leavesden</b>	8.4	2.3	4.1	3.9	1.2	69.6	4.2	0.3	1.3	4.3	0.4
<b>Maple Cross and Mill End</b>	9.7	5.9	2.0	4.0	1.4	64.1	5.3	0.3	1.5	5.5	0.3
<b>Moor Park and Eastbury</b>	13.9	19.7	2.5	1.0	0.3	51.2	2.5	0.2	0.9	7.3	0.5
<b>Northwick</b>	6.3	3.8	9.3	4.8	1.2	58.7	6.4	1.3	1.1	7.1	0.3
<b>Oxhey Hall</b>	9.0	5.2	4.7	3.4	1.2	62.3	5.3	1.3	1.9	5.3	0.4
<b>Penn</b>	7.5	9.1	1.9	3.4	1.1	63.6	5.8	0.2	1.6	5.5	0.3
<b>Rickmansworth</b>	11.1	18.2	4.9	1.8	0.7	46.5	3.2	0.30	1.0	11.0	1.3
<b>Rickmansworth West</b>	10.8	14.4	2.7	1.2	1.1	59.8	2.9	0.2	1.3	5.2	0.5
<b>Sarratt</b>	18.5	5.9	3.8	1.4	0.5	60.6	3.7	0.3	0.8	3.6	1.0

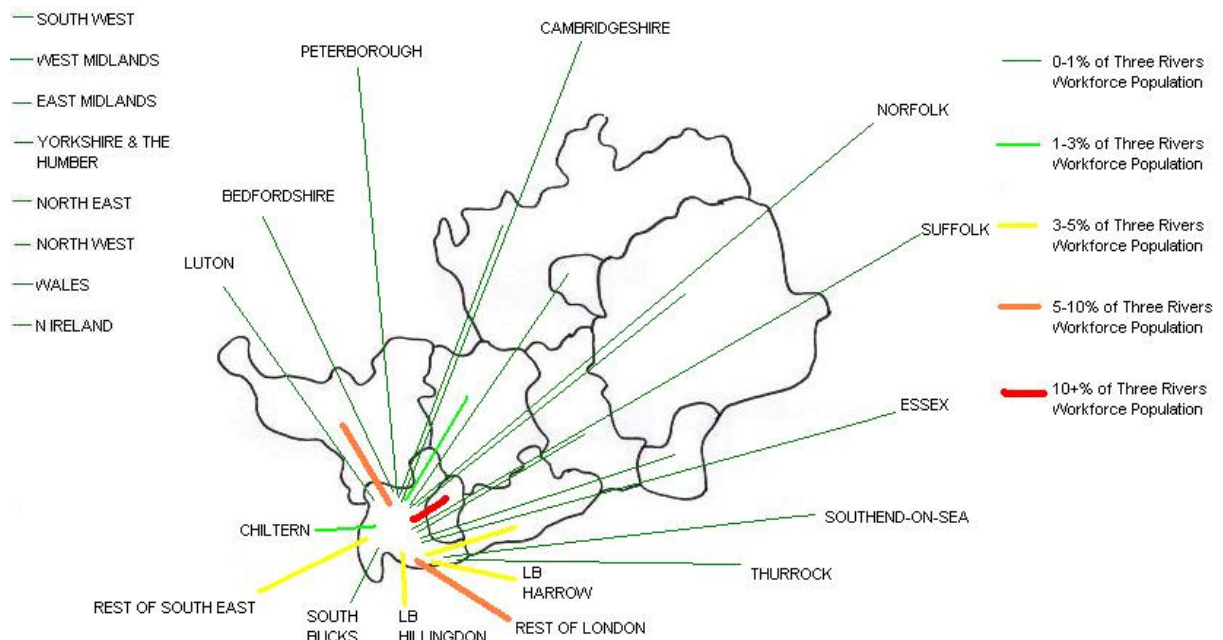
**Figure 3.1:** Change in Mode of Travel to Work 1991-2001 (Census)



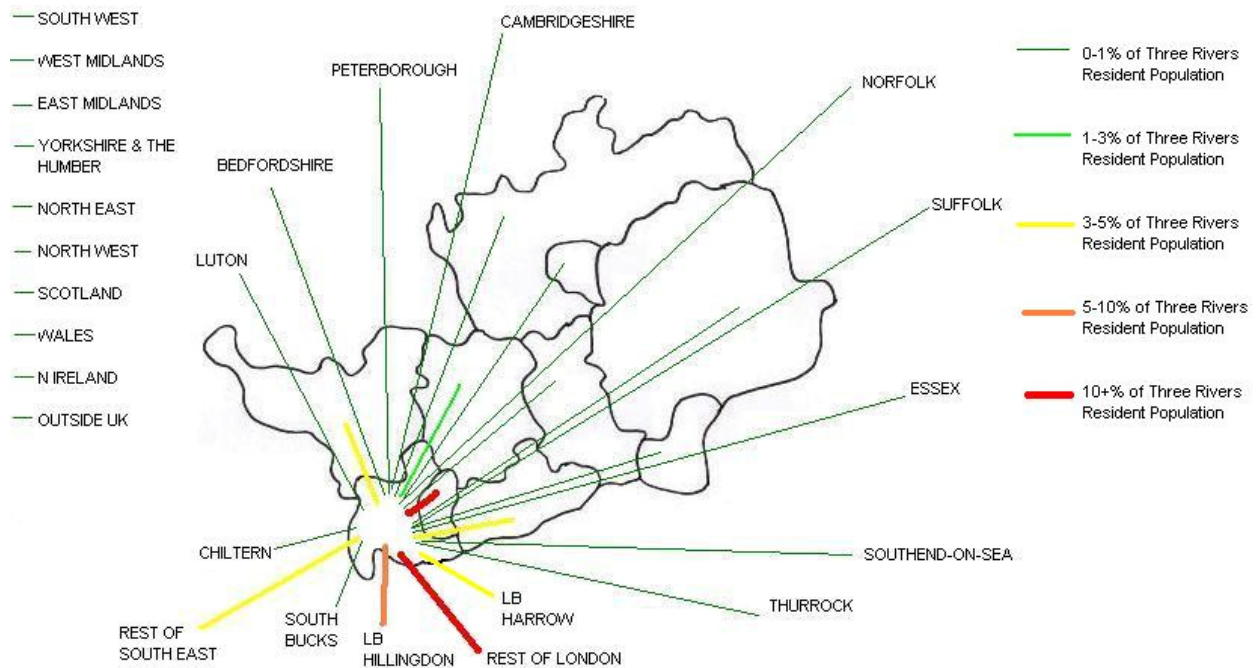
Between 1991 and 2001 the only modes of travel to show increases in the percentage of people travelling by them are 'car driver' and 'works at home'. All other modes of travel showed a reduction in use.

Figures 3.2 and 3.3 show the patterns of commuting in to and out of Three Rivers based on Census 2001 data. It is clear that the greatest flows are between London and Watford.

**Figure 3.2:** Commuting in to Three Rivers



**Figure 3.3:** Commuting out of Three Rivers



### 3.8.3 TRAFFIC FLOWS

The Hertfordshire Traffic and Transport Report (2008)<sup>17</sup> provides an indication of traffic flows by district through measured vehicle kilometrage. The data for Three Rivers does not include counts on the motorway/ trunk road network.

**Table 3.5:** Total Vehicle Kilometrage 2008

	Traffic (Million VKm/Day)		% Change 2007-2008		Highest Recorded Flow	
	All Roads	HCC Roads	All Roads	HCC Roads	x1000 (AAWD)	
<b>Three Rivers</b>	1.06	1.06	-0.43	-0.43	23.8	A412

Three Rivers has the lowest level of forecast traffic growth to 2021 of all Hertfordshire districts, as well as levels below county, regional and national levels.

**Table 3.6:** Local Traffic Forecasts (2008 base year)

	2011 (% increase)	2021 (% increase)
<b>Three Rivers</b>	2.9	14.8
<b>Hertfordshire</b>	3.7	18.8
<b>East of England</b>	4.3	21.2
<b>Great Britain</b>	4.6	19.5

<sup>17</sup> <http://www.hertsdirect.org/infobase/docs/pdfstore/1ttdr2008.pdf>



### 3.8.4 ROAD SAFETY

DfT publish road accident statistics<sup>18</sup>, and these indicate that Three Rivers has seen a reduction in accidents in line with Hertfordshire, regional and national trends.

**Table 3.7:** Three Rivers Reported Casualties by Severity

	All KSI	Child KSI	All Slight Casualties	All Casualties
2008	29	5	371	400
2007	35	4	400	435
2006	36	1	348	384
2005	51	5	439	490
2004	49	1	417	466

### 3.8.5 ENVIRONMENT

Three Rivers has three areas designated as Air Quality Management Areas (AQMAs), all of which are associated with the M25 motorway. The areas are:

- ❖ AQMA 1: Residential properties close to M25 at Kings Langley
- ❖ AQMA 2: Chandlers Cross
- ❖ AQMA 3: Chorleywood

Information on emissions of carbon dioxide are published by the Department of Energy and Climate Change<sup>19</sup>, including a breakdown showing the contribution of industry and commercial, domestic and road transport sectors, and land use change.

**Table 3.8:** Local Carbon Dioxide Estimates- Road Transport

	kt CO <sub>2</sub> emissions from road transport
2005	357
2006	349
2007	345

## 4 CURRENT/ POTENTIAL SPECIFIC TRANSPORT SCHEMES IN THREE RIVERS

### 4.1 CROSSRAIL

Crossrail is a major new railway proposal that will provide high frequency rail services for London and the South East. From 2017, Crossrail will travel from Maidenhead and Heathrow in the west to Shenfield and Abbey Wood in the east via new twin tunnels under central London, and will link Heathrow Airport, the West End, the City of London and Canary Wharf.

Crossrail should make travel in the region easier and quicker, and reduce crowding on London's transport network. Trains will carry more than 1500 passengers in each train during peak periods.

<sup>18</sup> <http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtieslatables/>

<sup>19</sup> [http://www.decc.gov.uk/en/content/cms/statistics/climate\\_change/climate\\_change.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_change/climate_change.aspx)

In the early stages of the project, extensions to the main route were also considered. Western corridor B would have extended in a tunnel from west of Paddington to join the Chiltern and Metropolitan lines near Wembley Park, and run to Aylesbury with a branch to Chesham. While this corridor performed strongly against selection criteria objectives, it was not included in the preferred scheme because of adverse contractual impacts on the Chiltern line franchise. Western corridor D would extend in a tunnel from Paddington and surface close to Wembley Park to join the Metropolitan line and run to Watford and Uxbridge. This corridor performed poorly against a number of selection criteria, because Crossrail would directly replace the existing Metropolitan line, thereby reducing the benefits in comparison to other possible extensions. It was therefore not included as part of the preferred scheme.

Although Crossrail itself will not now reach Three Rivers, it may still have implications for transport as improved infrastructure links within and across London may encourage journeys by rail.

## **4.2 CROXLEY RAIL LINK**

TfL together with Hertfordshire County Council has been developing plans to re-route and extend the Metropolitan line to Watford Junction. The proposals include:

- ❖ Two new London Underground stations at Ascot Road and Watford West;
- ❖ A new viaduct to link the existing Metropolitan line at Croxley to the disused Network Rail Croxley Green Branch line;
- ❖ Double track on the Croxley Green Branch Line which is currently single track;
- ❖ Refurbishment of the platforms and stations at Watford High Street and Watford Junction; and
- ❖ Possible closure of the Metropolitan line station at Watford and of the branch north of the viaduct.

If the link is constructed, Metropolitan line trains could run from Watford Junction to Central London at least every ten minutes. The Link would improve access to public transport for residents, improve access to the main attractions of central Watford such as the Harlequin Centre, reduce road traffic congestion, improve transport links to London and provide future opportunities for services from Watford to Rickmansworth and beyond.

The project has the strong backing of local authorities, the regional authority, TfL and public support. However there have been problems in securing funding for the project. In 2005, TfL tentatively committed to providing up to £18m, and in February 2008, a business case was submitted to DfT, however this was rejected on the basis that no guarantee of financial backing had been received from TfL.

In July 2008, the East of England Regional Assembly declared the Croxley Rail Link a priority, and suggested a Government grant of £119.5m towards the costs. Hertfordshire County Council has agreed to allocate £25.8m which it hopes to recover through ticket sales and other London Underground revenue. A Transport and Works application is expected to be submitted in May 2010, and it is hoped that the Link could be operational by 2017.

### **4.3 M25 WIDENING**

Widening of the M25 was one of the recommendations of the Orbit Multi Modal Study (November 2002). The study included widespread public consultation and looked at current problems on orbital transport routes around London, and potential solutions. The report recommended that most of the dual three lane sections of the M25 should generally be widened to dual four lanes.

Widening of the M25 between junctions 16 and 23 from dual three lanes to dual four lanes directly affects transport in Three Rivers. Works commenced in May 2009, and involve building new lanes; partly over the current hard shoulders with new hard shoulders built alongside, except over or under bridges. Works are due to be completed in the summer of 2012.

### **4.4 WATFORD JUNCTION IMPROVEMENTS**

Although outside the boundaries of Three Rivers District, there are proposals within Watford Borough for redevelopment around Watford Junction Station which may include residential and commercial development, with improvements in access to the station through a new link road, increased car parking and improved bus and taxi facilities.

## **5 FUTURE TRANSPORT IN THREE RIVERS**

The major points of action for transport in Three Rivers should aim to:

- ❖ Reduce congestion;
- ❖ Increase public transport and non-motorised mode shares;
- ❖ Reduce local traffic impacts, for example improving road safety, improving perceptions of personal safety and reducing the traffic effects of shorter trips;
- ❖ Manage traffic for local quality of life benefits;
- ❖ Improve bus services including school services;
- ❖ Improve rail links and services;
- ❖ Improve safety and facilities for cyclists and pedestrians;
- ❖ Improve access and facilities for mobility impaired and elderly people;
- ❖ Control parking in the District; and
- ❖ Ensure new development does not place undue pressure on infrastructure and encourages the use of sustainable transport modes.

Three Rivers District Council supports the County Council in delivering Local Transport Plan 2 and integrated transport. The Council's priorities in meeting Local Transport Plan 2 targets are:

- ❖ Tackling congestion: since the mid 1990s Three Rivers District Council, Hertsmere Borough Council, Watford Borough Council and Hertfordshire County Council have been working together to tackle congestion. The Councils commissioned and adopted the South West Herts Transportation Strategy in 1996. The aim was to keep traffic levels at 1995 levels by 2011, which in effect would represent a 5% decrease (equivalent to travelling in school holidays). This Strategy was refreshed in November 2008 to consider changes in policy and the influence of changing traffic and travel patterns. Three Rivers remains committed to tackling congestion through

implementation of the Strategy as well as through its own capital programme and other joint initiatives with the County Council and neighbouring authorities. The Council will seek to address congestion through policies and strategies in the Local Development Framework.

- ❖ Access to services: the Council continues to operate the national concessionary fares scheme which entitles all residents aged 60 or over and residents that are 'eligible disabled' to free off peak local bus travel within England, In addition, Hertfordshire pass holders are also able to travel at any time on bus services across Hertfordshire. Non-commercial bus routes are subsidised, including the 336 between Chorleywood and Watford which is much used by elderly people. The Council has an annual programme of refurbishments to shopping parades which seeks to improve access for all through the provision of tactile paving, new ramps and better lighting.
- ❖ Safer roads: cycle tracks are being developed to secure safer routes to schools and to other facilities. The Council's highways improvement programme seeks to complement the County's programmes by providing safer crossings, speed reduction measures and other safety features.
- ❖ Better air quality: Three Rivers has five Air Quality Management Areas (AQMAs) all relating to road traffic emissions from the M25.
- ❖ Other quality of life issues: provision of new parking bays in residential areas, to discourage verge parking and provide additional spaces; implementation of environmental enhancements to improve biodiversity and counteract pollution through works to nature reserves, open spaces and woodlands.

Significant schemes and actions identified for Three Rivers by Local Transport Plan 2 for the period 2006/07-2010/11 are:

- ❖ Implementation of the Croxley Rail Link;
- ❖ Extension of the Rickmansworth Controlled Parking Zone to facilitate residents parking and manage commuter parking near the station;
- ❖ Implementation of other parking restraints to assist local residents throughout the District;
- ❖ Implementation of a District wide cycling strategy;
- ❖ Enhancement of local shopping centres to ensure vitality and viability;
- ❖ Complete installation of parking bay programme; and
- ❖ Continued programme of highway improvements.

The Council has been working with the Highways Agency and with Hertfordshire Highways to identify the transport impacts of the Local Development Framework. No significant issues have been identified as a result of the Core Strategy Proposed Submission (June 2010), however further work will be required to support Site Allocations. This work is anticipated to be completed in advance of public consultation on the Site Allocations Preferred Options in Autumn 2011.