

SOUTHERN ST ALBANS URBAN TRANSPORT PLAN

April 2009

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1 INTRODUCTION

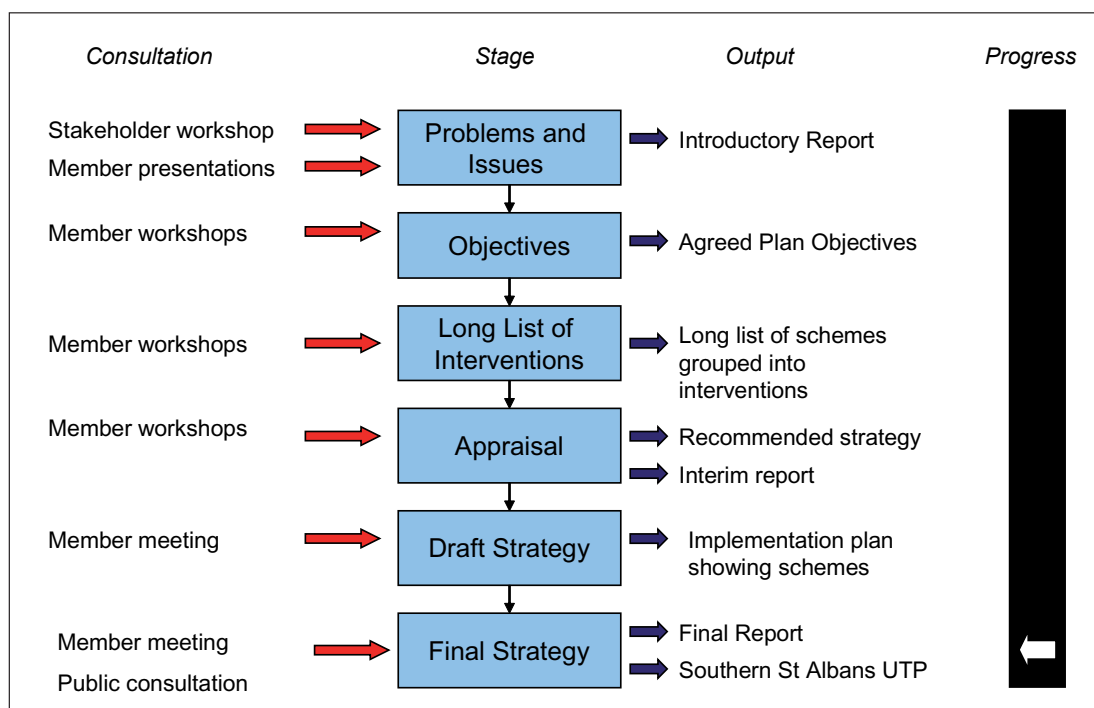
About this document

- 1.1 Following on from the County's Local Transport Plan, a more local, Urban Transport Plan (UTP), has been developed, for the area south of St. Albans city centre. This encompasses the urban areas of London Colney, Park Street, Bricket Wood and Chiswell Green. These all fall within the district of St Albans.
- 1.2 The area has its specific transport problems, suffering from traffic disruption, which is exacerbated by problems on the motorways as traffic diverts through the study area. There is also congestion caused by traffic travelling to and from the nearby city of St Albans, and accessing the sizable major superstores and industrial estates within the study area. Effectively managing freight for the Plan area is another big challenge.

Overview of the UTP process

- 1.3 The diagram below shows the process for this transport study. As can be seen on the progress bar on the right, we are now at the final stage - this is the Final Strategy.

FIGURE 1.1 UTP PROCESS



- 1.4 Following this introduction and overview of the process, this report will take the following structure:
- **Section 2** describes the background to the study area, including the socio-economic characteristics and analysis of transport data.
 - **Section 3** reports on the review of policy.
 - **Section 4** explains how the objectives were derived and identifies the targets that will be used to measure progress towards the objectives.
 - **Section 5** explains how schemes to address the problems were developed and appraised against the objectives.
 - **Section 6** describes the schemes that will best meet the study area's objectives.

Description of Study Area

- 1.5 The study area consists of four main urban areas (London Colney, Chiswell Green, Park Street & Bricket Wood), which fall within two parishes.
- 1.6 **The Parish of London Colney** is situated on the old coaching route between London and St. Albans, bounded in the north by the A414 and south by the M25. On the western side of the village are a nature reserve and the Roman Catholic All Saints Pastoral Centre, formerly an Anglican convent built on the site of the old mansion house. The village has a thriving historic centre with a hypermarket to the south. With 1,800 car parking spaces, it is one of the largest hypermarkets in the UK. The settlement is within the district of St. Albans, and close to St. Albans city centre. This is a significant historic city 25 miles away from London.
- 1.7 **The Parish of St Stephen** consists of a number of villages:
- **Park Street** is built along Watling Street, an ancient trackway first used by the Celts between Canterbury and St Albans and later paved by the Romans. The River Ver flows through the village of Park Street on its way to join the River Colne, which largely forms the southern boundary of the Parish.
 - **Bricket Wood** lies to the west of Park Street and is bounded to the west by Bricket Wood Common (SSSI), an important example of lowland heath. Around Munden Hall, to the south, are areas of informal medieval parkland and a complete section of meadow pasture. This area also contains the site of several Roman villas.
 - **Chiswell Green** lies to the north of the Parish. Originally positioned around the junction of Chiswell Green Lane and Old Watford Road it was much extended between the wars. To the north are the headquarters of the Royal National Rose Society and its flagship gardens - the "Royal National Rose Society Gardens of the Rose". There is a plan to build the world's largest butterfly dome at an adjacent site.
- 1.8 There are three stretches of motorway in St Stephen. The M1 runs north south through the west of the Parish, the M25 bisects it from east to west and the M10 forms part of the northern boundary. The incomplete junction of the M25 and M1 also lies in the Parish. Traffic travelling anticlockwise on the M25 needs to leave the motorway and use the A405 to join the M1 travelling southbound whilst traffic travelling northbound on the M1 needs to leave the motorway and use the A405 to join the M25 travelling clockwise.
- 1.9 Nearby places outside the district include Hatfield to the east, Welwyn Garden City to the northeast, Luton and Dunstable to the northwest, Hemel Hempstead to the west, Watford to the southwest and Borehamwood to the south. A map, outlining the boundaries of the study area, is given in Figure 1.2.
- 1.10 The study area is connected into the strategic road network by joining the M25 or M10/ A414 and these lead to further (indirect) linkages with the M1 and A1(M). The A405 carries a lot of traffic between the M25 and M1 as there is no direct connection between the M25 and M1 south, and M1 north to the M25, as Junction 6a is a limited junction. The highway network is described in more detail later in this report.

Environment

- 1.11 This is a semi-rural area, containing several villages. It encompasses the parishes of St Stephen and London Colney. St Stephen contains five play areas and Greenwood Park, an important and well used sports facility administered by St Stephen Parish.

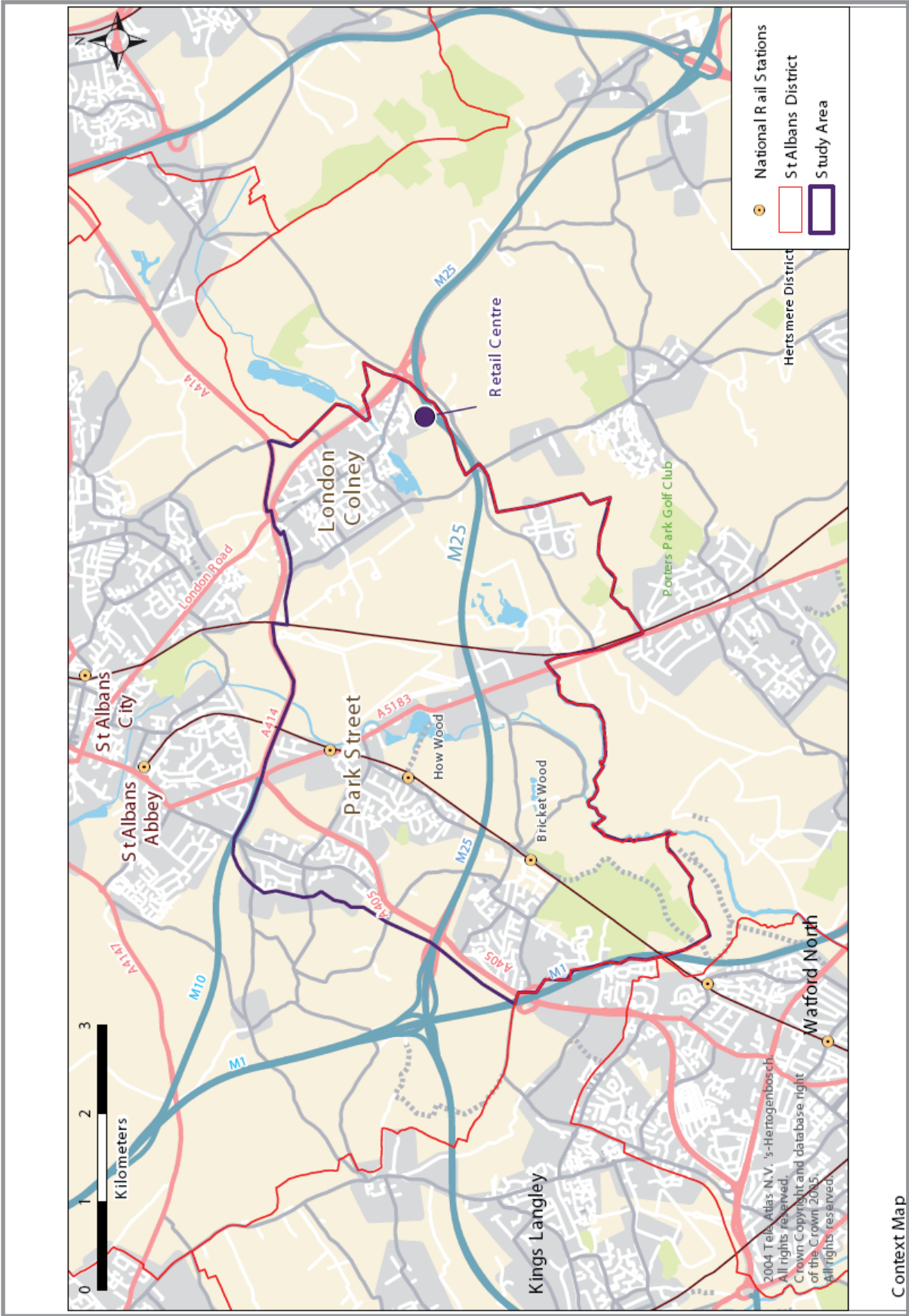
Within the parish there are large tracts of woodland including Bricket Wood Common, which is a protected Site of Special Scientific Interest (SSSI).

- 1.12 London Colney contains a nature reserve for wild birds and a river which runs through the village, called the River Colne. It is a tributary of the Thames, flowing into the Thames at Staines.

Consultation

- 1.13 This Urban Transport Plan has been developed in close consultation with elected County and District members and local Parish Councils. Figure 1.1 illustrates the stages at which consultation has taken place.
- 1.14 The study commenced with a stakeholder workshop at which the existing and future problems were examined and opportunities for tackling local problems and issues identified. This was followed by a series of member steering group meetings at which progress was examined and member inputs provided. Meetings have also taken place with key County and District officers and further discussions have taken place with individual officers in the County Council in developing the implementation plan. Public consultation has also taken place on this Draft Urban Transport Plan and responses have been considered further by the member steering group before this Final Plan was produced.

FIGURE 1.2 URBAN TRANSPORT PLAN: STUDY AREA



2. BACKGROUND PROBLEMS AND ISSUES

Introduction

2.1 Here, we give an analysis of:

- Socio-economic characteristics;
- Highway network and congestion – includes traffic flow analysis, car ownership data, origin and destination mapping and travel to work information;
- Safety – analysis of accident data;
- Freight – a thorough review of freight and servicing, encompassing current and future activity;
- Parking – descriptions of on and off-street parking within the study area;
- Sustainable Transport – information about the various public transport modes (bus and train), as well as cycling and walking, and the progress made with Travel Plans, which cover travel behaviour and other sustainable measures, and;
- Accessibility – a review of access by public transport to major services and establishments (GPs, hospitals, schools, etc).

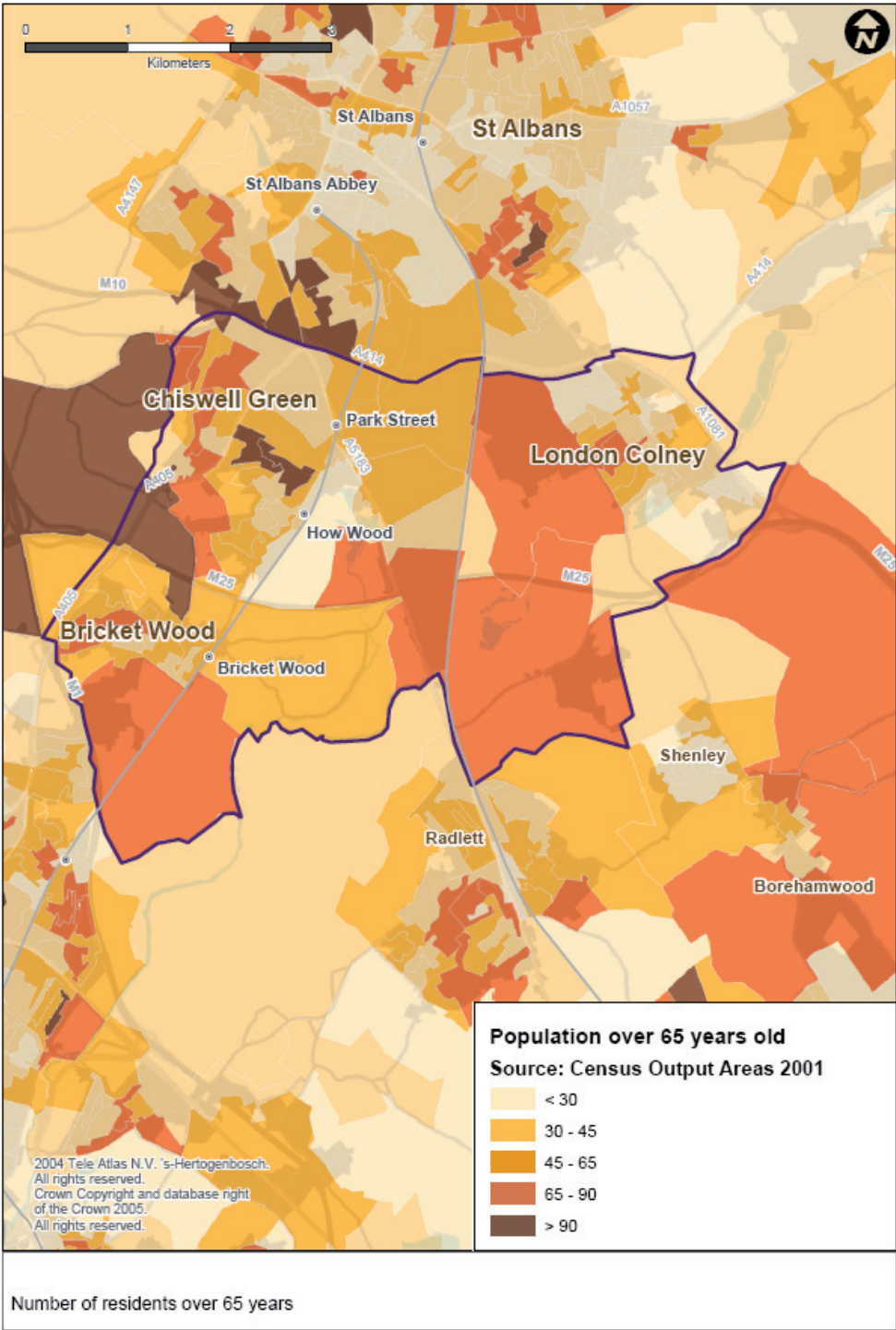
2.2 The location of the strategic roads around London Colney and St Stephen define the characteristics of the road network. The roads that run east-west in the area are all for local access with the major roads focusing on north-south movements, linking into the M10/A414 or St Albans to the north and the M25 or London to the south.

Socio-economic characteristics

Age profiles

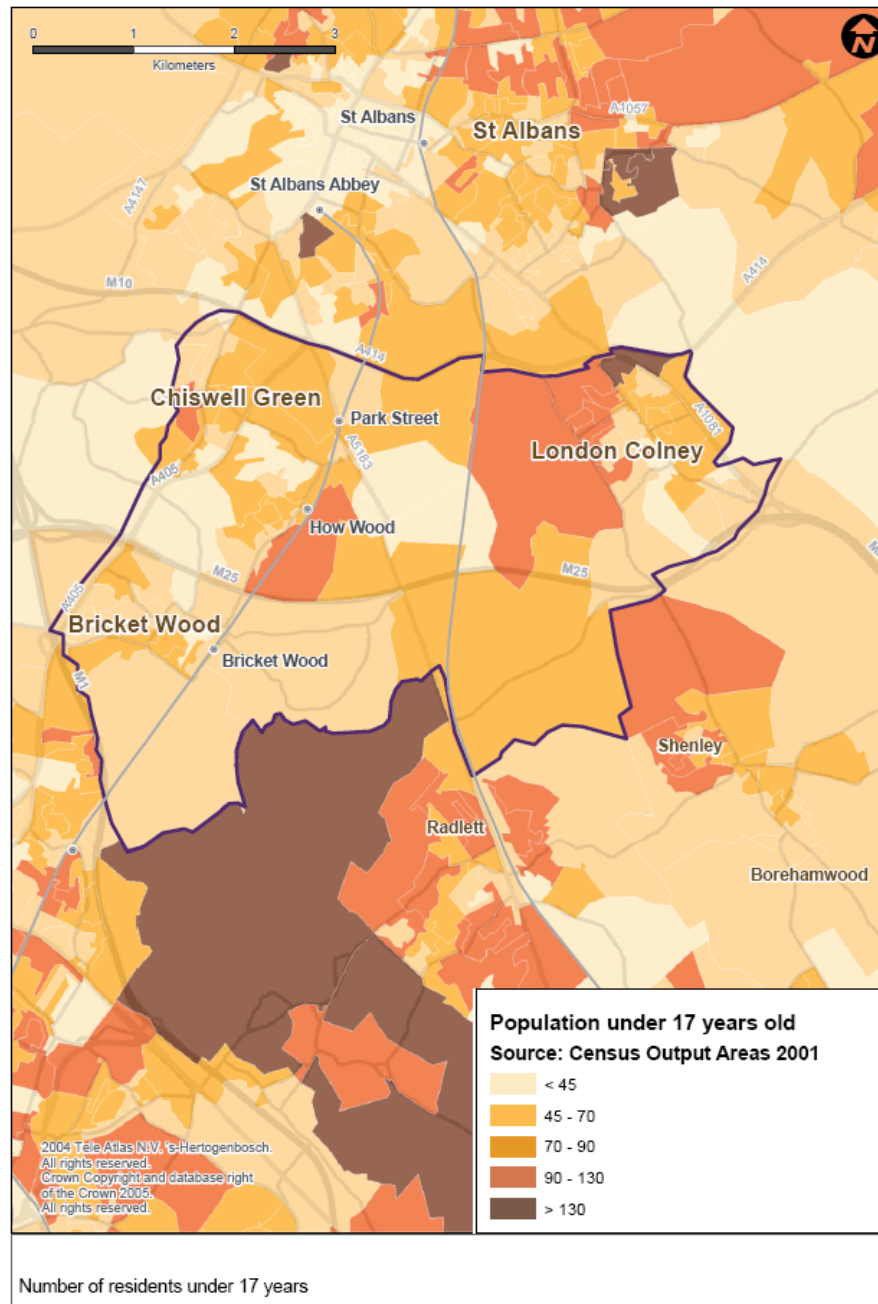
2.3 The study area contains areas with a relatively high percentage of the population over 65 years old, the distribution of which is illustrated in (Figure 2.1).

FIGURE 2.1 NUMBER OF RESIDENTS OVER 65 YEARS OLD



2.4 The following map, showing the population under 17 years old (Figure 2.2), shows a cluster of younger people in London Colney, rather than to the west or south of the study area.

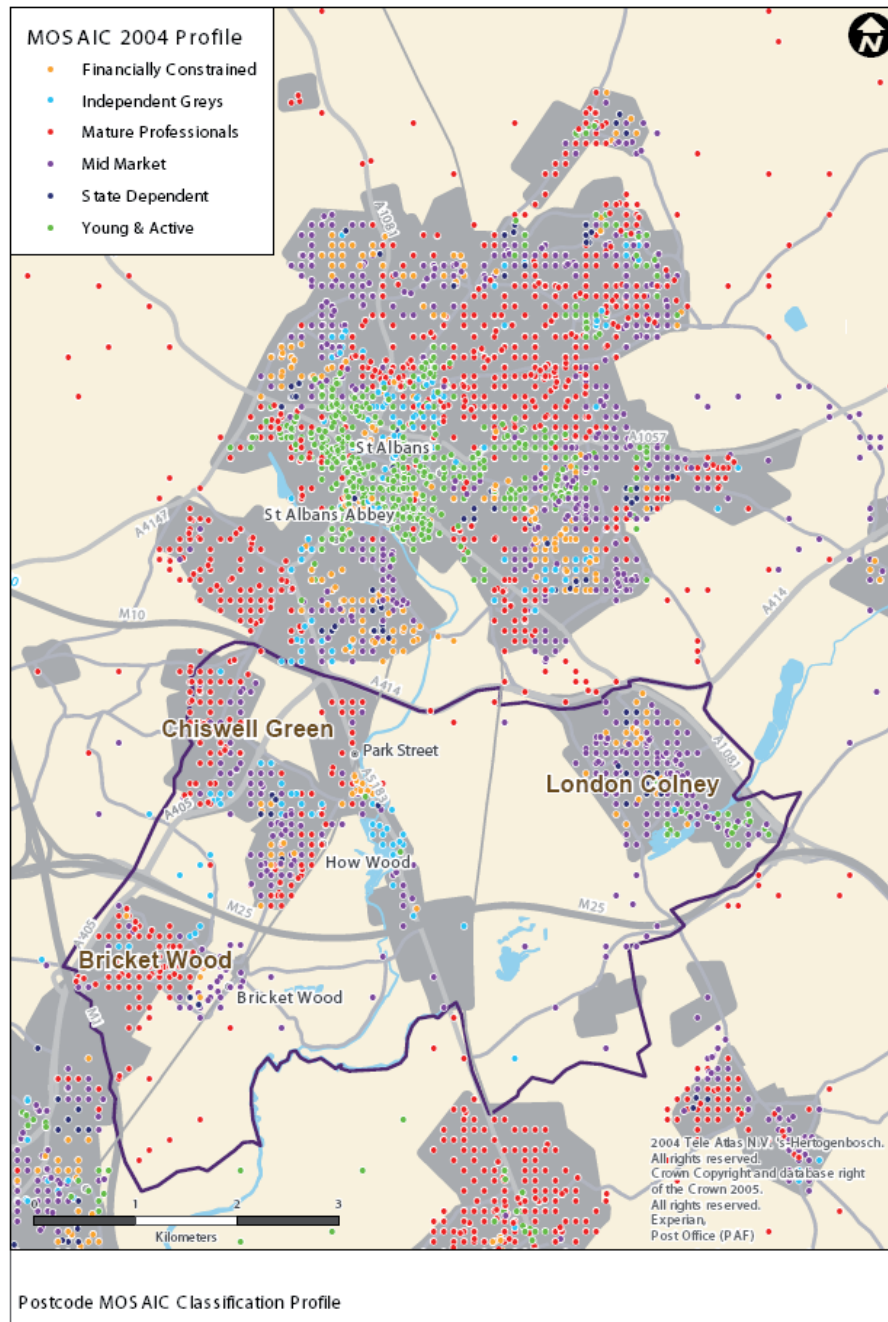
FIGURE 2.2 NUMBER OF RESIDENTS UNDER 17 YEARS OLD



Socio-economic profiling

2.5 It has also been possible to produce a MOSAIC profile of the resident population, as shown in Figure 2.3. MOSAIC uses a combination of census, electoral roll, housing and financial data to classify households into different socio-economic groups. This map shows specifically the various types of profession as a proxy indicator of wealth and lifestyle. We can see that London Colney contains a large proportion of 'mid-market' professions (alongside some 'young and active'), whereas St Stephen contains a higher percentage of mature professionals (and few 'young and active'). This corresponds well with the age profile information in the previous maps.

FIGURE 2.3 SOCIO-ECONOMIC CLASSIFICATION OF HOUSEHOLDS IN STUDY AREA



Definition of terms

<i>Financially constrained</i>	-lower than average purchasing power and car ownership, more children at home.
<i>Independent Greys</i>	-mid-range purchasing power, lower car ownership, more children at home.
<i>Mature Professionals</i>	-above average purchasing power, fewer children at home.
<i>Mid-Market</i>	-mid-range purchasing power, higher car ownership, more children at home.
<i>State Dependent</i>	-lower than average purchasing power and car ownership, children at home reflects general population.
<i>Young & Active</i>	-mid-range purchasing power, lower car ownership, fewer children at home.

NB. This geodemographic classification is a combination of travel behaviour types and life-style types (derived from MOSAIC, a classification developed by Experian, the UK's largest owner of consumer data). Travel behaviour data comes from travel surveys, tracking surveys, customer satisfaction surveys and customer databases.

Roads and Traffic

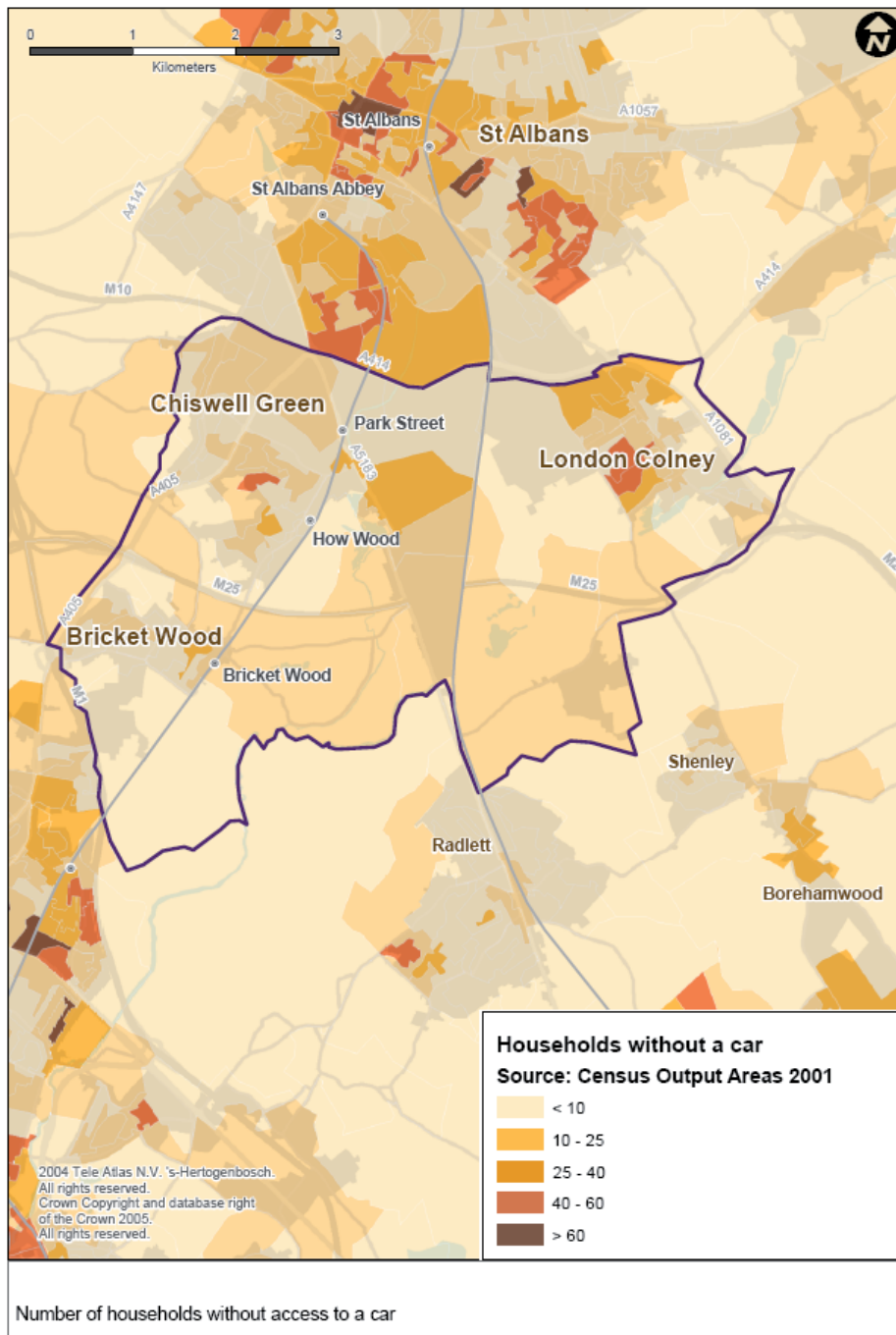
Background

- 2.6 Southern St Albans has excellent strategic road connections. The area has the M1 running to the west and the A1(M) to the east, providing links to the midlands and north of England as well as London to the south. The M10 and A414 immediately to the north of the area, links the two motorways together. To the south is the M25 which connects into routes to the east, west and south of the UK.
- 2.7 Close proximity to major motorways has disadvantages however. The M1 is one of the busiest motorways in Britain. The section between junctions 6A and 10 is approximately 10 miles long, stretching from the M25 to Luton, and carries an average of 160,000 vehicles per day with long delays experienced at peak times. The M25 is even busier, handling around 200,000 vehicles every day.
- 2.8 Congestion on the major motorways often generates diversions into the study area along the A405, A414 and M10. Traffic may also divert onto local roads when incidents arise on the motorways, especially Watford Road, Mount Pleasant Lane, and Oakwood Road. In London Colney, Whitehouse Lane leading into High Street, St Anne's & Kind's Road, Shenley Lane leading into Bell Lane and Harper Lane also suffer when diversions take place.
- 2.9 Highways Agency has Variable Message signs on Motorways capable of giving diversion advice but will only give advice on non-motorway routes according to working agreements with Herts CC and the M25 Policing Group. Other than this, there are no other electronic variable message signs displaying traffic information (VMS) within the district.
- 2.10 The main roads running through the area are:
- The A405 North Orbital Rd runs to the west of Bricket Wood and is linked into the M1 junction 6 and M25 junction 21a to the south, and M10 junction 1 and A414 to the north.
 - The A5183 Park Street runs from London to the M10 junction 1 and A414.
 - The B5378 Shenley Lane is immediately west of London Colney and comes from Boreham Wood to the A414.
 - A1081 London Colney Bypass is to the east of London Colney. It is linked to the M25 junction 22 and A414 and St Albans to the north.

Car ownership

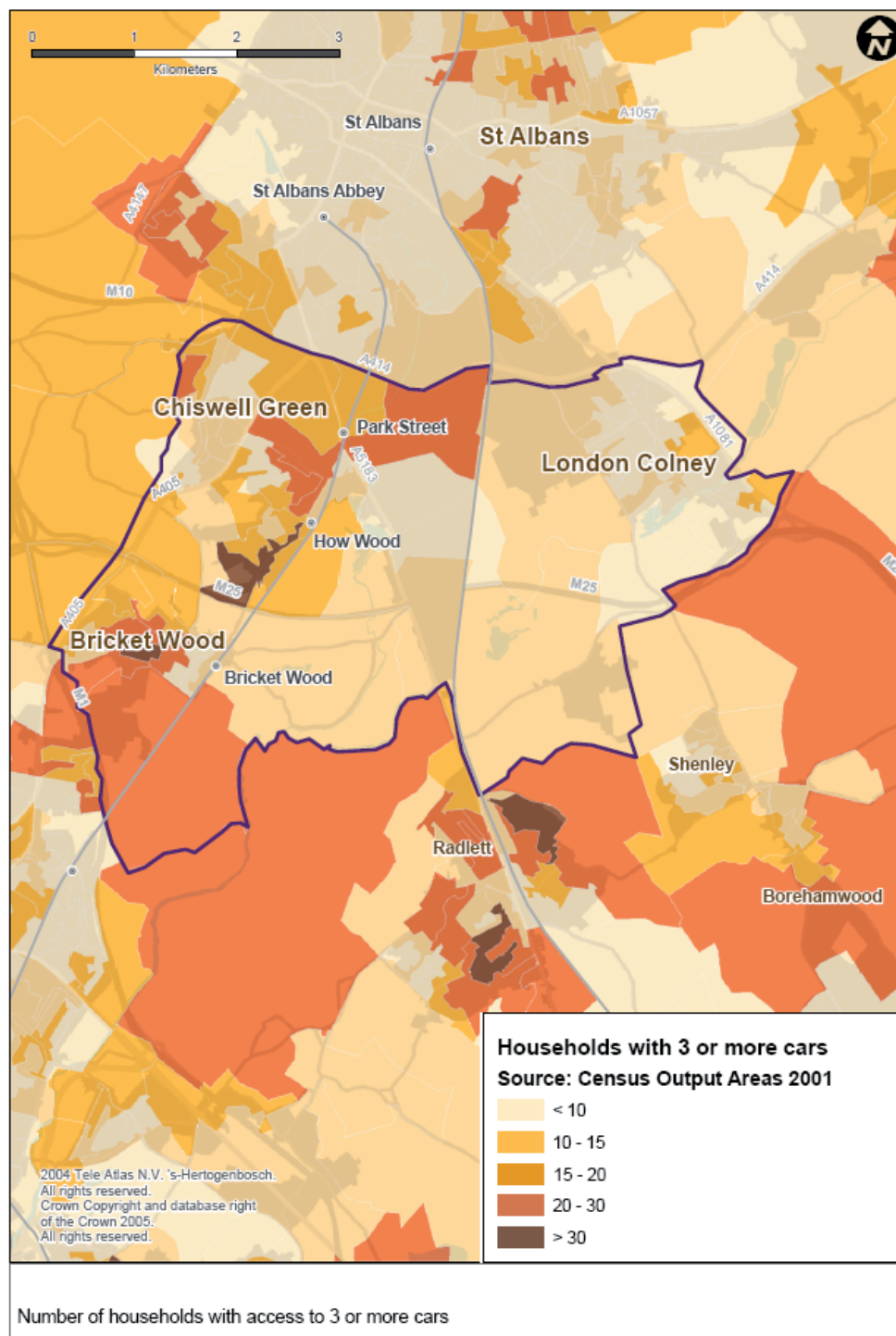
- 2.11 Hertfordshire has the 4th highest car ownership in England (0.558 cars per head). A large proportion (41%) of households has access to 2 or more cars.
- 2.12 The available car ownership data has been mapped below. Figure 2.4 shows the number of households with no car. It can be seen that there are very few households without access to a car. These are concentrated in London Colney village and some areas of Park Street.

FIGURE 2.4 CAR OWNERSHIP (NUMBER OF HOUSEHOLDS WITHOUT ACCESS TO A CAR)



2.13 The results of mapping the data of households with three or more cars in the following diagram (Figure 2.5) show the inverse of the map above. The west of the study area had the highest concentration of three or more cars. There were very few (less than 15%) across the whole of London Colney ward with high car ownership.

FIGURE 2.5 CAR OWNERSHIP (PERCENTAGE OF HOUSEHOLDS WITH 3 OR MORE CARS)



Origins and destinations

- 2.14 Next, origins and destinations for people travelling to and from the study area, using travel-to-work data were considered. These calculations have used data from the two parishes within the study area; London Colney and St Stephen.
- 2.15 Figure 2.6 below, shows where commuters are travelling from by any mode, to work

within the study area. It shows that most people who work in the study area also live in the study area. The greatest concentrations of employment within the study area are in the central and southern parts of the study area, where there are industrial estates and large retail sites. There is less in the north east and north west which are more residential.

- 2.16 The data used is from the 2001 census which does not include the new Napsbury development.

FIGURE 2.6 TRAVELLING TO WORK, INTO THE STUDY AREA, BY ANY MODE

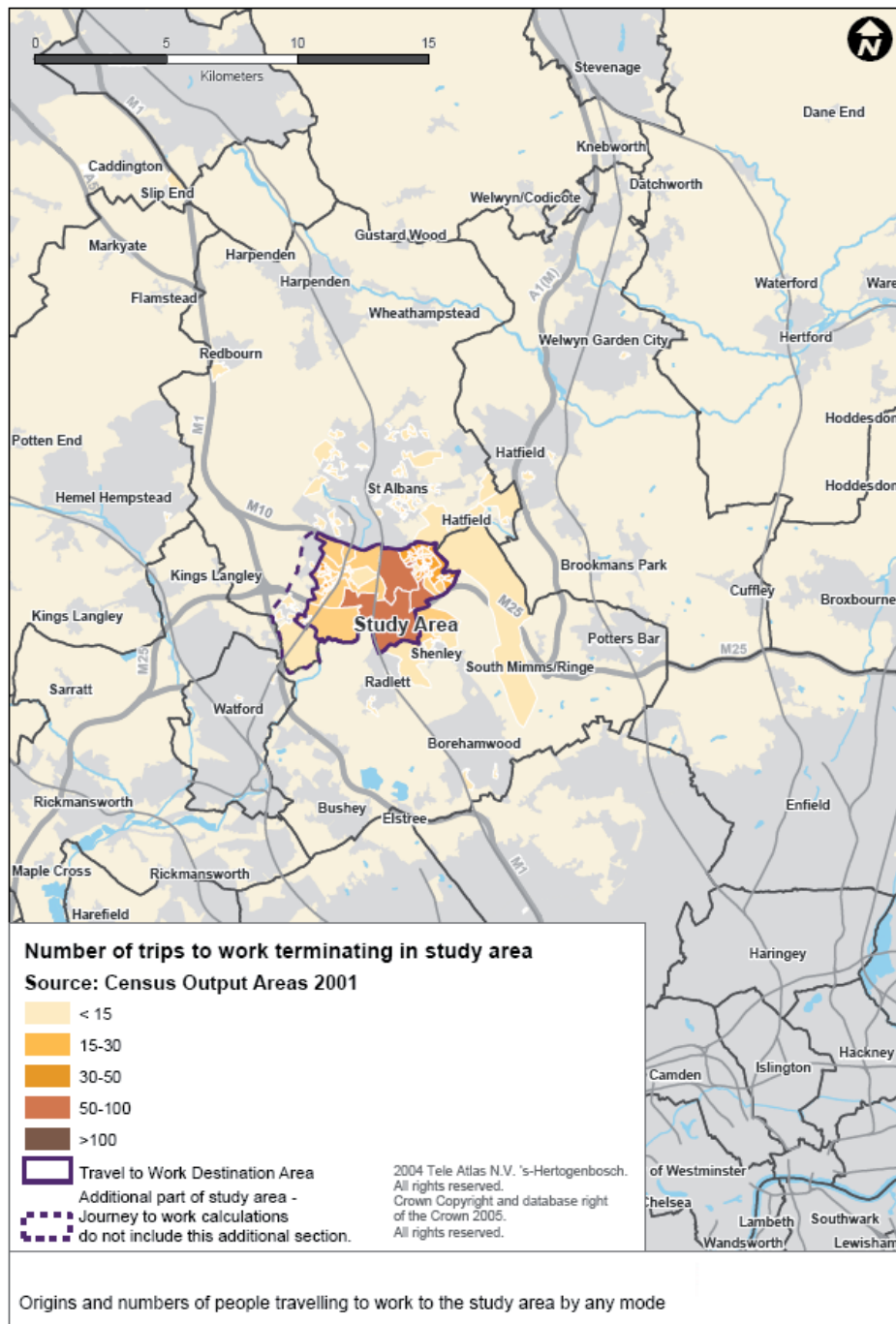
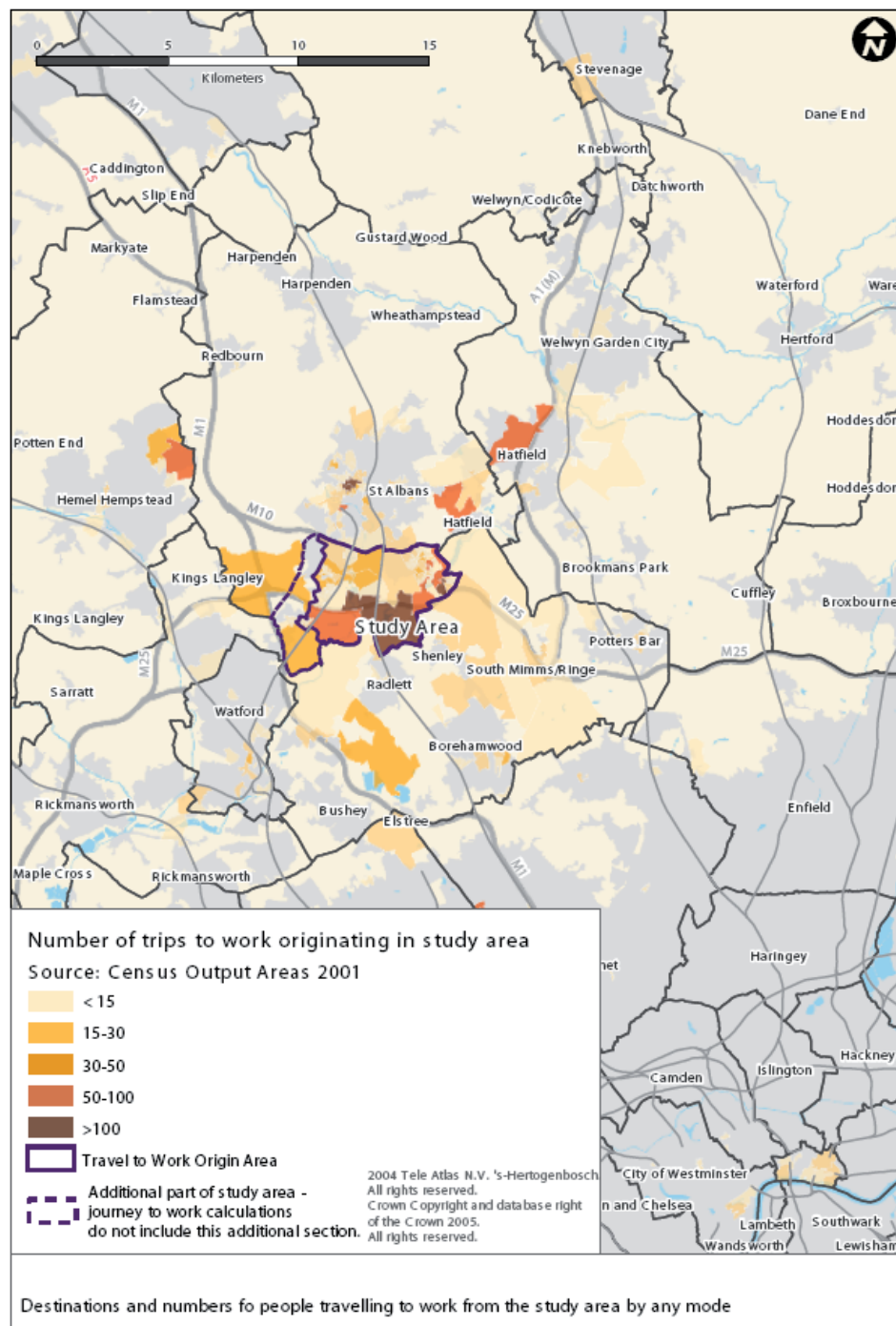


FIGURE 2.7 TRAVELLING TO WORK, OUT OF THE STUDY AREA, BY ANY MODE



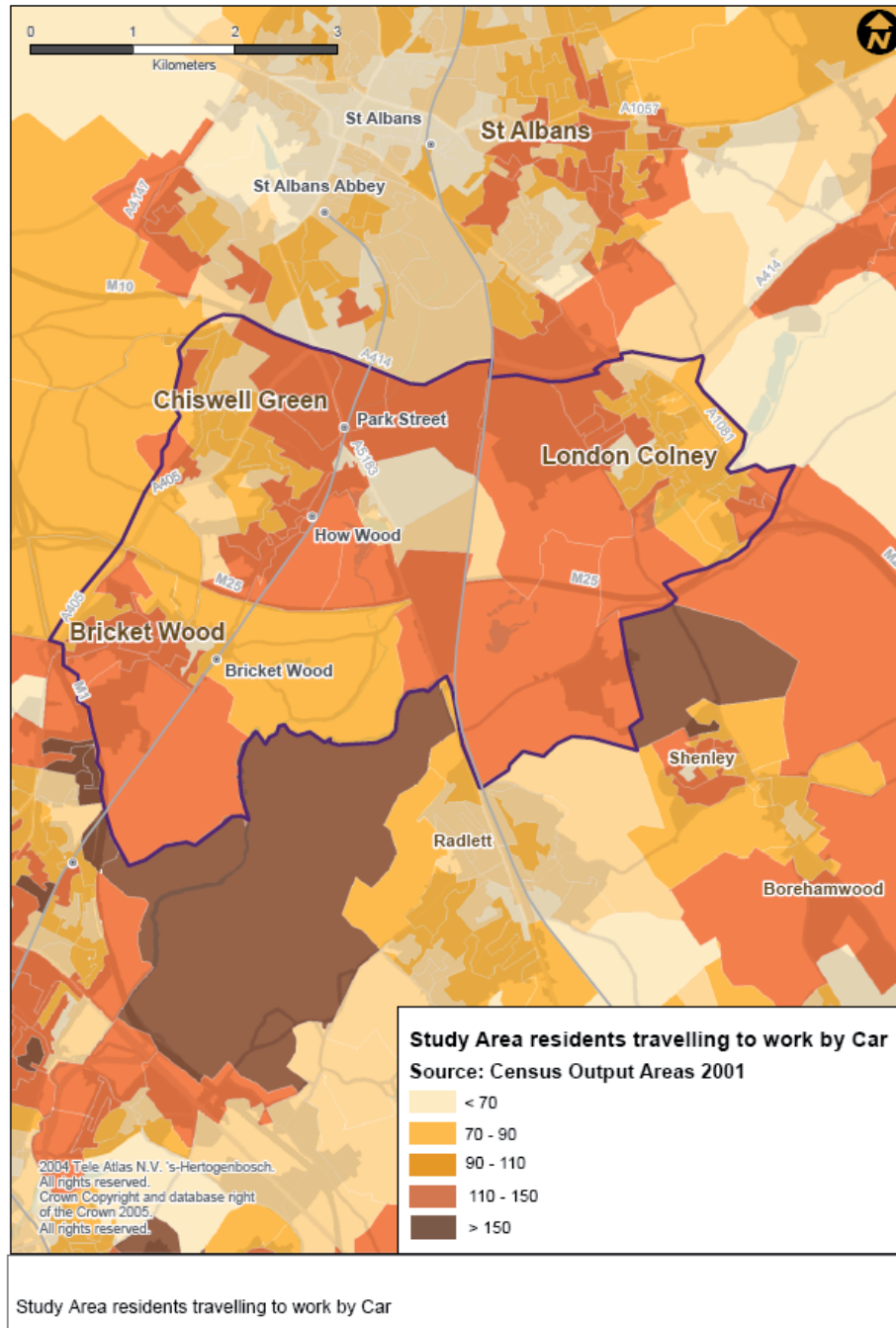
- 2.17 Figure 2.7 shows the number (and distribution) of travel to work trips that originate in the study area. It shows central St Albans, Hemel Hempstead and Hatfield as the most popular destinations.

Travel to work

- 2.18 Following this, we have looked at travel-to-work data by mode. There are two ways of representing this information – using percentage of the population travelling to work and actual numbers of people travelling to work.
- 2.19 Figure 2.8 shows the numbers of residents commuting by car. It shows that in the

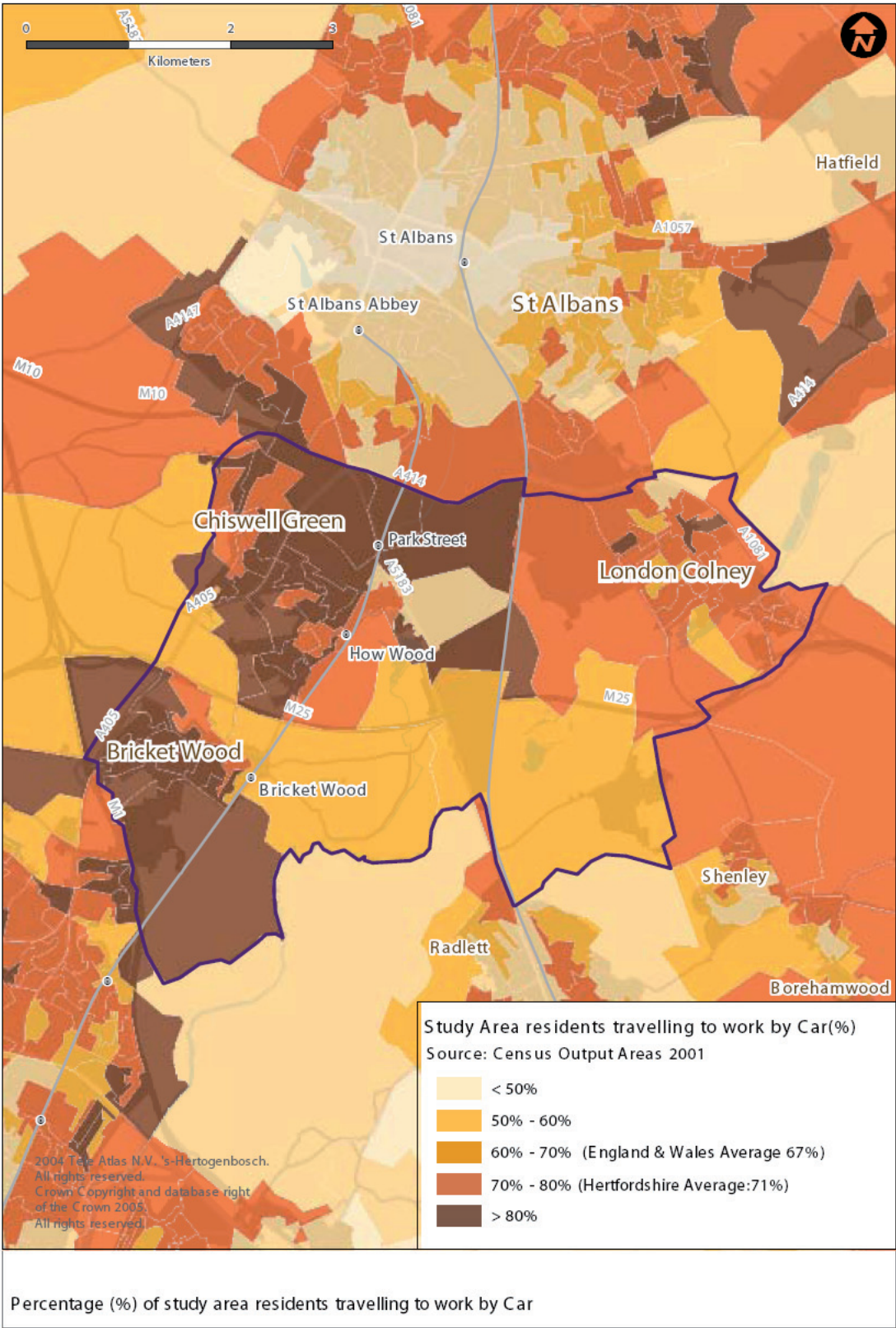
majority of the study area, there are over 110-150 residents per output area travelling to work by car. The patch of lower car-use in the centre of the study area is because this is a non-residential, industrial site.

FIGURE 2.8 TRAVEL TO WORK BY CAR (NUMBERS OF PEOPLE)



2.20 Figure 2.9 below gives the percentage of people travelling to work by car. It shows that the study area has an overrepresentation of people using this mode to travel to work– especially in Park Street and Bricket Wood. The Hertfordshire average is 71%, and in many areas here over 90% travel to work by car.

FIGURE 2.9 TRAVEL TO WORK BY CAR (PERCENTAGE)



Traffic flows

- 2.21 Hertfordshire County Council has a number of automatic traffic counters (ATCs) in and around the study area. The ATCs are machines that count vehicles over a period of time giving traffic flows over time periods. The counts have been analysed at the following locations around the study area:
- B556 Bell Lane
 - A1081 London Colney Bypass
 - B5378 Shenley Lane
 - B4630 Watford Road - between King Harry Lane and St Stephens Avenue
 - A405 North Orbital Road - between the M25 and Nokes Lane
 - A5183 - Watling Street - between the M10 roundabout and Mount Drive.
- 2.22 The counts were carried out over a week in either September 2005 or 2006. They are presented by weekday to show daily variation.
- 2.23 A problem for strategic traffic in the area can arise from the fact that the junction between the M1 and M25 does not allow all movements. Traffic travelling along the M25 cannot get off to go south along the M1 for example. The A405 just to the south and east of this junction links the M25 and M1 together, giving traffic the opportunity to make these missing movements without undue diversion. However this is obviously not ideal for a junction between two motorways.
- 2.24 This analysis focuses on the north-south roads and the problems affecting them. It also looks at issues affecting the minor roads within the urban areas especially access onto the strategic network and 'rat-running' caused by congestion on the main roads.

Roads around London Colney

- 2.25 London Colney has a limited number of access points. There is a junction to the south with the M25 and to the north with the A414. Also Shenley Lane (B5378) passes to the west and crosses the M25 and A414 but has limited capacity and places to access.

London Colney Bypass

- 2.26 To the east of the village of London Colney is the A1081 London Colney Bypass. The Bypass links the M25 to the A414 North Orbital Rd and is also a route to/from St Albans and the M25. The bypass is connected to a roundabout linked to junction 22 of the M25 and another roundabout with the A414 and has no intermediate junctions.
- 2.27 In the southbound direction (see Figure 2.10) there are two defined peak hours in the AM between 07:00-08:00 with just under 1000 vehicles and the PM peak between 17:00-18:00. The inter-peak fall away to around 700 vehicles an hour. This profile is fairly flat compared to other roads in the area.
- 2.28 The northbound direction (Figure 2.11) has higher flows in the peak hours. In both the AM and PM peak the average number of hourly vehicles is just over 1200. The flows drop sharply in the inter-peak with the number of vehicles more than halving in the two hours after the morning peak to 600 vehicles between 10:00-11:00.

FIGURE 2.10 A1081 LONDON COLNEY BYPASS (SOUTHBOUND)

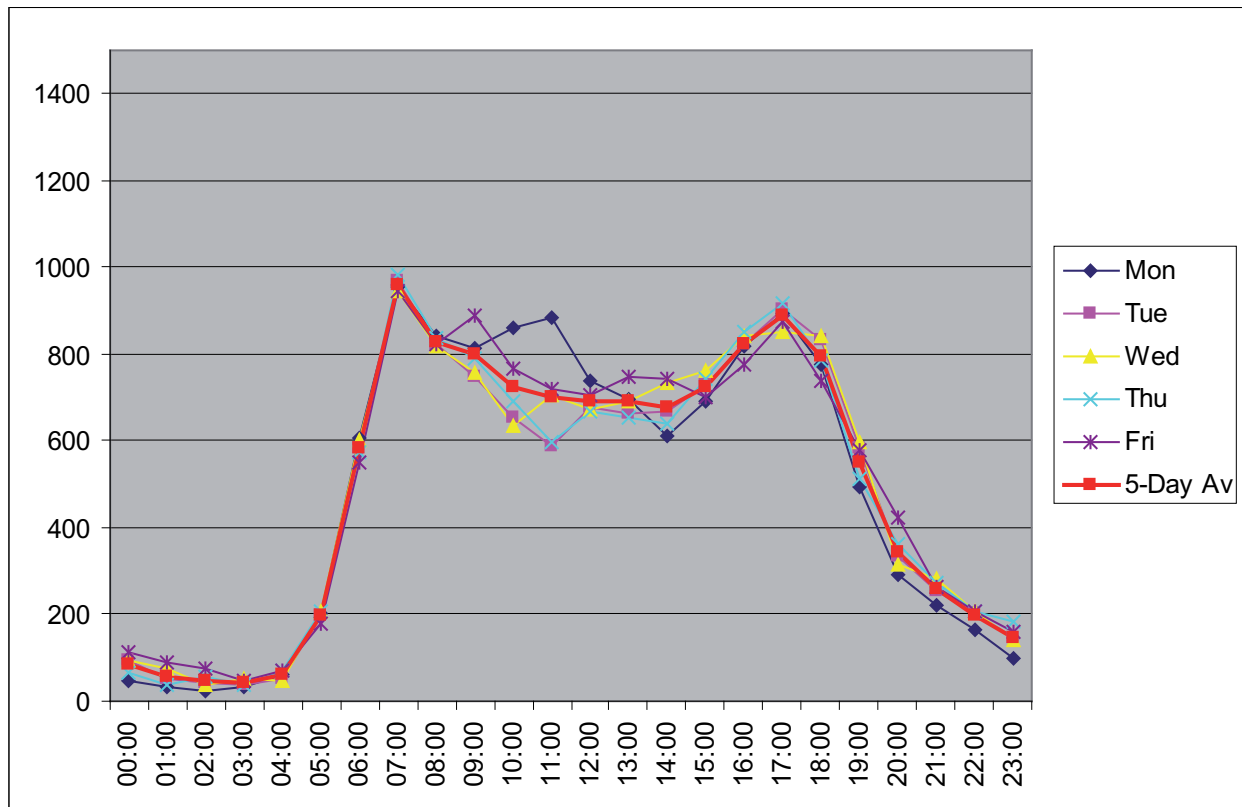
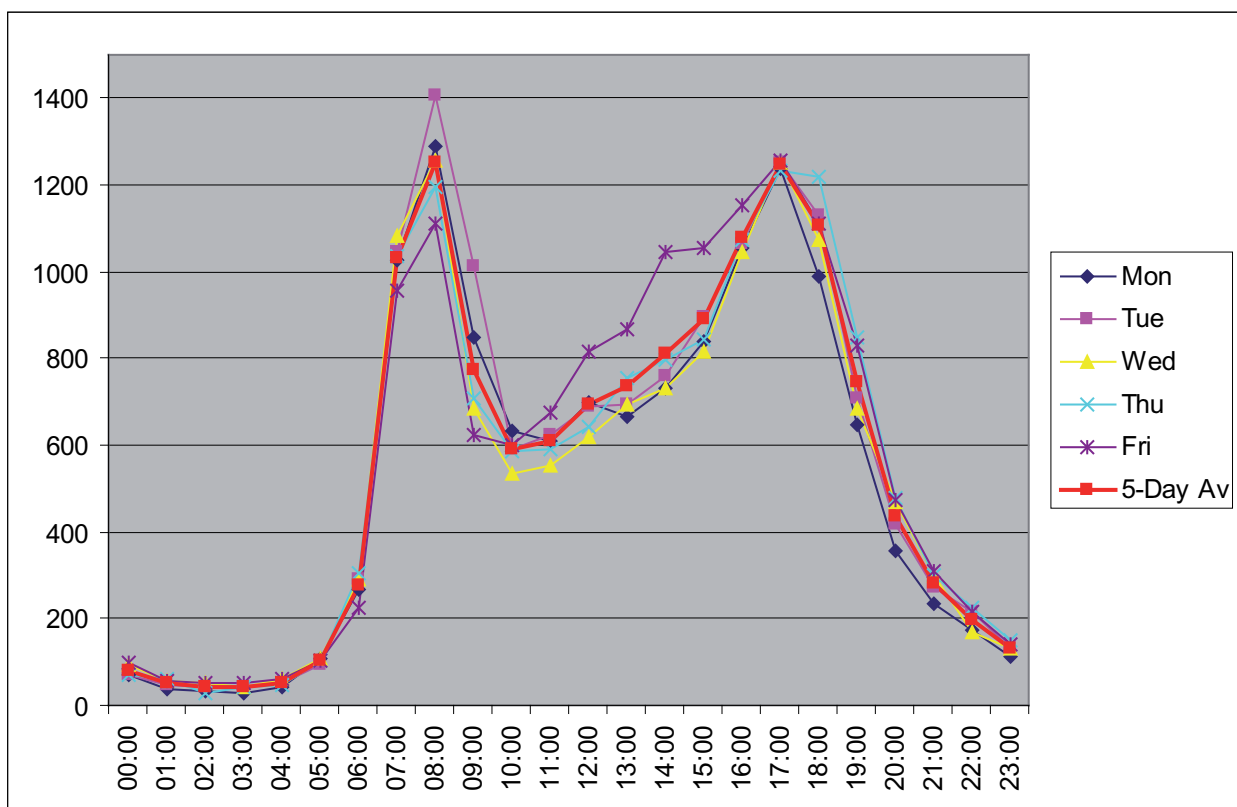


FIGURE 2.11 A1081 LONDON COLNEY BYPASS (NORTHBOUND)



- 2.29 The levels of traffic along the bypass, creates problems at the junctions on either end of the link. There traffic levels are high in the area so all arms of the junction suffers from congestion. This makes is difficult to improve the transport conditions by redesigning the junctions to reallocate priority.

Shenley Lane

- 2.30 Shenley Lane runs to the west of London Colney and is linked to the A414 in the north by slip roads. It is not connected to the M25 in the south but goes under it to link to the B556 Bell Lane which connects to the M25 and Watling Street. The road also continues south to Shenley and Borehamwood.
- 2.31 On the following page, Figure 2.12 shows the southbound direction. It has an AM peak of around 700 vehicles an hour and a smaller PM peak of just over 400 vehicles. The PM peak (Figure 2.13) has the opposite profile with around 400 vehicles in the AM peak and 500 in the PM.
- 2.32 The flow profile suggests that there are more commuting flows going southbound along Shenley Lane in the morning and then returning home in the evening. This is due to the crossing of the M25 which avoids any junction with motorway traffic providing quicker access to the areas south of London Colney than using the bypass. This however creates problems at the junction with Bell Lane. The roundabout junction suffers from congestion on all of its arms.

FIGURE 2.12 B5378 SHENLEY LANE (SOUTHBOUND)

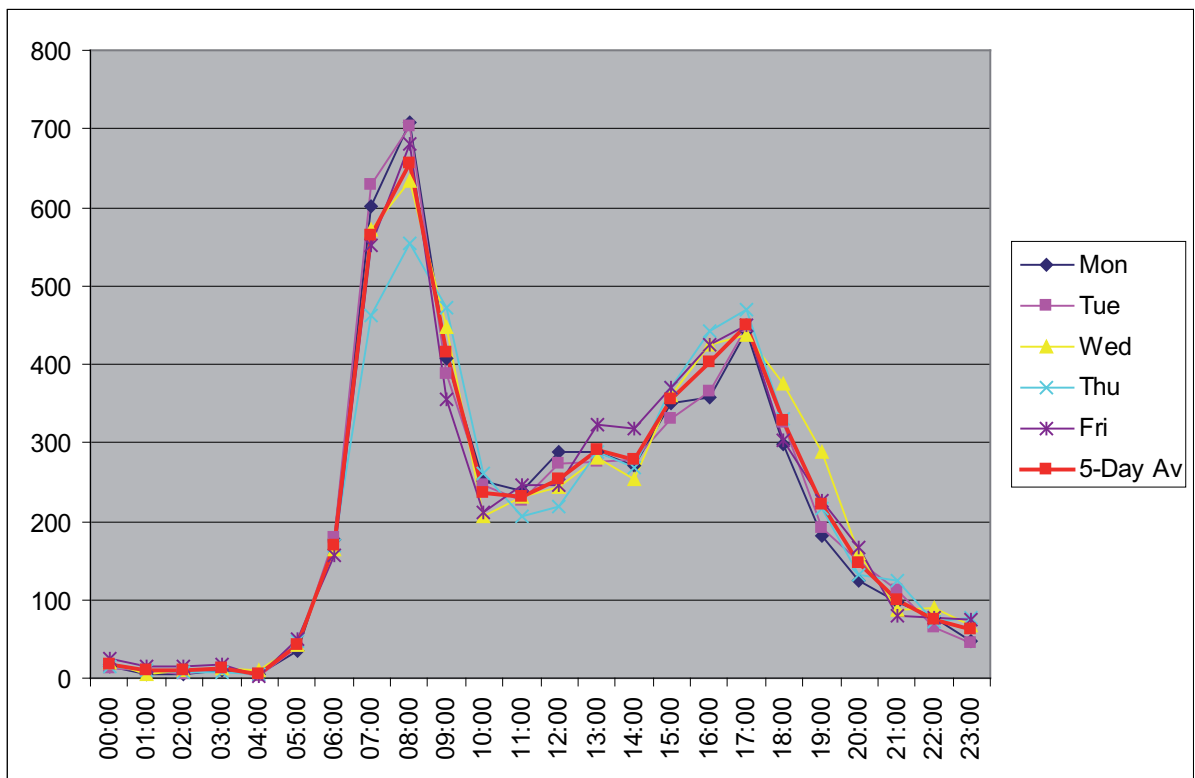
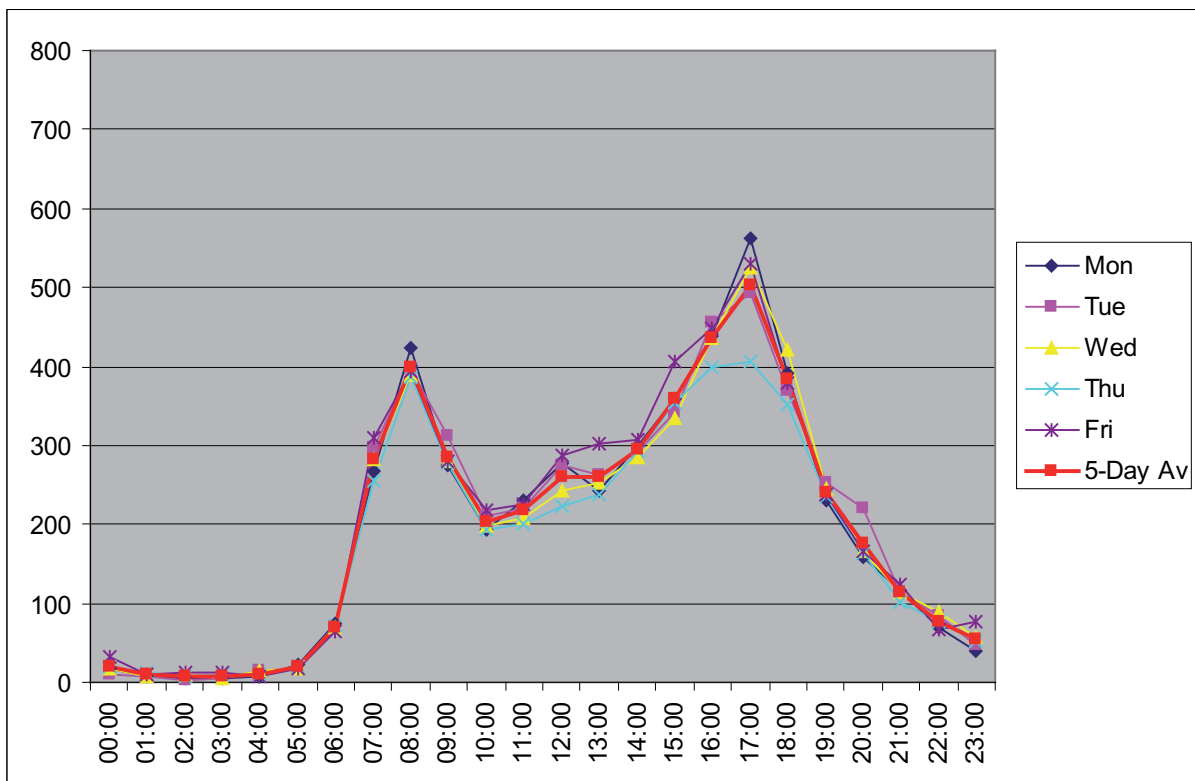


FIGURE 2.13 B5378 SHENLEY LANE (NORTHBOUND)



Bell Lane

- 2.33 To the south of the M25 running parallel is Bell lane. It provides a links between the M25 junction with the London Colney bypass and Shenley Lane. It therefore serves as a southern bypass to London Colney and as an access to and from the motorway.
- 2.34 The eastbound direction, shown in Figure 2.14, has a defined AM and PM peak with around 600 vehicles during either peak. It drops to between 400 to 500 vehicles for the rest of the day. In the westbound direction the AM peak reaches around 600 vehicles but is then flat for the rest of the day at between 450 to 500 vehicles until it declines in the evening. This can be seen in Figure 2.15.

FIGURE 2.14 B556 BELL LANE (EASTBOUND)

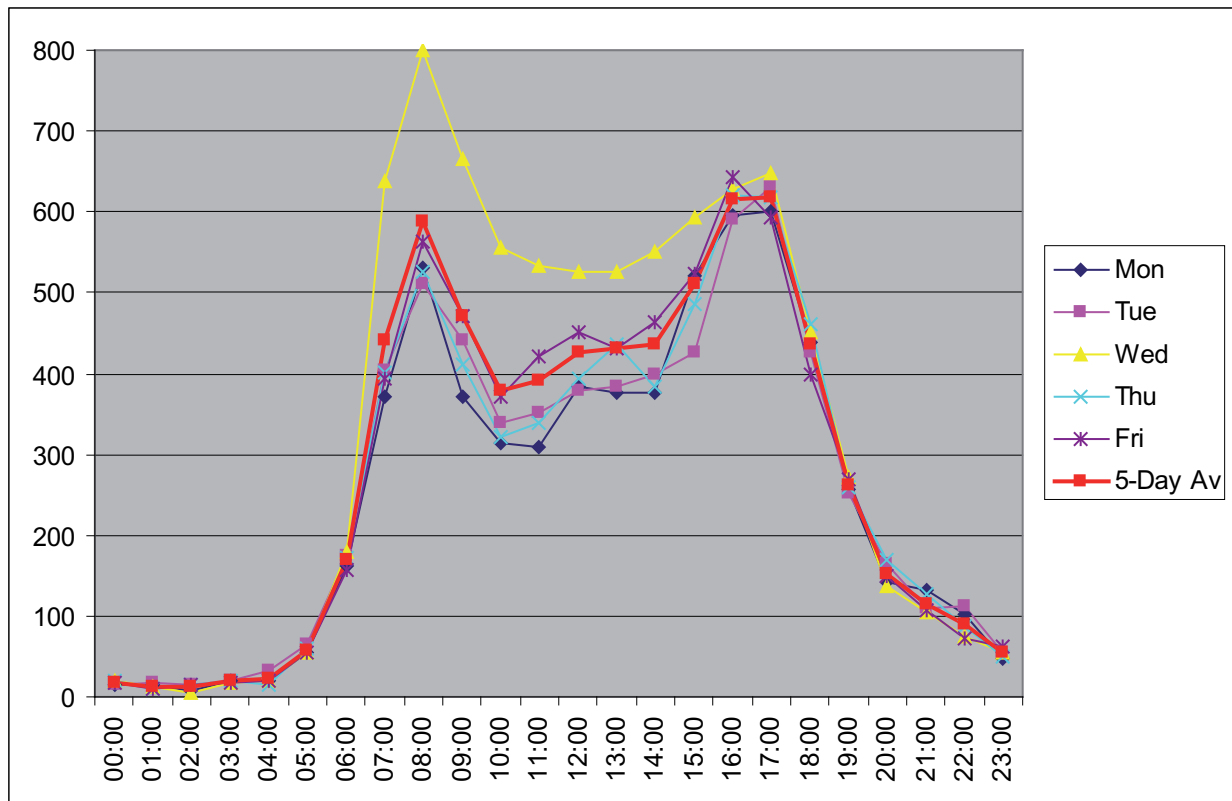
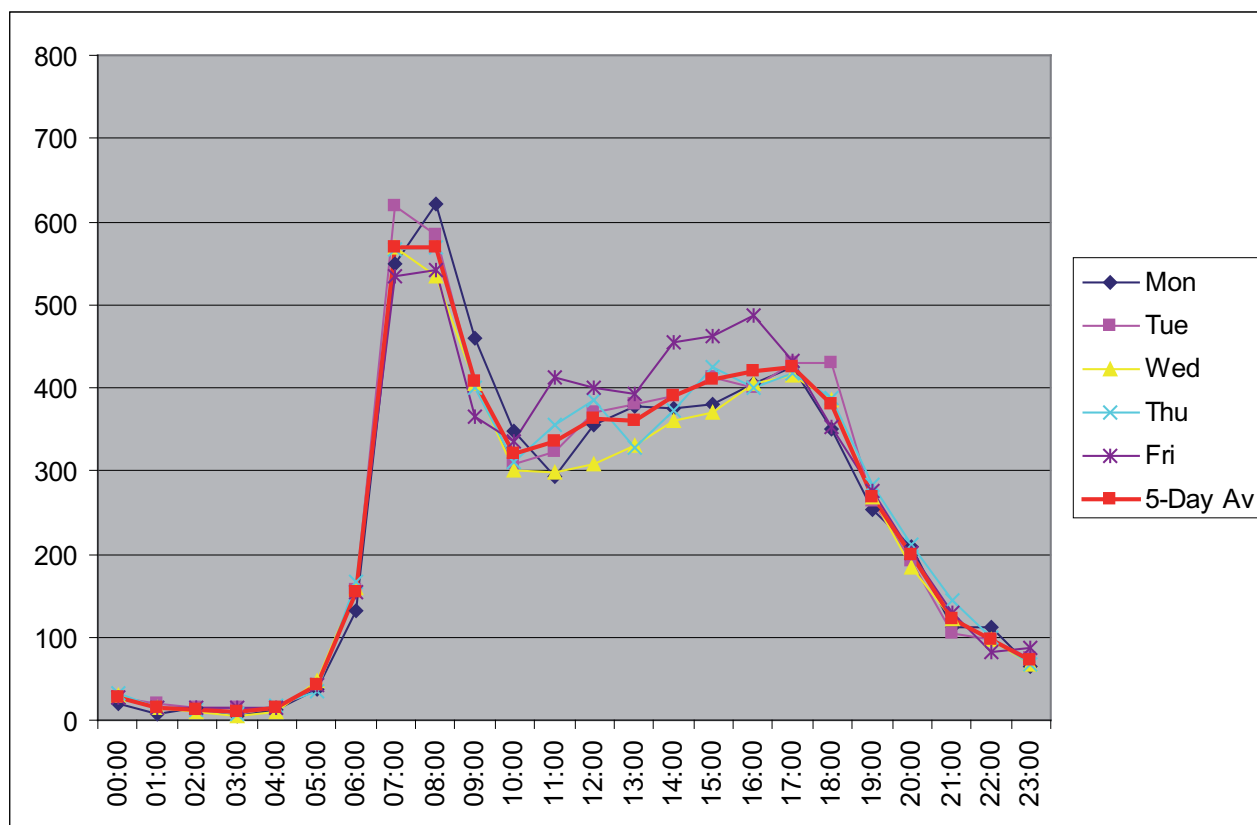


FIGURE 2.15 B556 BELL LANE (WESTBOUND)



- 2.35 The traffic flows along Bell Lane are fairly modest and would be used for access rather than as a strategic route to relieve the M25. However the variation between days suggests that when traffic is severe on the M25 it is used as an alternative route. The congestion at the junction with Shenley Lane means that there is not any room for an increase in flow along this road.

Roads in London Colney

- 2.36 The high traffic levels on the roads around London Colney lead to traffic diverting into the village. In particular the High Street is a parallel route to the bypass connecting into the same M25 and A414 junctions. It can also be used along with either King's Road or St Anne's Road as cut through onto Shenley Lane.

Roads around Park Street, Chiswell Green and Bricket Wood

- 2.37 The three main roads that go through the west of the study area are the A5183 Park Street, A405 Northern Orbital and B4630 Watford Road. As well as linking the urban areas to each other these roads also carry through traffic and are heavily congested during peak periods, leading to traffic diverting onto local roads, in particular Mount Pleasant Lane, Park Street Lane, Smug Oak Lane and Tippendell Lane.
- 2.38 The St Albans City and District Council Core Strategy Development Plan Document, Issues and Options Consultation Paper (July 2007) included in its options section: a new road link from the M10 to the A4147, an eastern distributor Road from London Road to Hatfield Road, extension of Griffiths Way and various junction improvements to help ease congestion in the city and serve possible new developments. These options would need to be considered further to assess their possible benefits and impacts on congestion before any further works could be undertaken.

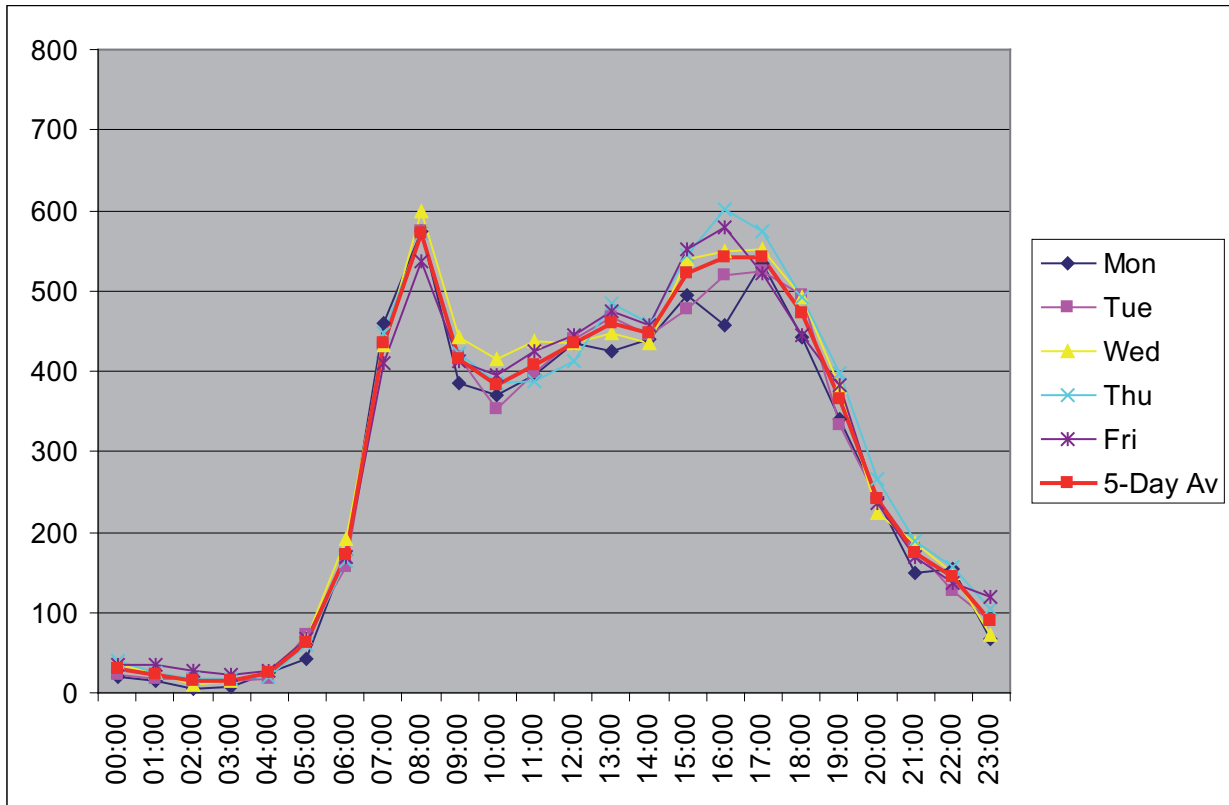
A5183 Park Street

- 2.39 The A5183 runs from north London through Radlett up to the junction between the M10 and A414. It passes through the village of Park Street, past the train station and a number of industrial and retail sites.
- 2.40 Watling Street has a distinct AM peak between 08:00-09:00 with over 700 vehicles an hour (see Figure 2.16). It then declines to around 400 vehicles for the rest of the day until the evening. In the northbound direction (Figure 2.17) the profile is much flatter as the heavy traffic flow westbound on the A414 makes it difficult for traffic heading north on the A5183 to merge on to the Park Street Roundabout. The AM and PM peaks are between 550 and 600 vehicles an hour going down to around 400 vehicles in the inter-peak.

FIGURE 2.16 A5183 WATLING STREET NORTH OF MOUNT DRIVE (SOUTHBOUND)



FIGURE 2.17 A5183 WATLING STREET NORTH OF MOUNT DRIVE (NORTHBOUND)



- 2.41 Considering the nature of the road, with substantial residential areas, narrow carriageway width and tight junctions, the route runs at capacity for considerable amounts of the day. Congestion caused by high traffic flows on the roundabout junction with the A414/ M10 and the narrowness of the road through Park Street limits the amount of traffic that can flow along the road.

North Orbital Rd

- 2.42 The North Orbital Road (A405) connects the M25 junction 21a and the M10 junction 1 and is therefore a major road the main route from the M25 into the district of St Albans. It also passes in between How Wood and Chiswell Green and is a major access/ egress link for the study area.
- 2.43 There are large flows on this road reflecting the strategic nature of the road. Both directions have PM peaks flows of over 2000 vehicles an hour. The northbound direction (Figure 2.18) has a morning peak of over 1500 vehicles which declines in mid-morning before steadily rising to the peak hour between 18:00-19:00. Southbound (Figure 2.19) the AM peak is higher with just under 2000 vehicles an hour which slowly declines until it rises steeply in the evening.

FIGURE 2.18 A405 NORTH WESTERN AVENUE, THE NOKE (NORTHBOUND)

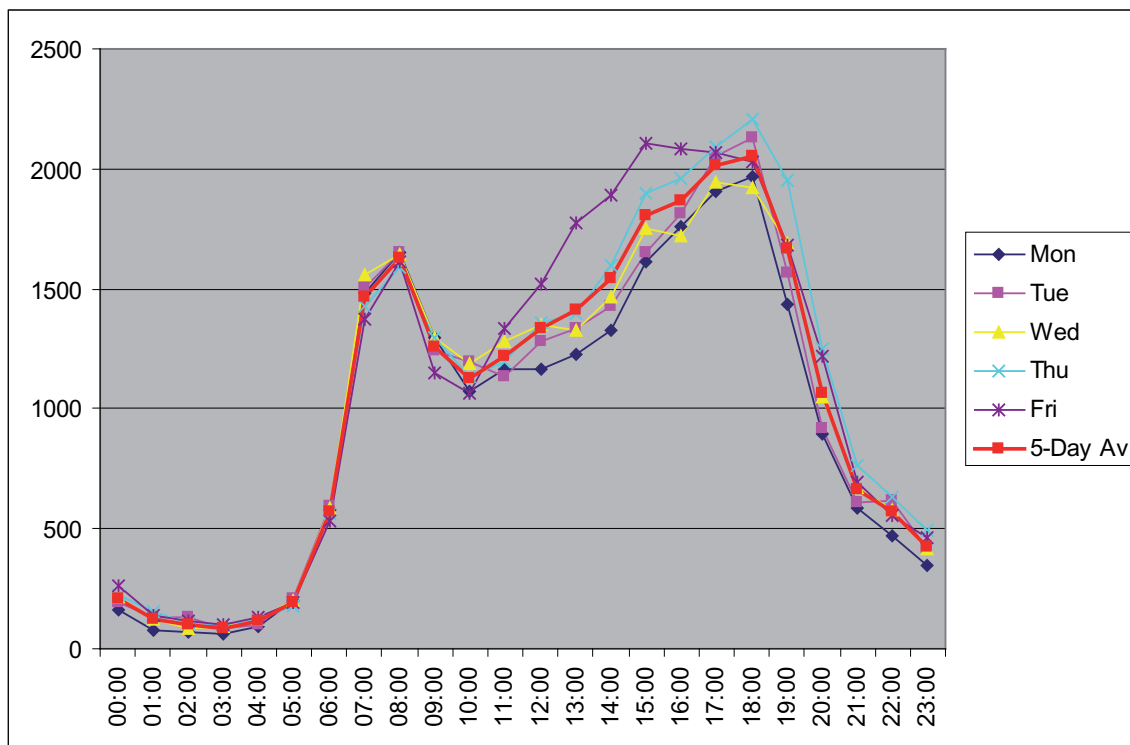
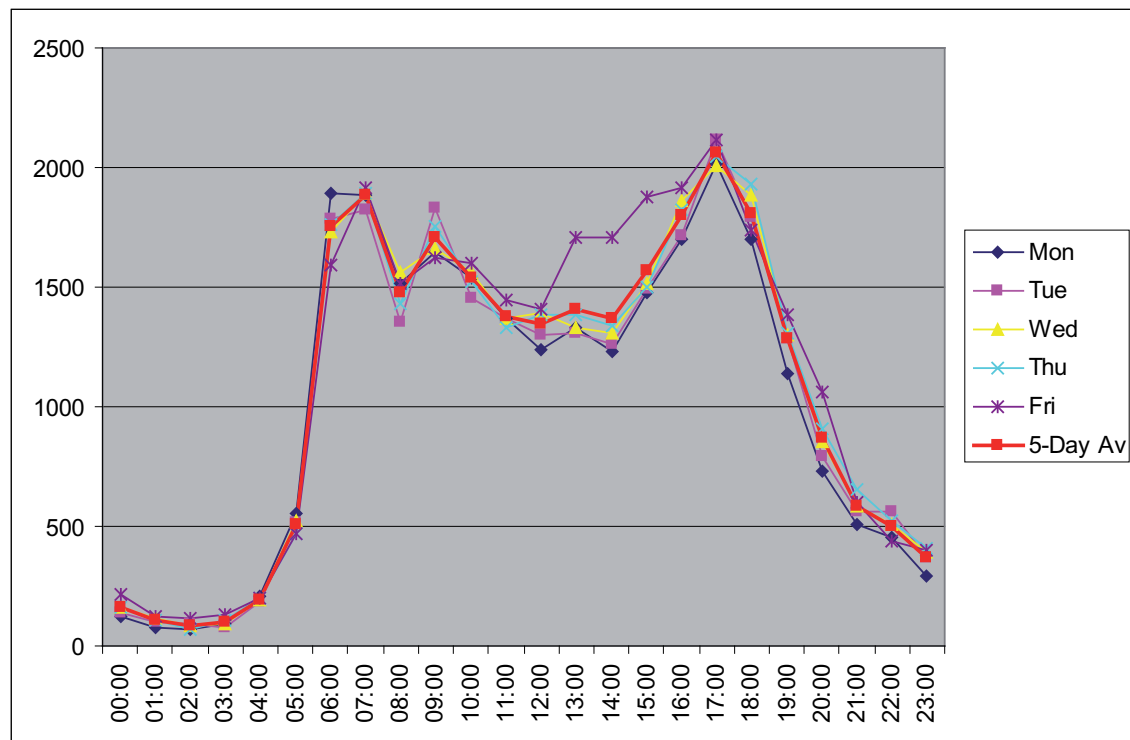


FIGURE 2.19 A405 NORTH WESTERN AVENUE, THE NOKE (SOUTHBOUND)



- 2.44 Traffic on the A405 suffers from congestion, particularly approaching the M25 and M10 junctions. The junction with Watford Road is heavily congested westbound during peak times which is unsurprising considering that both roads have high volumes of traffic using them and it is Watford Road that precedes the A405 at the roundabout where they meet.

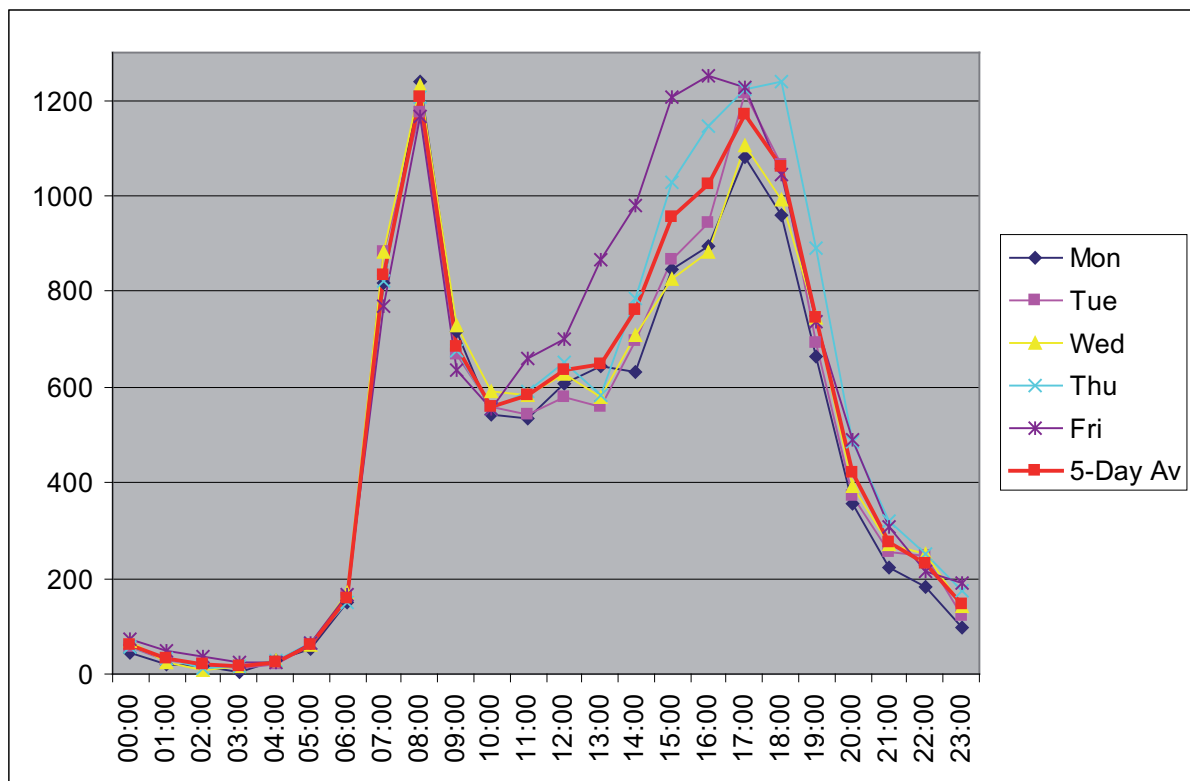
Watford Road

- 2.45 Watford Road goes from the A405 to meet up with Watling Street on the edge of St Albans. It is a route into St Albans from the A405 that avoids going through the junction with the M10. It also passes through the village of Chiswell Green.
- 2.46 Watford Road has significant traffic flows for a B class road. As shown in the figures on the following page (Figure 2.20 and Figure 2.21), the southbound direction has a defined AM and PM peak hour with around 900 vehicles, and the northbound flows are higher in the peak hours with over 1200 vehicles in both peaks.

FIGURE 2.20 B4630 WATFORD ROAD (SOUTHBOUND)



FIGURE 2.21 B4630 WATFORD ROAD (NORTHBOUND)



- 2.47 Watford Road does suffer from some congestion at the junction with the North Orbital road, although this is expected considering the levels of traffic going through the junction. It does enjoy priority over the A405 dual carriageway at the Noke junction, making it heavily congested during peak periods. The levels of traffic also cause problems in St Albans where there are severe problems at the junction with King Harry Lane, Watling Street and St Stephens Hill.
- 2.48 The southbound diagram (Figure 2.20) shows a peak before the evening peak, which is likely to be school traffic.

Congestion

- 2.49 As has been noted, the A405 suffers from congestion particularly approaching the M25 and M10 junctions (also at the junction with Mount Pleasant Lane and at the Park Street roundabout). Discussions with officers and stakeholders have highlighted congestion problems at the roundabouts along the A405 and A414 in the northern part of the study area:
- At the London Colney roundabout north of London Colney village – connecting London Colney Bypass with the North Orbital Road.
 - At the Park Street roundabout north of Park Street Village – connecting the A5183 with the North Orbital Road and the M10.
 - At the Noke roundabout west of Chiswell Green – connecting Watford Road with the North Orbital Road.
 - At the junction of the A405 and the M25.
 - At the junction of the A405 and the M1.
- 2.50 With the exception of the last two, where the lack of a complete junction between the M1 and M25 forces traffic to use the A405, these are caused by high traffic volumes, traffic diverting from strategic routes a combination of high car ownership, and journeys to work. It should be noted that the planned M25 widening by the Highways Agency may alleviate some of the congestion along the A405.
- 2.51 The analysis also identifies pre-evening peak traffic likely to be associated with school traffic. Possible ways to address this will no doubt be part of the forthcoming Transport Plan. School Travel Plans are the most immediate possibility, some of which are already underway.
- 2.52 Congestion in the study area has lead to traffic diverting into the village, causing 'rat running' problems.

Parking

2.53 There are a number of off street car parks within the study area;

- Haseldine Road, London Colney - A fairly substantial car park in the centre of London Colney High Street with lighting and CCTV owned by St Albans District Council.
- Colney Fields Shopping Centre - A large car park with security located at the Eastern end of Barnet Road as part of a large shopping complex. Although privately owned has good bus links running to and from.
- Riverside, London Colney - A small car park owned London Colney Parish Council close to a church and open land popular with walkers.
- Park Street – near Post Office
- Park Street Station - small car park used by commuters and owned by the rail company
- Greenwood Park, Tippendell Lane, Chiswell Green - used to access recreational grounds. Owned by St Stephen Parish Council

2.54 None of these car parks charge but are in general small and only serve areas of interest nearby (apart from Haseldine Road and Colney Fields Shopping Centre which specifically serves shoppers using those facilities).

2.55 Although no further statistical information was available on parking within the study area, through observation and discussion with stakeholders it was noted that on-street parking was a problem around schools. This is illustrated in the photograph below, showing illegal on-street parking at Park Street School.

FIGURE 2.22 PROBLEM (ON-STREET) PARKING AT SCHOOLS



Safety

Accidents

2.56 In the year running up to March of 2006 there were 257 reported accidents in the study area. There were also 62 child casualties and 15 pedestrian or cycle casualties over this period. Table 2.1 on the following page, shows a summary of accidents over the last three years. The numbers of accidents are similar in June 2003 to May 2004 and June 2005 to May 2006.

TABLE 2.1 REPORTED ACCIDENTS IN STUDY AREA (MARCH 2003 - JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
June 2003-May 2004	3	15	61	79
June 2004-May 2005	1	13	86	100
June 2005-May 2006	1	8	69	78
Total	5	36	216	257

2.57 Figure 2.23 shows the location of accidents in the study area that only involve motor vehicles (i.e. does not include pedestrian or cyclist related casualties). The majority of accidents occur on the M25 or A414/M10, which is where flows are highest and the traffic is travelling faster.

2.58 There are a number of areas off these major roads that have a concentration of accidents:

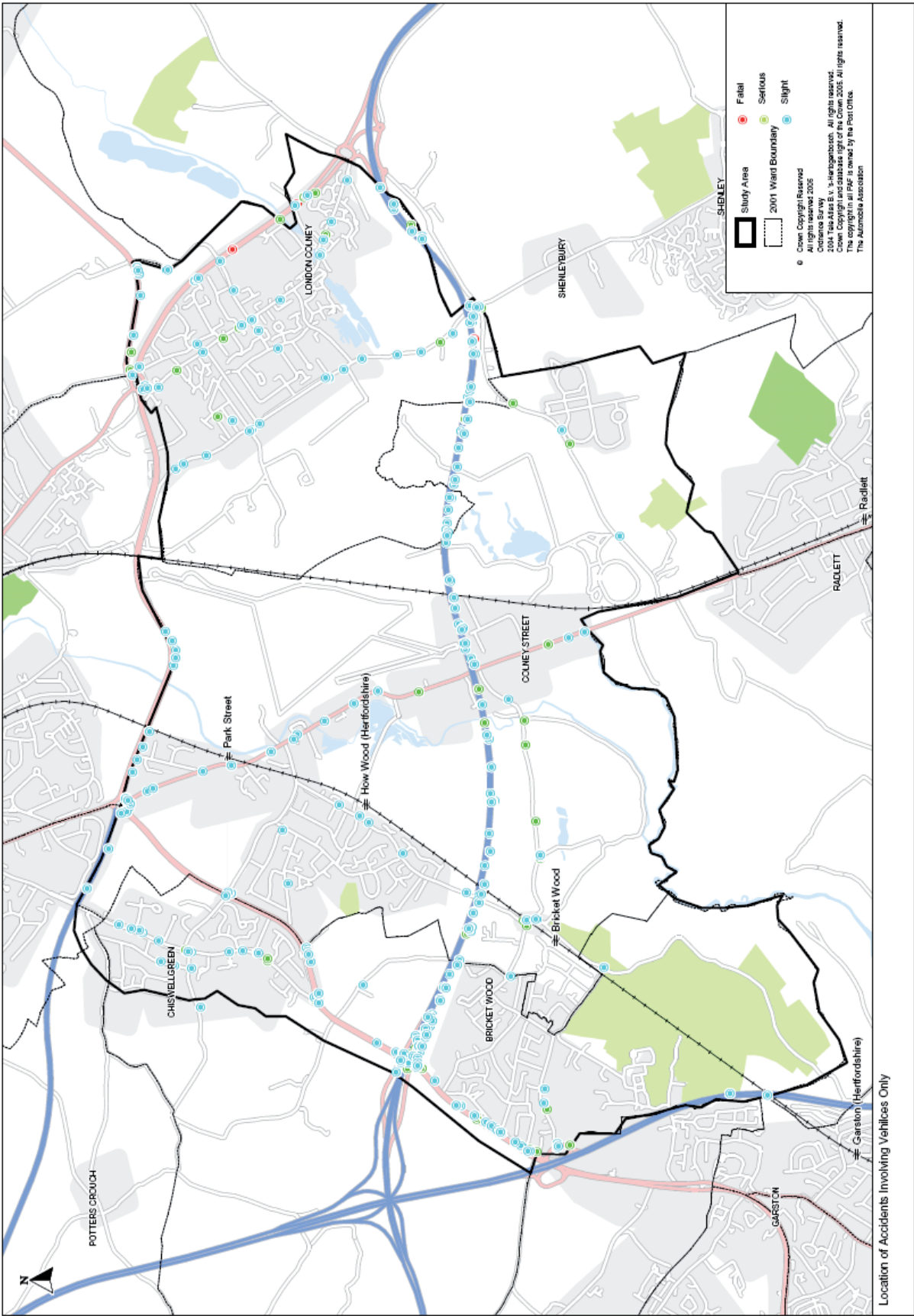
- Along the whole of the A5183 (although there appear to be no particular hotspots where accidents are concentrated).
- Shenley Lane and London Colney bypass.
- Along the A405 (particularly at the junctions with the M25, Watford Road and Tippendell Lane). Also along Watford Road itself, through Chiswell Green.
- Smug Oak Lane which runs between Radlett Road and Station Road has had a number of accidents.
- The centre of London Colney.

2.59 Table 2.2 below shows child casualty rates in the study area. There have been no fatal accidents involving children in the last three years and serious injuries are low with only ten.

TABLE 2.2 CHILD CASUALTIES IN STUDY AREA (MARCH 2003 - JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
June 2003-May 2004	-	3	13	16
June 2004-May 2005	-	4	22	26
June 2005-May 2006	-	3	17	20
Total	0	10	52	62

FIGURE 2.23 LOCATION OF ACCIDENTS IN STUDY AREA, INVOLVING MOTOR VEHICLES ONLY



- 2.60 Figure 2.24, overleaf, shows the accidents in the study area that involved children and is broken down by whether they were in a motorised vehicle or walking/ cycling. The locations of accidents are similar for the rest of the population.
- 2.61 Table 2.3 shows the number of casualties to pedestrians and cyclists. The numbers of accidents to cyclists and pedestrians is very small in the study area. Indeed in the last year there have only been five slight accidents with no fatal or serious injuries.

TABLE 2.3 PEDESTRIAN AND CYCLING CASUALTIES IN STUDY AREA (MARCH 2003 - JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
June 2003-May 2004	1	2	3	5
June 2004-May 2005	-	1	4	5
June 2005-May 2006	-	-	5	5
Total	1	10	12	15

- 2.62 The accidents involving pedestrians and cyclists are displayed in Figure 2.25. The accidents are mostly concentrated in London Colney. London Colney is more of a local centre than the other villages in the area where there are more services within walking distance of each other as well as to residential areas which makes people more likely to walk or cycle.
- 2.63 There have also been some accidents near the Park Street train station, of which some have been serious. Access to Park Street station for all users should be addressed as part of the Urban Transport Plan.

FIGURE 2.24 LOCATION OF ACCIDENTS IN STUDY AREA, INVOLVING CHILDREN

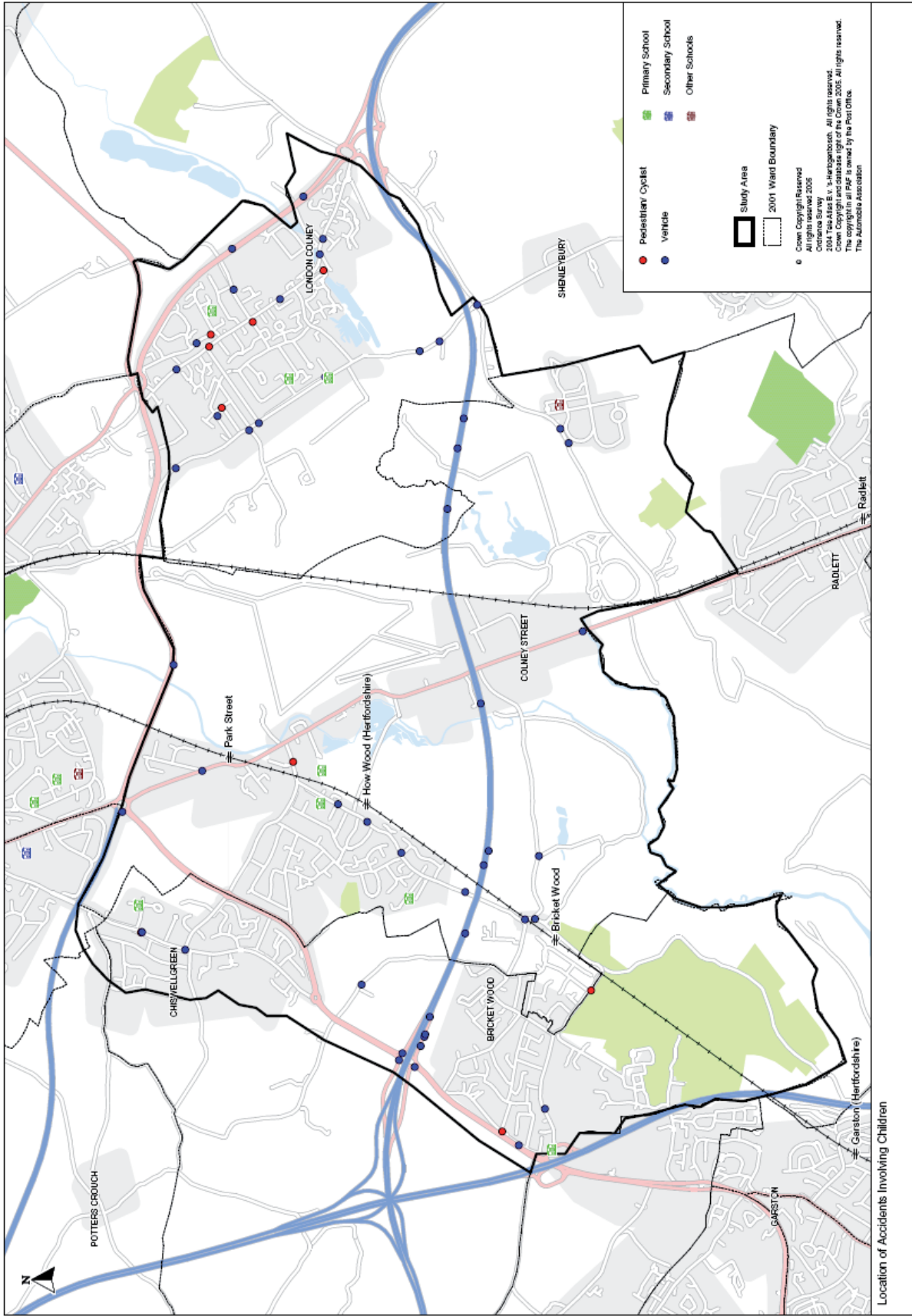
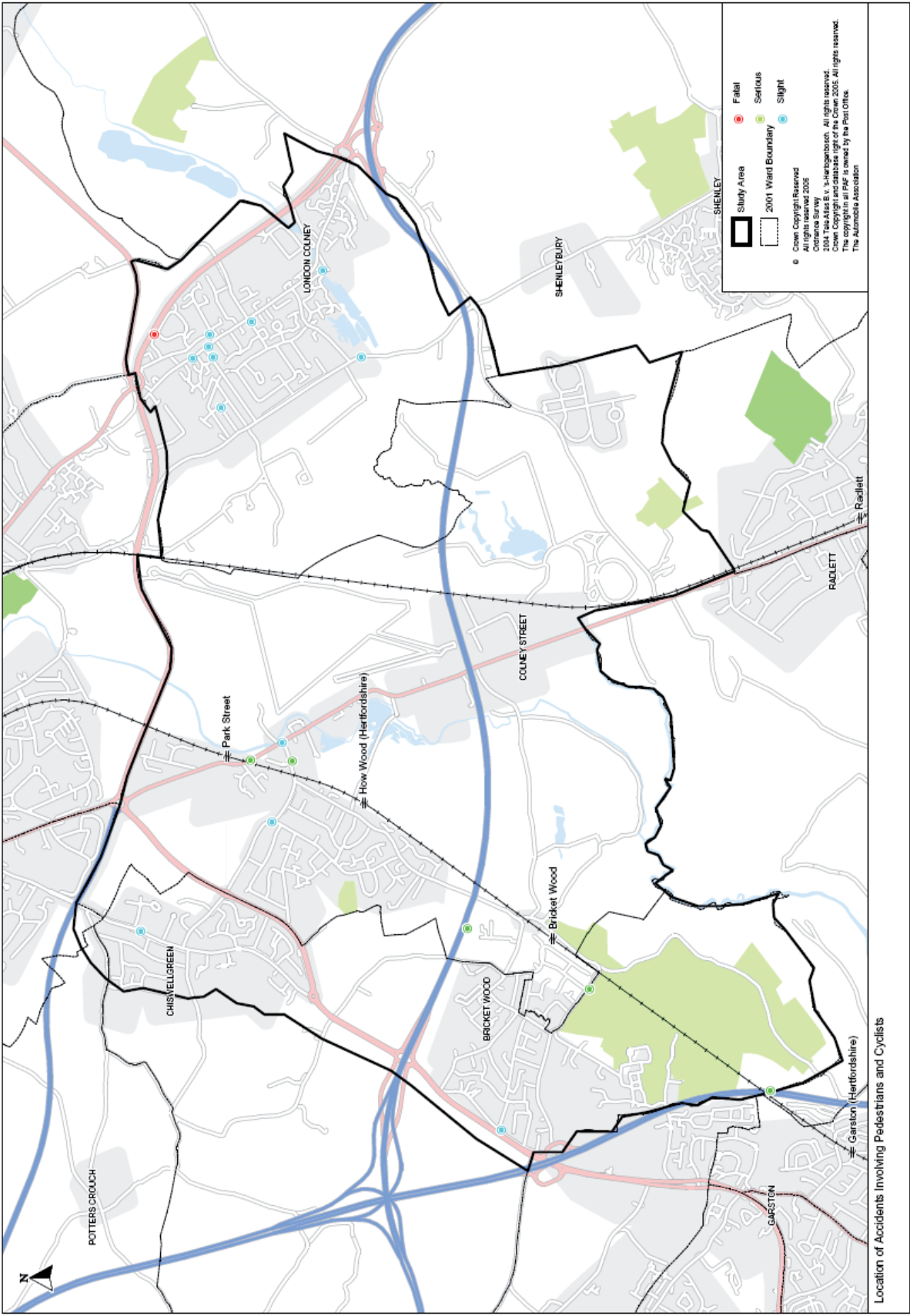


FIGURE 2.25 LOCATION OF ACCIDENTS IN STUDY AREA, INVOLVING PEDESTRIANS AND CYCLISTS



Freight

Introduction

- 2.64 Freight and servicing covers all vehicle movements (of whatever mode) that are not for the purpose of transporting people.

Current activity

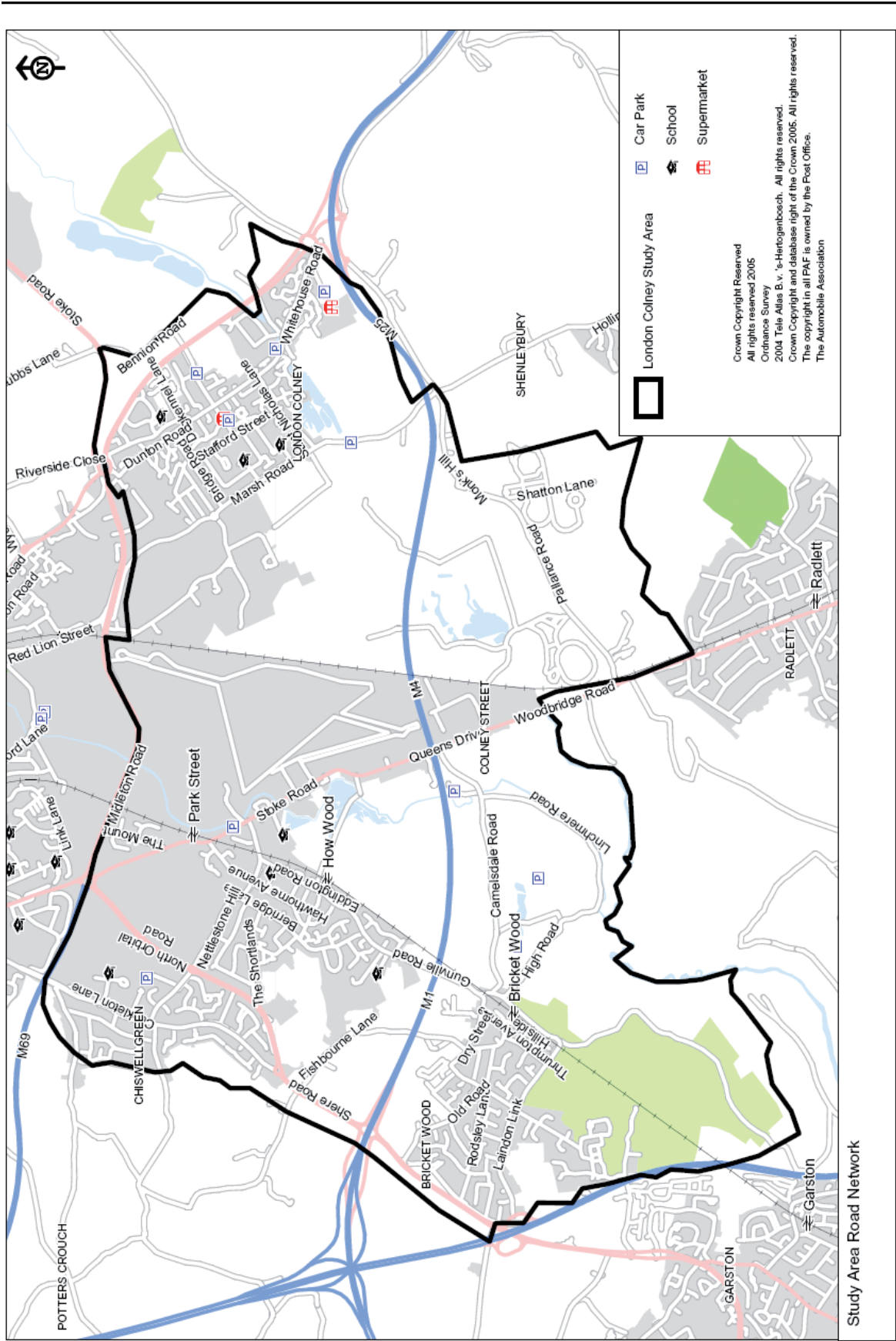
- 2.65 The predominant focus of this section is associated with the current activity of road-based distribution, however it should be noted that a facility operated by Lafarge at Harper Lane to the South of the study area is rail connected and generates frequent inbound and outbound train movement. There is a glass recycling facility on site as well as the traditional uses for quarrying of aggregates and production of carriageway resurfacing materials. Nevertheless, it is important to note that, the site also generates road haulage movements and journeys of staff to and from work.

Road networks

- 2.66 The study area is characterised on one hand by a number of strategic routes used by significant volumes of freight traffic, and on the other hand a network of local roads primarily rural in nature servicing the villages of London Colney, Park Street, Frogmore and Bricket Wood.
- 2.67 As can be seen in the map in Figure 2.26, the study area is well connected to the strategic road network, with links to the M25, M1, M10 and A1(M) all adjacent to the area. The major routes in the study area of the A414, A405 and A1081 can be characterised as part of this strategic route network, and it is evident that there is a significant amount of freight traffic using these sections of the road networks that are simply passing through the study area. This is particularly true for heavier goods vehicles.
- 2.68 Two other routes through the study area are of interest as they could also be characterised as strategic north-south routes, linking Hertsmere and some northern boroughs of London with the A414 and onwards to the major motorway routes. These are the A5183 (Park Street/Watling Street) and the B5378 (Shenley Lane). The high levels of freight along the A5183 in particular result in a number of problems.
- 2.69 Given the nature of the strategic roads within the area, looking at them from a network perspective reveals the importance of a number of junctions/intersections to the traffic conditions in the area. These are as follows:
- London Colney Roundabout: Junction of A414, A1081 and London Colney High Street
 - Park Street Roundabout: Junction of A414, A5183, M10 and A405
 - Noke Roundabout: Junction of A405 and Watford Road
 - M25 Junction 22: Junction of M25 and A1081
 - M1 Junction 6 Junction of M1, A405 and Mount Pleasant Lane
 - M25 Junction 21a Junction of M25 and A405

- 2.70 Locally, all of the other roads within the study area are subject to a 7.5t vehicle weight limit except for loading and unloading. They are not desirable for heavy freight traffic usage, and are almost exclusively bi-directional single-carriageway roads of a rural or residential nature. Nevertheless, they are still used to some degree by freight traffic, either in the form of deliveries and collections at local businesses, for home delivery or as an illegal through route. However, the amount of on-street parking and the use of traffic calming measures do deter the use of larger vehicles for deliveries along these routes. A more localised appreciation of the road network is provided on the following page.

FIGURE 2.26 STUDY AREA ROAD NETWORK



- 2.71 There are a handful of notable freight destinations in the study area, as highlighted in following sections, however it is worth mentioning the key points of access for delivery vehicles to these locations. These are the most significant origins/destinations of HGV movements in the study area:
- Hypermarket and Retail Park – Access from the M25 Junction 22.
 - Ventura Park (Distribution) – Access from the A5183.
 - Riverside Industrial Estate – Access from the A1081 (northbound carriageway only).

Traffic levels

- 2.72 Traffic counts have been provided by Hertfordshire Highways, for a variety of sites across the study area over the period 2004-2006. As these are historical counts, they have not been developed to specifically assist in the development of this study and therefore any conclusions to be drawn from this data about freight traffic through the area are limited.
- 2.73 Of the selection of traffic counts provided, two are able to give an indication of the goods vehicle activity in the south of the study area, as they provide a vehicle type breakdown of the traffic on Bell Lane/Harper Lane (B556) across a single day. In fact, this is the same road, therefore the freight-specific flow information for Harper Lane is described in the following paragraphs and charts.
- 2.74 The Harper Lane traffic count took place on a Wednesday in November 2005. Although for freight traffic, it is difficult to suggest that any day is 'typical', this can be considered to be representative of normal traffic conditions. Bi-directional flows were recorded between 6am and 10pm, with the total traffic recorded as in Table 2.4.

TABLE 2.4 HARPER LANE TRAFFIC COUNT 6AM – 10PM (NOV 2005)

North East Direction			South West Direction		
LGV	HGV	Total Vehicles	LGV	HGV	Total Vehicles
803	393	5,761	812	385	5,350

- 2.75 As this indicates, the total flow is similar for both directions, as is the split between vehicle types. Figure 2.27 and Figure 2.28 show how the goods vehicle flows vary across the day for each direction. Whilst HGV flows remain stable across the day in both directions, there are significant fluctuations in the LGV time distribution. Notably, the south west sees a peak in traffic during the morning peak, with the reverse peak in the north east direction during the evening. It is suggested that this may represent LGVs being used for Journey to Work purposes. It is interesting to note the tail-off in HGV traffic after 4pm in both directions. This may reflect the fact that the majority of deliveries are dispatched to meet delivery windows within the 9-5 time period.

FIGURE 2.27 GOODS VEHICLE FLOWS BY HOUR, HARPER LANE, NORTH-EASTERLY

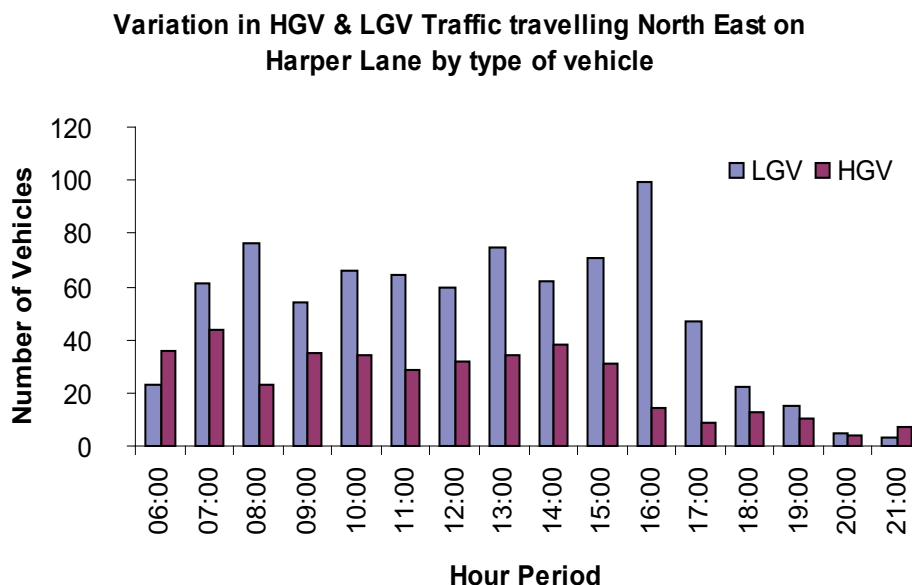
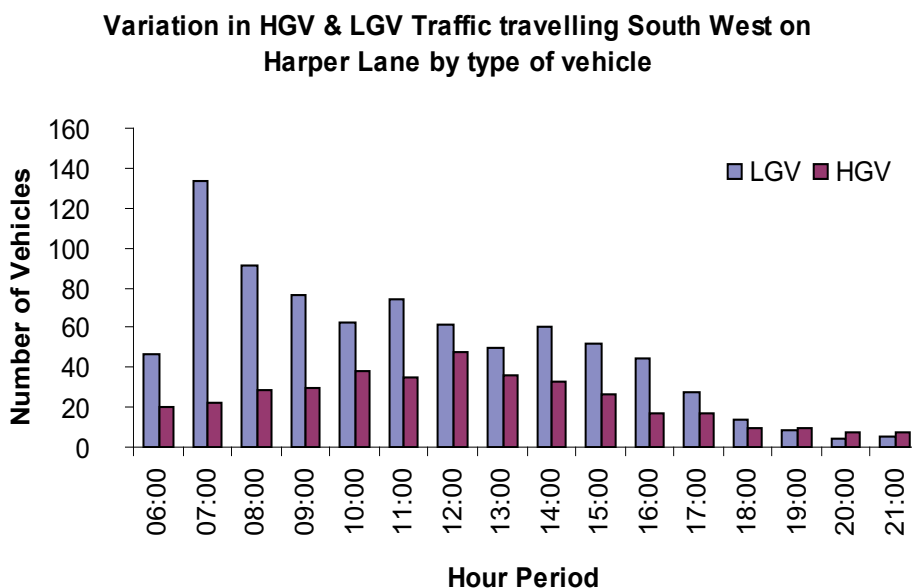


FIGURE 2.28 GOODS VEHICLE FLOWS BY HOUR, HARPER LANE, SOUTH-WESTERLY



- 2.76 Figure 2.29 and Figure 2.30 show the traffic flows for LGVs, HGVs and total traffic indexed to the count in the first hour of the day in each directions. This shows how the flows in LGV and HGV traffic relate to the overall activity on the roads. In the north east direction, this indicates that the HGV pattern across the day is similar from 6am through to about 4pm, after which volumes reduce significantly. LGV patterns much more closely reflect the total traffic pattern, although the evening peak in LGVs occurs one hour earlier than the total peak flow. For the south-westerly direction, the LGV pattern closely reflects the total traffic flow with a significant early morning peak between 7:00 and 8:00. The volumes steadily reduce for both across the day, although LGV volumes reduce earlier in the evening than for other road users. Conversely, the HGV patterns show a peak in demand during the middle of the day. This may reflect the desire of freight operators to maximise the efficiency of their vehicles by avoiding congested time periods.

FIGURE 2.29 INDEXED GOODS VEHICLE FLOWS BY HOUR, HARPER LANE, NORTH-EASTERLY

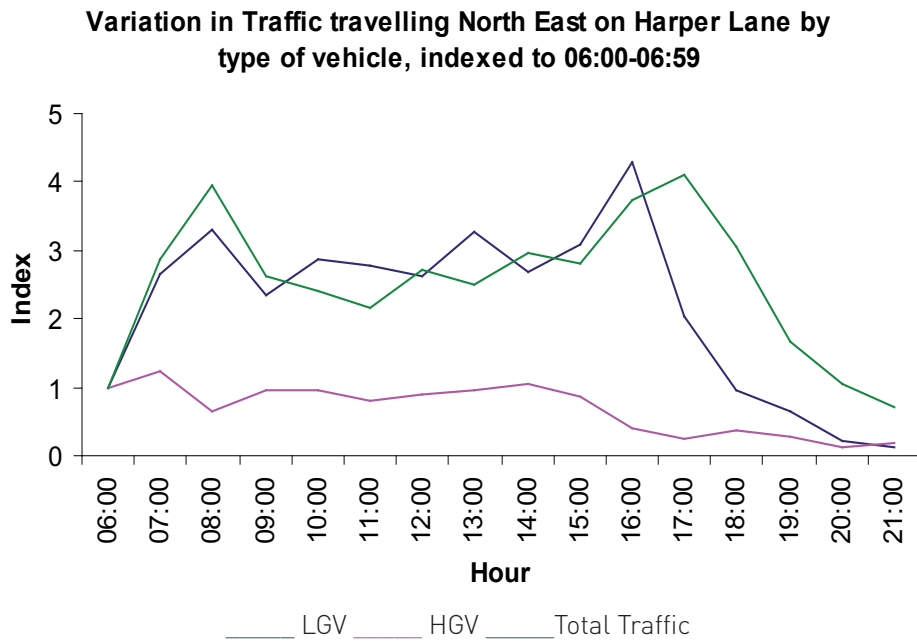
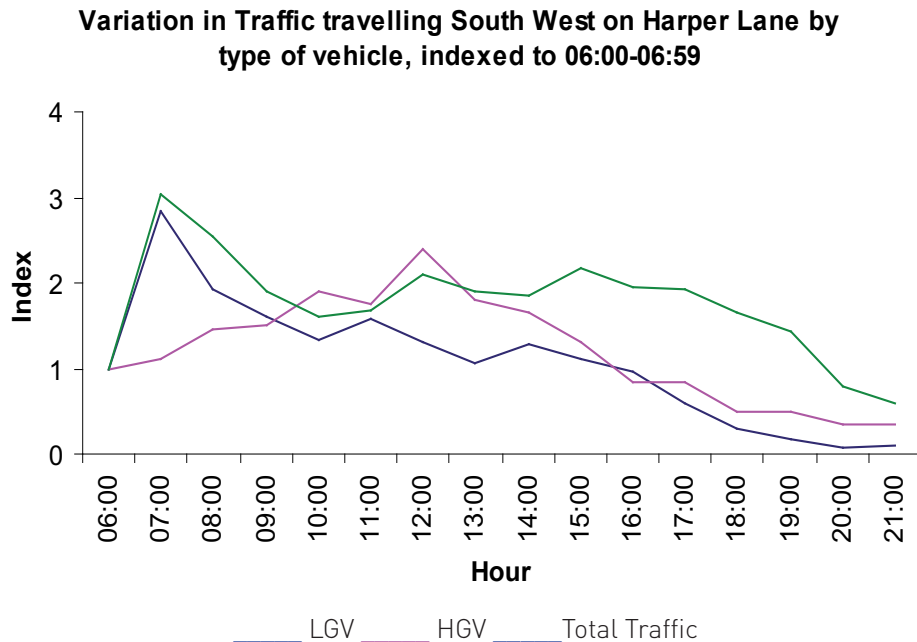


FIGURE 2.30 INDEXED GOODS VEHICLE FLOWS BY HOUR, HARPER LANE, SOUTH-WESTERLY



2.77 Note that the only information we have available is between 6am and 10pm, and we do not have visibility of the traffic volumes at night, when there is the potential for greater disturbance to local residents. However, given the nature of the roads and the logistics activity within the study area, it is not expected that much freight traffic would be generated on these routes outside the survey hours.

- 2.78 A freight route through Watling Street (to and from Ventura Park) has been identified as a particular problem. Further investigation is needed to identify possible solutions, possibly through the Freight Quality Partnership, which will be discussed further in the last section of this document.

Types of vehicles

- 2.79 The types of vehicles used to deliver goods and services to and from the study area will be a mix of Heavy Goods Vehicles, Light Goods Vehicles, cars and even motorcycles and bicycles. It is known from studies undertaken across the UK that particularly in urban areas, LGVs and cars have an important role to play.
- 2.80 Nevertheless, for the three major freight generators listed above, HGVs will have a significant role to play in the vehicle mix, although evidence from site visits revealed that smaller goods vehicles and vans also make up a significant proportion of delivery activity.
- 2.81 In the villages, there are a number of small businesses and local retail outlets that will receive regular deliveries. There is no direct evidence from business or parking surveys, however, very few if any of these will be part of a distribution network relying upon HGVs, and as such LGVs and cars are expected to play a significant role. The road conditions in these areas also hint towards a preference for use of smaller vehicles.
- 2.82 It is important to note however, that the 7.5t weight restriction for vehicles using these routes does not apply to vehicles requiring access for loading and unloading. Therefore, the weight restriction does not prevent larger goods vehicles from using these roads per se, only from using them as through routes. This needs to be borne in mind when addressing issues raised by local residents about undesirable vehicles using local roads.

Origins and destinations

- 2.83 Sufficient data is not available to ascertain the origins and destinations of freight movements associated with the study area. Flow data provided by the Department for Transport as part of their Continuing Survey of Road Goods Transport (CSRGT) is not robust enough at such a localised level, and is only intended as an indicator of goods moved by HGVs. To achieve an understanding of the origins and destinations it would be necessary to undertake a bespoke data collection exercise, including roadside interviews and some form of cordon survey. Also, as delivery patterns vary across the week and the months of the year, it is not clear whether valid conclusions could be drawn from a single data collection exercise. Nevertheless, localised studies at key locations and junctions could reveal useful information about the split between local and strategic freight traffic in the study area.

Therefore, for the purposes of this study, a qualitative description of freight generators in the study area is set out in the following sections.

Land use in the study area

- 2.84 The study area is predominantly residential, made up of a number of villages that fall within the District of St Albans. However, there are a variety of industrial and commercial interests within the area, which drive the patterns of freight movement across the area. This is detailed in the following section of this report.
- 2.86 The Valuation Office Agency (VOA) collects annual data on Commercial and Industrial properties in England and Wales in order to record and rate the value of properties

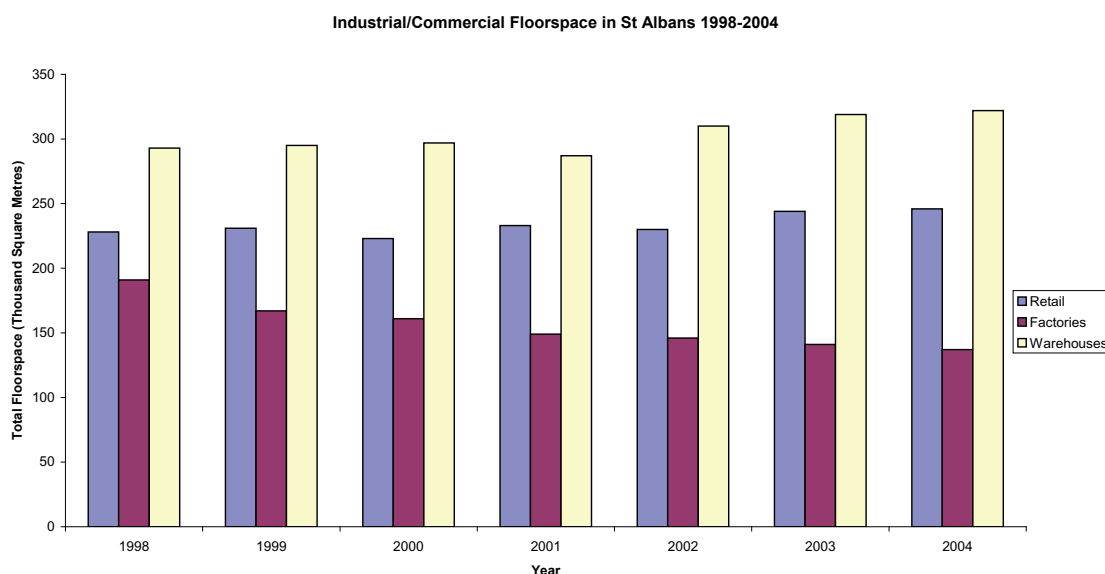
across the country. It has been possible to use the VOA database to identify the stock of Manufacturing, Retail and Warehousing in Hertfordshire, and how this has changed over the past six years. Table 2.5 below summaries the number of properties of each classification in 1998 and 2004, and Figure 2.31 is a graphical representation of the floor space within each classification during this period. Please note that this data covers the whole of St Albans District and therefore this is more than the area covered by the Southern St Albans Urban Transport Plan.

TABLE 2.5 NUMBER OF COMMERCIAL/INDUSTRIAL PROPERTIES IN ST ALBANS - 1998/2004
(SOURCE: VOA)

Classification	Number of Properties in 1998	Number of Properties in 2004	Percentage Change 1998-2004
Retail	1197	1167	-3%
Factories	370	318	-14%
Warehouses	377	413	+10%

2.87 Information is also provided on the total floor space accounted for by this commercial and industrial activity. Figure 2.31 shows the trends in land take of these types of usage over the six year period.

FIGURE 2.31 COMMERCIAL/INDUSTRIAL FLOORSPEACE IN ST ALBANS 1998-2004 (SOURCE: VOA)



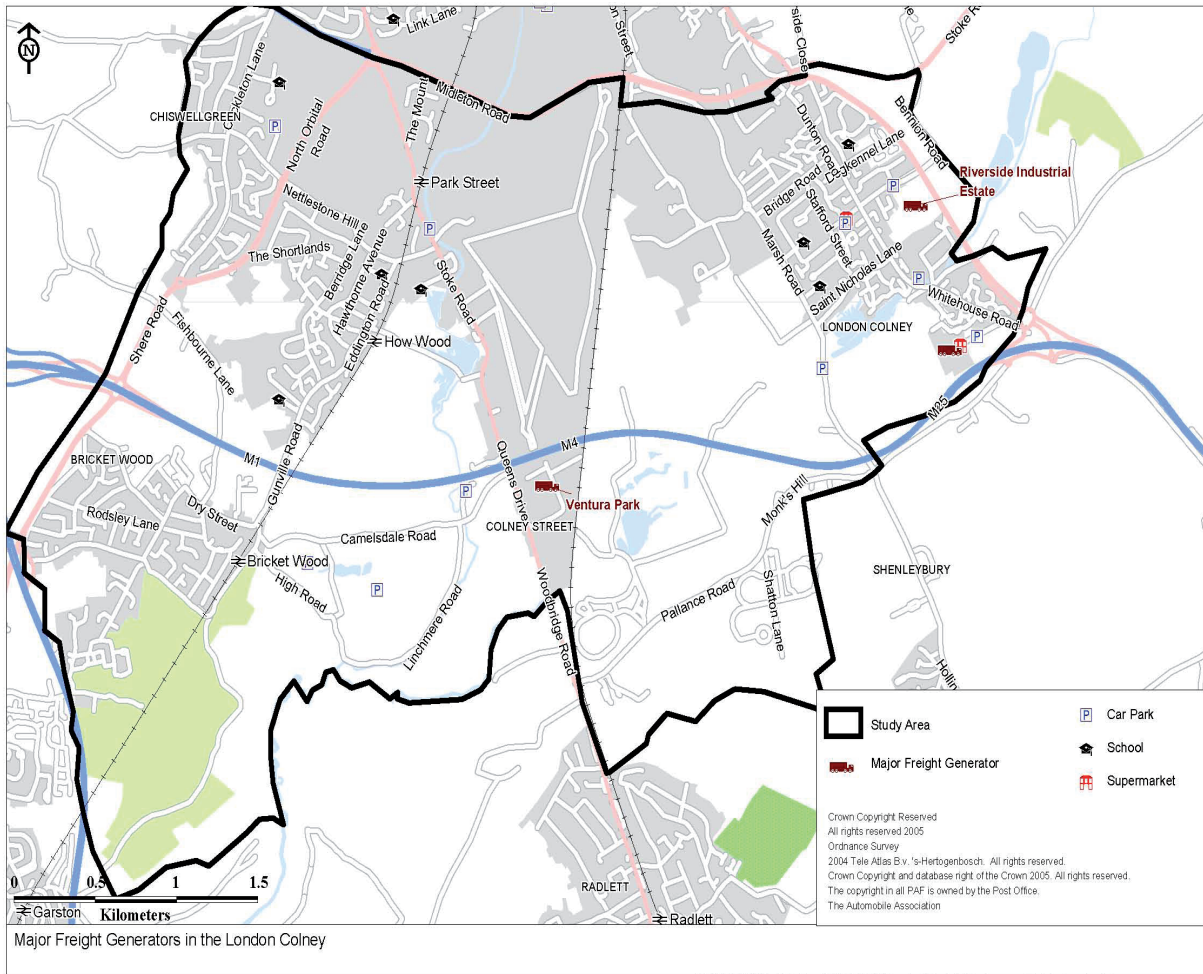
2.88 This land use data clearly shows that whilst the number of premises used for retail and the actual land take that this accounts for has remained relatively stable in St Albans, there is a clear decline in the manufacturing sector and growth in the size of the warehousing stock.

2.89 There are a number of clusters of industrial developments both within and just outside of the study area. These developments act as important nodes of employment in the area, as well as generating frequent flows of inbound and outbound goods movements. It is worth noting that although the study area is home to two of the most prominent

large-scale warehousing developments in the District (distribution centres for Sainsbury and B&Q), this only accounts for a proportion of the floor space used for distribution purposes in St Albans.

- 2.90 Figure 2.32 indicates the location of notable centres of freight generation within and just outside of the study area, followed by a short commentary on each.

FIGURE 2.32 MAJOR FREIGHT GENERATORS IN STUDY AREA



Major freight generators

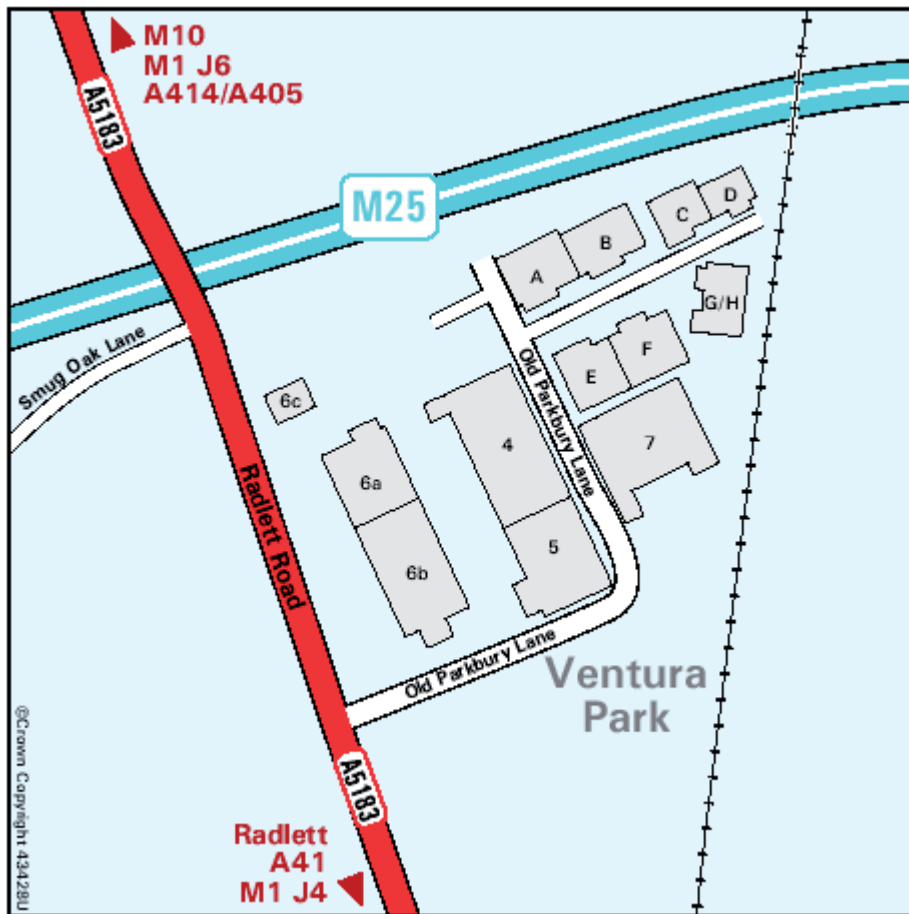
- 2.91 The out-of town retail park located at M25 Junction 22 is a major generator of traffic, both in terms of shoppers (private car is the main mode of access) and for delivery activity. Sainsbury's and Marks & Spencer's have major stores located on site and there are five other retailers located there. Each outlet is considerable in size and is a nationally known retailer. As such, these stores will be served by an optimised logistics network, predominantly receiving deliveries in HGVs on a regular pattern. Nevertheless, as shown in Figure 2.33, deliveries using smaller vehicles are an important feature of freight activity in this area (particularly for specialist, infrequent or 'emergency' deliveries). Back of house goods-in facilities and signposting of specific access points for delivery vehicles streamline the receipt of goods process, and limit the conflicts with other road users and visitors. These stores are not used as the base for home delivery operations.

FIGURE 2.33 FRONT DOOR DELIVERY AT LONDON COLNEY HYPERMARKET



- 2.92 Ventura Park is a significant Distribution Park located within the study area, used by several occupiers to service a variety of different sectors. In total, there is 594,000 ft² floor space in the Park, across approximately twelve units as shown in Figure 3.6 below. Most notably, the 159,000 ft² B&Q Distribution Centre has been operational on a ten-year lease since 2003. The main access route for Ventura Park is via the A5183, and given the level of distribution activity taking place here, there are relatively regular flows of HGVs using this bi-directional single carriageway to access the Park. There is also a smaller industrial site, Curo Park, located further north in Frogmore housing a number of commercial businesses and Eon Film Studios. A substantial proportion of Curo Park is being redeveloped for residential use and the level of HGV activity here has been in decline over recent years.

FIGURE 2.34 VENTURA PARK SITE CONFIGURATION (SOURCE: BRIXTON PLC)



- 2.93 There is also a significant distribution facility in the east of the study area. The Riverside Industrial Estate is the base of a Sainsbury's Regional Distribution Centre, operated by NFT Distribution, including handling of chilled produce. Although the site can be accessed by road from London Colney itself, the actual entrance/exit point for delivery vehicles is from the A1081 London Colney Bypass northern carriageway. This depot serves Sainsbury stores across the South East, and therefore predominantly generated Heavy Goods Vehicle movements. However, given the activity levels within this type of operation, it is also a significant employer within the local area.

Local retail & businesses

- 2.94 Although London Colney, Park Street and Bricket Wood are less than five miles from the centre of St Albans, they have very much retained the character of distinct villages. As such, each has some level of local retail and business activity, which serve residents and visitors to the area. To sustain these businesses, goods and services are necessary, and this generates freight flows to and from the area. In these instances a balance needs to be struck between maintaining the ability of these businesses to operate efficiently whilst minimising the level of disturbance upon the local environment.

Home delivery

- 2.95 The study area is characterised by residential areas, and it is suggested that this will continue to grow into the future. A significant proportion of the housing reflects a high degree of affluence, and as such a greater amount of disposable income. With the ever-expanding role of the Internet in shopping, the trend towards higher volumes of home delivery is likely to continue over coming years, and this will see increasing levels of freight traffic accessing residential areas. However, there is no available data to suggest the current volumes of home delivery activity in the study area, the types of goods carried or how the volumes have varied over time.

Waste collection and disposal

- 2.96 Household refuse collection is undertaken by St Albans District Councils appointed contractor MRS Ltd, who provide a weekly collection from all 55,000+ properties in the District. This equates to approximately 600-700 tonnes of refuse per week, peaking at approximately 1000 tonnes per week over the Christmas period. All household waste collected is taken to the transfer station in Garston (outside the study area), where it is transferred into bulk containers for transportation to landfill in Bedfordshire.
- 2.97 There is no council provision for the collection of commercial waste and businesses are therefore required to organise their own contractual arrangements to cover this.

Construction activity

- 2.98 Any construction activity taking place in the study area will generate freight traffic. Site visits have revealed that there are no major construction projects currently underway. Nevertheless, although these activities are only temporary, there is the potential to impact upon traffic conditions, particularly in the local vicinity.
- 2.99 Importantly, there are the major residential developments planned for the former Harpersbury Hospital site.

Potential future activity

- 2.100 In 2006 a planning application was submitted for developing a major rail-connected warehousing and freight distribution centre in the Green Belt that separates London Colney & Park Street. The development would have generated a substantial increase in lorry and rail freight traffic activity in the study area, as well as a significant number of jobs. However, planning permission was rejected by St Albans District Council, and subsequently went to appeal and Public Inquiry in late 2007. A decision was made in October 2008 by the independent Inspector to reject the appeal. This was ratified by the minister, resulting in a final dismissal.

Sustainable Transport

Introduction

- 2.101 Bus, train, cycling and walking all constitute more sustainable means of getting around than the private car, and we have therefore grouped the information about these into one chapter. It was also a relevant section to include current information on Travel Planning, as this combines all these modes and other 'travel awareness' campaigns in a productive way.

Public transport

Services in London Colney and Park Street

- 2.102 London Colney has linear bus services through the village, but no rail station or taxi rank. There are bus services to St Albans, South Mimms, Radlett, Hatfield, Watford and Potters Bar. The table below shows the services.

TABLE 2.6 BUS SERVICES IN LONDON COLNEY

Service number	Route	Frequency
84	St Albans, London Colney, South Mimms, Potters Bar	3 buses per hour in each direction run by Metroline/Thorpes
602	Hatfield, St Albans, London Colney, Watford	3 buses per hour in each direction, run by the University
632	Hatfield, London Colney, Radlett, Watford	1 bus per hour in each direction, run by the University

- 2.103 Services 84 and 602 operate via St Albans and are likely to be affected by traffic congestion in St Peter's Street, which may lead to some unreliable operation. Service 602 operates a variant once per hour via Shenley Lane instead of High Street.
- 2.104 The High Street of London Colney is straight and fairly uncongested (A1081 forms a bypass). There are vertical deflection traffic calming measures along the High Street which could make the ride on a bus uncomfortable.
- 2.105 All three services in London Colney operate to the retail park at the southern end of the village, where two stops are provided near to the store entrances (involving a deviation off the main route).
- 2.106 The condition of the vehicles used to service the routes varies considerably, however it is noted that improvements sometimes as result of HCC grant funding have been made on a number of routes. In addition, some of the stop shelters are in quite poor condition (glass missing etc) although all appeared to be displaying service information. See paragraph 5.152 for a further explanation.
- 2.107 The following table shows the range of bus services available in Park Street and Bricket Wood.

TABLE 2.7 BUS SERVICES IN PARK STREET, BRICKET WOOD, HOW WOOD AND CHISWELL GREEN

Service number	Route	Frequency
655	Borehamwood – Park Street – Hatfield	Approx hourly in each direction during the day until last journey around 7PM in both directions
656	Borehamwood – Park Street – St Albans	2 journeys in each direction, both in the evening. 2 hourly daytime services on Sundays
622	Croxley Green – Park Street - Hatfield	1 journey per weekday in each direction – AM peak to Hatfield; evening return to Hatfield
W1	South Oxhey – Park Street – St Albans	1 journey per day, in the evening only
321	Rickmansworth/ Watford – Bricket Wood – Luton Airport	Approximately 2 buses per hour in each direction during the day, 1 per hour in the evening until 23:00. Operates hourly on Sundays, with no evening service
320	Watford - Park Street - Hemel Hempstead	Approximately 1 bus per hour in each direction during the day, ending approximately at 17:00 for services stopping within the study area. No Sunday service
721	Abbots Langley – Bricket Wood – St Albans	Operating from 1st October 2008. Approximately 1 bus every 2 hours, 9:30 – 14:00 (within the study area). Wednesdays only
724 & 726	Harlow – Chiswell Green – Heathrow Airport	Approximately 1 bus per hour (within the study area) until 20:30. 1 every 2 hours on Sundays

Correct as of December 2007 - subject to change in the future

Although services are available throughout the day there is a limited choice of destination. Frequencies are low throughout the day, only hourly, and less frequent than this in the evenings. There is a two hourly frequency service on Sundays using service 656.

There are no systems for the Electronic display of timetable information or real-time updates within the study area. Pre-trip information is available via the internet through the following websites:

- www.intalink.org.uk
- www.ukbus.co.uk
- www.hertsdirect.org
- www.traveline.org.uk
- www.transportdirect.info

General public transport information and facilities in the study area

- 2.110 In terms of public transport information available, the County Council publishes a range of "Travel Guides" which give all public transport services in Hertfordshire, but are broken down by area (e.g. St Albans or Welwyn/Hatfield). The County Council also publishes a free public transport map for Hertfordshire and regular "Interchange" updates, giving information on bus service changes.
- 2.111 The Intalink Strategy explicitly recognises the need for integrated ticketing and integrated tickets using smartcards have been introduced for particular sectors (e.g. concessionary fares) and types of journey. These have been implemented using vendor proprietary systems that do not conform to the ITSO smart card standards. An Intalink ticket allows travel on all bus operators in Hertfordshire for £7 per day, and can be used for up to 2 adults and 2 children.
- 2.112 The County Council is following a number of Programmes to improve public transport, including AVL for bus services and the possibility of an express coach links.

Rail

- 2.113 There are no mainline stations in the study area, although there is a well used local branch line known as the Abbey line. St. Albans City railway station is the fastest rail link to London for residents of London Colney. It is situated 0.3 miles to the south of the town centre and provides a regular First Capital Connect service into the capital and Gatwick and Luton airports, as well as links to the East Midlands Trains services via Luton and Bedford. Both the West Coast mainline (at Watford) and the East Coast mainline (at Stevenage) are within easy access, by car, although parking can be a problem at both locations. For residents of St Stephen, the fastest route into London is to take a train on the Abbey line at any of the three stations (How Wood, Bricket Wood or Park Street) to Watford and change.
- 2.114 East-west public transport links are poor however. While the Abbey line runs between St. Albans Abbey railway station and Watford Junction this can only provide a train service every 40 minutes at best since it is a single-track line. The Abbey line was selected by the Strategic Rail Authority (now DfT Rail) as one of the six national pilot Community Rail Partnerships with an aim to double the annual number of journeys made. There has already been considerable growth in patronage - up around 22% since the establishment of the Partnership and patronage is now at around 500,000 journeys p.a (source: www.abbeyline.org.uk).
- 2.115 One possibility would be to re-instate the Bricket Wood passing loop to enable a doubling of the service frequency. This was ruled out in 2008 due to a combination of the engineering costs and the franchise costs of an extra train. Poor security at stations on the route contributes to poor revenue collection, and underestimates of the level of use which makes planning difficult.
- 2.116 Abbey Station (along with St Albans City & Hatfield) have been designated as a pilot station as part of the DfT's Rail Station Travel Plans project 2008.
- 2.117 Other initiatives which are being progressed for the Abbey line are the rolling out of auto PA systems, CCTV and help points which will be linked to a central Automated Passenger Security Station. Improvements to assist accessibility are also being made, including installation of hand rails, non-slip treads and the investigation of the

trial of a raised hump at the Abbey station with London Midland and the DfT. There are plans to put in additional cycle provision in conjunction with rail operators at selected stations in Hertfordshire in the future as opportunities arise.

- 2.118 Data analysis for travel to work by train in the study area showed very low numbers using the train throughout the study area, but particularly residents of the London Colney ward. There were higher numbers of rail commuters living in Radlett and Shenley, which can be expected considering the rail stations are located close to these areas.

Travel plans

School travel planning

- 2.119 Both the County and City Councils are committed to the development of school travel planning through the implementation of the LEARN initiative. Furthermore, the capital programme includes an allocation for the delivery of infrastructure measures associated with school travel planning through the safer routes to school programme.
- 2.120 Of the 11 schools in the study area, 6 have an approved travel plan. The County Council has a database which summarises the progress of individual schools (including in relation to Safer Routes to Schools initiatives).

Workplace travel planning

- 2.121 The County Council's Business Travelwise initiative is the primary means through which travel planning is brought to the attention of businesses in the area. The main thrust of the County Council's activity comes via engaging businesses already working in established forums.
- 2.122 The County Council has previously promoted the Government's free site specific travel planning advice service though they have been disappointed with the level of communication by the Government appointed consultants and also the advice programme managers.
- 2.123 The County Council has, in the past, worked closely with "BusinessLink", a support organisation for local businesses, and the Hertfordshire Chamber of Commerce and Industry however these relationships have to a certain degree diminished and, with the right approach, could present an opportunity for the future.
- 2.124 There are relatively few opportunities to promote workplace travel planning although there are a few pockets of small to medium size enterprise. In the London Colney area this is notably at Hertfordshire Business Centre and the Riverside Industrial Estate. In the Park Street area key locations for such enterprises are located along Watling Street, and in Bricket Wood there is the Smug Oak Business Centre off Lye Lane, and the HSBC training centre off Smug Oak Lane.
- 2.125 It would appear that with the right level of resourcing and partnership working there is some potential for greater travel planning activity in the area.
- 2.126 It should also be noted that in relation to planning applications for larger travel generating uses the County Council, through its Highways Development Control function, works with the City and District Council the local planning authority to secure travel plans through the planning process wherever this is appropriate.

Other organisational travel planning

- 2.127 As noted above travel planning has the potential to be applied to all significant travel generating uses and furthermore the bringing together of organisations, through area wide travel plan forums, can be worthwhile – irrespective of organisations size and type. The County Council clearly recognises the potential for this type of approach however this has not yet manifested itself in the area.
- 2.128 A notable potential example is the ‘Colney Fields’ retail park in the south east part of the study area which is a key travel attractor and could warrant specific travel planning activity – possibly on an area wide basis given the number of units on the site. ‘The Arboretum’ on the western side of the study area could also warrant consideration as another special case where travel planning could be pursued.

Residential travel planning

- 2.129 Although a relatively new smarter choices intervention residential travel planning has hitherto been confined to the consideration of new residential development. While the County Council is not aware of any recent examples within the area of where residential travel plans have been secured in this way it is known that a number of recent planning applications for residential developments have included discussion of individual elements of a travel plan (e.g. car clubs and provisions for cyclists).
- 2.130 The County Council has a desire to secure residential travel plans where the opportunity presents itself and it is deemed appropriate by the local planning authority.

Personalised travel planning

- 2.131 Although the County Council has indicated that the principle of personalised travel planning is one which they fully support there have not, hitherto, been any attempts to introduce personalised travel planning in this area. This is partially borne out of an uncertainty as to how personalised travel planning would assist the County Council in moving toward achievement of its ‘Congestion’ objective as contained within the current Local Transport Plan. However, a pilot of such an initiative is being undertaken in Watford, and the results of this will inform future development of personalised travel planning by the County.
- 2.132 To be most effective personalised travel planning is best deployed in locations where the quality of public transport, cycling and walking is known to be of an attractive standard and in areas where it is known that the ‘propensity to change’ of the target audience is high. The latter can be determined by an analysis of the socio-demographics of local residents (or, in the case of a workplace based approach, via a staff travel survey). Accession is also a potentially useful tool in identifying those areas where accessibility to given facilities is of a good standard.

Cycling and walking

- 2.133 As a county, Hertfordshire is well served by the National Cycle Network (NCN). Many sections are off-road and provide good links with the wider Rights of Way network.

2.134 Hertfordshire County Council has a cycling strategy to encourage the use of this mode. There are many opportunities to increase the amount of cycling in Hertfordshire based around a number of themes. From these themes it is possible to identify a range of

areas for action and interventions to both increase cycling and address the County Council's core transport priorities. These include:

- Creating and improving cycle networks in all the main Hertfordshire towns, especially in the higher density urban cores;
- Prioritising action in those towns with high levels of self-containment (journeys made within town), flat terrain, existing higher levels of cycling, and higher levels of no-car or one-car households;
- Ensuring that the needs of cyclists are considered when changes are made to the highway network, including accident remedial measures;
- Ensuring that all railway stations in towns, particularly those associated with high levels of commuting or limited car parking, have convenient cycle access arrangements, high quality, covered and secure cycle parking and links to local cycle networks;
- Ensuring that large workplaces (particularly those in towns), higher education establishments and schools have workplace travel plans that promote cycling, offer adult cycle training programmes, provide secure cycle parking and are linked to the cycle network;
- Promoting and encouraging cycling to children through cyclist training, cycle parking at schools and the promotion of 20mph zones and traffic calming around schools and in residential areas where appropriate;
- Promoting and encouraging cycling through adult cycle training programmes delivered by the County Council;
- Developing a network of inter-community routes that encourage cycling as a recreational and health improving activity as well as creating opportunities for those willing to undertake longer utility trips; and
- Maintaining the cycle network in a manner that encourages use.

2.135 Passing through the north of the study area is the 'Alban Way'. This is a well known, 6.5 mile traffic-free walking and cycling route. It runs along the former Hatfield to St Albans railway line, and forms part of Route 61 of the Sustrans National Cycle Network. It runs between Cottonmill Lane in St Albans and Wrestlers Bridge in Hatfield.

2.136 There is a 7km (4 mile) cycle route running through London Colney. This is a loop, running from London Colney High Street, up through London Road, left down Mile House Lane, then south down Napsbury Lane, where it crosses the railway bridge. It then passes down Shenley Lane, to the west side of London Colney village, and finally up St Albans Road, back to London Colney High Street.

2.137 More recently, Bricket Wood and Park Street have obtained an off-road cycle route. However, the level of secure cycle storage is inadequate. It is particularly in need at the post office, local parks and other recreation sites.

2.138 There are 8 PELICAN signal controlled crossings in the study area, 2 TOUCAN signal crossings that provide facilities for cyclists as well as pedestrians and 1 PEGASUS crossing that extends the TOUCAN facility to include horses and their riders. There are no forms of linking between the signals.

- 2.139 The poor condition of some of the footpaths could be one of the factors identified for low levels of walking in addition to an aging population. Potholes are also a particular problem in this area.
- 2.140 Hertfordshire county's average for people travelling to work by foot or by bike is just 12%, against a national average of 15% commuting by these modes. However, Census information tells us that within the study area, this is reduced to under 10%. Park Street in particular has very low levels of walking and cycling.

Accessibility

- 2.141 In 2003 the Social Exclusion Unit report, Making the Connections, identified the problems of social exclusion caused by poor access to the main services: healthcare; education; training and employment; and fresh food shopping. Responsibility was given to the DfT to take forward the government's accessibility planning agenda to help those who are socially excluded to overcome the barriers to accessing services. Local authorities, with their partners, must now implement their accessibility strategy (part of the Local Transport Plan) designed to improve access to local services and activities.

Hertfordshire County Council Full Accessibility Strategy

- 2.142 Hertfordshire's Full Accessibility Strategy was submitted in March 2006 as part of its second Local Transport Plan. The strategy gives no specific focus to St. Albans District, but does set targets and indicators for access to hospitals for the County as a whole. The indicator that has been set is the percentage of people who find it difficult to travel to a local hospital and information to measure this is collected in the annual public attitude MORI survey. The target that has been set is to reduce the percentage from a baseline figure of 29 % in 2005 to 20% in 2010/11.

Local Consultation and Accessibility Mapping

- 2.143 Consultation exercises with council officers and public stakeholders uncovered some of the more immediate perceived problems with accessibility to essential services in the study area.
- 2.144 The key services that were considered to be most difficult to access, particularly by non-car modes were:
- Employment,
 - Recreation/ leisure facilities
 - Hospitals
 - Secondary Education

Mapping accessibility

- 2.145 We have examined accessibility maps of access to some of these key services, to provide further investigative detail.

Access to Education

- 2.146 Figure 2.35 and Figure 2.36 below illustrate accessibility to secondary and further education respectively. Using the software 'Accession', the map takes into account bus

frequencies specific to the area. Figure 2.35 shows that the majority of the built-up area within the study area is within 20 minutes by either walk or public transport of the nearest secondary school. As would be expected, accessibility is more restricted to the fewer number of further education colleges, although most of the built-up area is within 30 minutes by public transport and walking.

FIGURE 2.35 ACCESS TO SECONDARY EDUCATION BY PUBLIC TRANSPORT AND WALKING

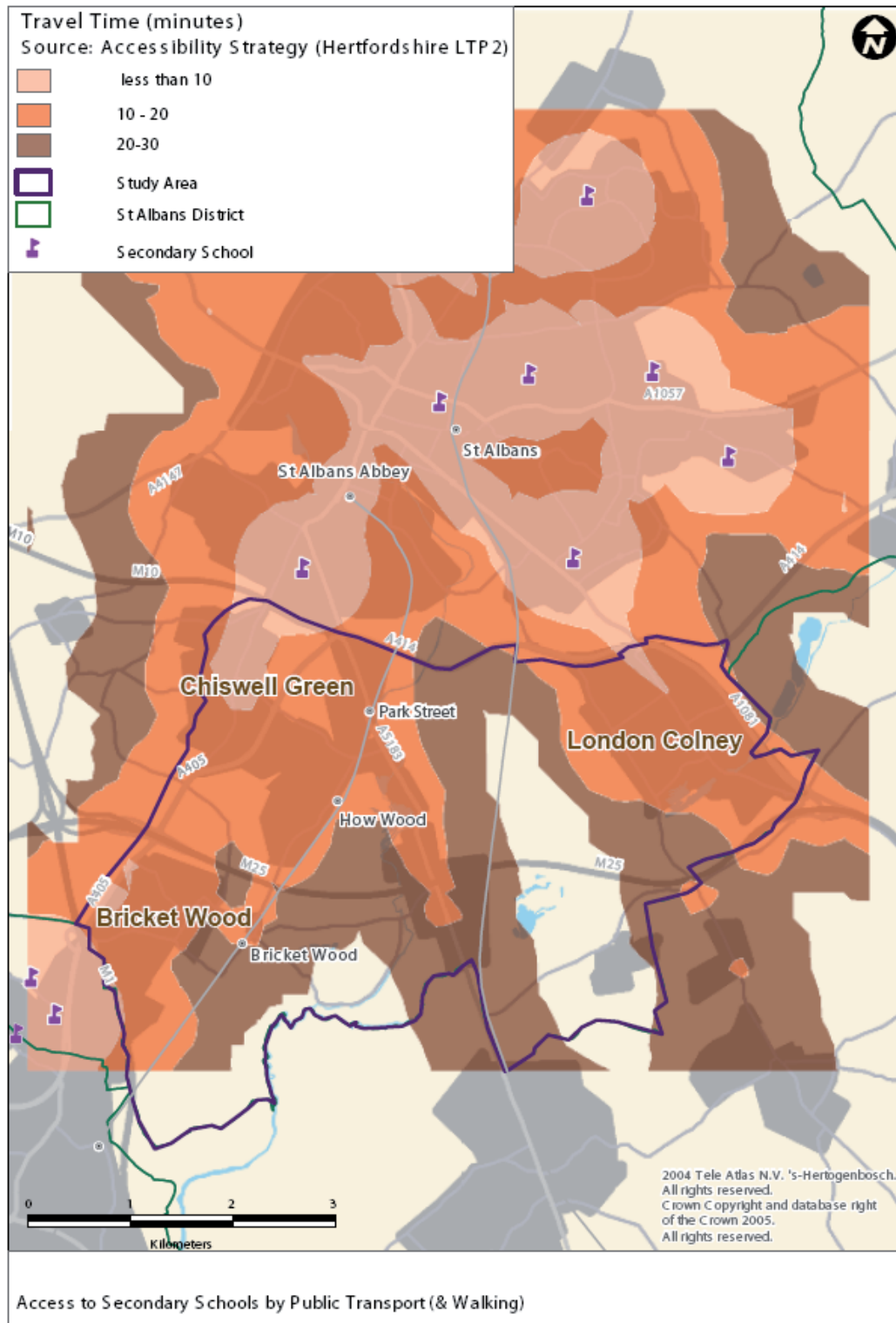
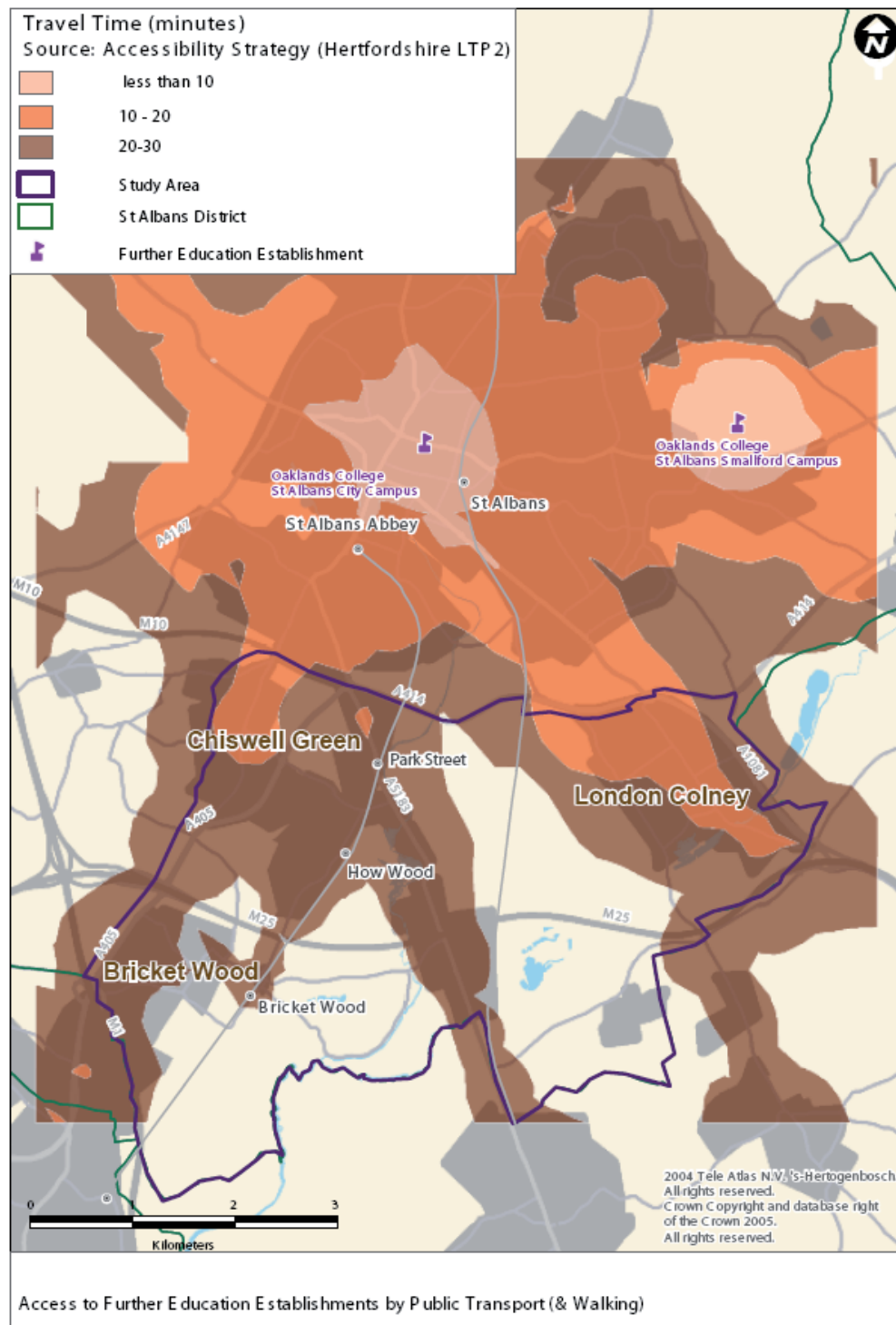


FIGURE 2.36 ACCESS TO FURTHER EDUCATION BY PUBLIC TRANSPORT AND WALKING

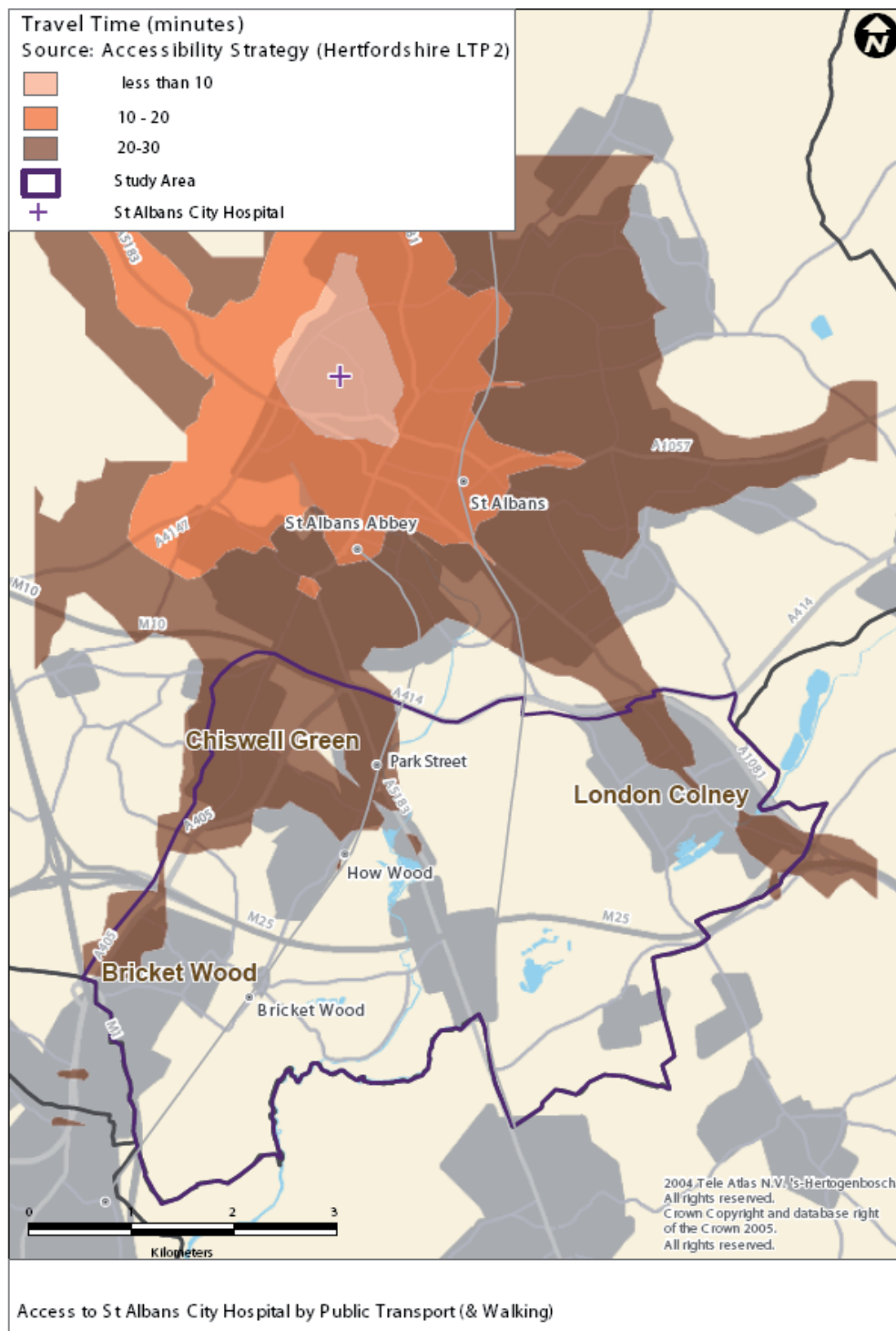


2.147 Consultation with council members highlighted the lack of free home to school public transport. Some of the children in the area do not qualify for free school transport as they live within a 'walkable' distance to school. However, their walk is not particularly safe so parents are reluctant to allow it and prefer to drive their children to school. The cost of using a normal bus service was considered too high.

Access to Heath Care Facilities

2.148 We have also examined maps of accessibility to GPs surgeries and hospitals. Access to GPs is generally good in the study area (less than 20 minutes by public transport and walking). However access to hospitals is poor as shown in Figure 2.37 overleaf, which measures access to St Albans City Hospital which does not fulfil an Accident and Emergency function. All of the study area is beyond the 20 minute travel time threshold and significant parts of the study area are outside of a 30 minutes travel time to St Albans City Hospital.

FIGURE 2.37 ACCESS TO HOSPITALS BY PUBLIC TRANSPORT AND WALKING



Key Issues for the strategy

2.149 The following sections summarise the key problems and issues which have been drawn out of the consultation and data collection, for each of the key areas of concern for transport.

Congestion

2.150 In Hertfordshire, traffic has grown 64% since 1980, with a consistent increase of 2-3% per year during the 1990's. It is expected to grow 17.7% by 2011, and 33.3% by 2021 (from a 2001 base), slightly higher than national forecasts. With this background...

- Car use in the study area is very high. In several wards of the study area, over 90% travel to work by car. On average, 78% of those living in the study area commute to work by car.
- Car ownership is also high, which leads to congestion occurring at capacity pinch points across the study area.
- Through-traffic is a constant problem, and there are many narrow roads within the study area which exacerbate this at busy times.
- Some of the worst congestion occurs along the A405 and A414, particularly approaching the M25 and M10 junctions.
- Severe congestion regularly occurs when there are traffic jams and other problems on the strategic route (the M25 and M1) resulting in traffic diverting through the study area.
- The Park Street and London Colney roundabouts suffer from congestion problems, as well as within London Colney village centre.
- High levels of traffic on the roads around London Colney lead to traffic diverting into the village (rat running).
- Consultation highlighted congestion along Mount Pleasant Lane, Watford Road and Smug Oak Lane, and Watling Street.
- A pre-evening peak of traffic has been identified along some roads indicating heavy school traffic.
- Analysis of the data has also shown there is a problem for journeys east to west in the area. This movement can be served by the M25 or A414/ M10 but congestion can make this difficult.

Safety

- 2.151 Accident levels are relatively low and stable for the area as a whole but there are some problem roads and dangerous junctions.
- Accident data shows a concentration of accidents occurring along the M25, in London Colney village centre, and along Park Street.
 - Large HGVs, travelling along narrow roads at inappropriate speeds causes dangers along Watling Street (especially at the junction with Harper Lane).
 - Other hotspots included:
 - Danger at the site north of London Colney (the roundabout where the A1081 meets the A414); and where Old Watford Road meets Mount Pleasant Lane.
 - Speeding along Shenley Lane, High Street, St Anne's Road and Kings Road in London Colney and Mount Pleasant Lane, Park Street Lane, Smug Oak Lane and Tippendell Lane in St Stephen.
 - Blind junctions, such as where Lye Lane meets Smug Oak Lane.
 - Dangerous crossing at White Horse Lane.

Accessibility

- 2.152 Some key points from the information gathered on sustainable transport in the study area are;
- Accessibility is perceived to be most restricted to employment, recreation/leisure facilities, hospitals, and secondary education.
 - Access to hospitals is a particular issue: 100% of the study area is outside of a 20 minute journey by public transport /walking and significant areas are beyond a 30 minute journey time.
 - Access to education by public transport and walking was also quite poor. In particular the lack of free home to school buses has been highlighted as a problem, and the high cost of using a normal bus service.
 - Buses are not very accessible for the local residents - they operate at relatively low frequencies (only hourly and less than hourly in the evenings).
 - The quality of the bus infrastructure has been identified as in need of improvement. Hertfordshire county Council are currently undertaking a programme of work working in partnership with the local Parish councils to upgrade shelters and stop facilities. In addition the buses used to service the routes have been subject to considerable investment by operators and via HCC grants where possible.
 - East – West rail links are currently quite poor, and security at stations has also been raised as an issue. Improvements such as access to stations and station security are required.
 - Walking and cycling levels are low in the area. More cycle lanes and footpaths, as well as other facilities for pedestrians and cyclists could encourage use of this more environmentally friendly mode for shorter trips, especially school trips.

Freight

2.153 Freight is a particular issue for this area, as a high number of freight vehicles pass through on their way to and from London.

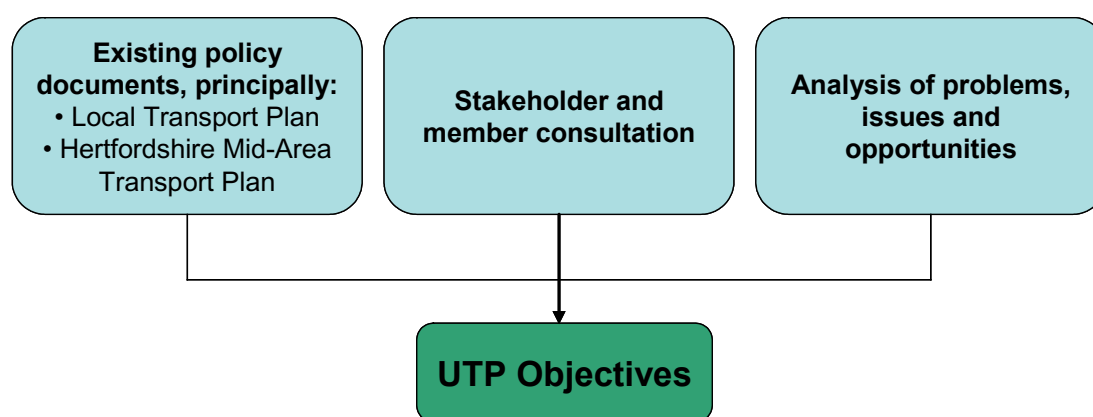
- There are three main freight destinations within the study area; Hypermarket and Retail Park (accessed via J22 of M25), Ventura Park (accessed via A5183), Riverside Industrial Estate (accessed via A1081).
- Freight vehicles cause congestion, particularly at key junctions (namely the two on the A414, and at the M25 Junction 22). It was noted HGVs contribute to the morning peak more significantly than the evening peak.
- Freight problems have been reported within London Colney village centre, as well as Mount Pleasant Lane and the Watling Street/Park Street/Frogmore route. Quantities of HGV traffic, narrow roads are blamed.
- Freight-related accidents are an issue within the study area. The key hotspot of concern is at the junction of the A414, A1081 and London Colney High Street, where six took place involving LGVs within the last period (2003-2006). In addition, the Harper Lane/A5183 junction has an accident history, caused by a narrow bridge which does not allow two lorries through at a time.
- The proposed proposal for a freight and logistics activity centre at Radlett would have generated a substantial increase in lorry and rail freight traffic activity in the study area. The planning application was refused by The Secretary of State who agreed with the Planning Inspector, who recommended that the proposal be rejected on the grounds that it would represent an “inappropriate development in the Green Belt”.

3. OBJECTIVES AND TARGETS

UTP objectives

- 3.1 The most relevant objectives from other plans were taken and adapted in consideration of local circumstances and problems, to create the UTP objectives. The LTP objectives were the most important of these, as it is understood that the UTP must relate closely to this larger transport plan. The LTP Objectives can be found earlier in this document, in Table 5.3 (page 12).
- 3.2 The diagram in Figure 3.1 below shows how the objectives from various sources fed into the UTP objectives. Further detail of the rationale behind each is given in the paragraphs below.

FIGURE 3.1 HOW THE OBJECTIVES WERE DERIVED



- 3.3 All of these objectives were reviewed and agreed by the district and county officers and councillors.

Congestion objectives

Objective C1. Reduce the impacts of congestion at key junctions and problem areas.

- 3.4 Tackling congestion was identified as a key issue in the policy documents. The Hertfordshire Mid-Area Transport Plan has an objective which is closely aligned to congestion objectives C1 & C2; Reduce growth in travel demand by motor vehicles The LTP has; to manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time.
- 3.5 The issue of congestion is of particular significance in the study area because of the regular problem of traffic diverting from the strategic routes (M25 and M1) onto local roads when accidents and other problems cause delays on the principal network.
- 3.6 In addition, when we analysed traffic statistics and drew profiles of traffic flow, it was evident that there is a lot of peak time congestion in this area. This is due to a high proportion of commuter travel. It is in contrast with St. Albans city centre, where congestion is fairly constant throughout the day, as there are a lot of shopping and entertainment destinations for people to travel to during the daytime.
- 3.7 It was decided that the objective to tackle the congestion should be aimed at key junctions (e.g. the London Colney & Park Street roundabouts and the M25 & M10

junctions along the A405) and problem areas (such as outside schools and retail sites). Additionally, specific attention was drawn to travel by car to school and employment, so this is dealt with in a separate objective.

Objective C2. Lower the demand for car travel to school and employment.

- 3.8 Councillors and other stakeholders have mentioned the need to address the specific journeys to school and work. A majority of school children travel to school by car¹. Around 40% travel to school in an individual car or in a car-share, another 12% 'Park and Stride' (where parents park in designated car parks and walk with their child for the remainder of the journey). This leaves a remaining 48% who use more sustainable means to get to school (47% of which travelled by foot, and just 1% cycled).
- 3.9 In our consultations, stakeholders also raised the point that the lack of free school buses meant that students have to use the normal bus services (where bus routes exist), which can be less convenient for these trips and can therefore influence pupils' perception of public transport for the future.

C3. Minimise the impacts of the new developments on congestion.

- 3.10 According to the Mid-Hertfordshire Area Transport Plan, 540 dwellings will be built in London Colney, and there are proposals for 400 residential units on the Harperbury Hospital site, alongside new retail and healthcare facilities. Nearby larger developments will also have an impact on the study area, generating more trips. This objective was therefore set up to address this potential problem.

C4. Encourage the use of sustainable transport modes as alternatives to the car.

- 3.11 This objective derived from the general objective in the Hertfordshire Mid-Area Transport Plan, such as "Encourage the use of other modes as an alternative to the car", "Reduce growth in travel demand by motor vehicles, and "Identify, and resolve by sustainable means, the causes of current movement problems", as well as the LTP objective "To develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources".
- 3.12 The study area currently has low levels of public transport use, with only a maximum of 10-15% bus-use in the most urban parts of the study area. Over the majority of the study area it is under 5%. Rail use is of similar proportions, as are proportions of people walking and cycling (see Section 7 of the Introductory Report for further detail). The Hertfordshire average for commuting by car is 71%, but in the study area, this rises to 78%. This makes this objective particularly important to the Southern St Albans study area.

¹ Averages of mode share in June 2006, from primary schools within the Southern St Albans study area. Data supplied by Hertfordshire Highways

Safety objectives

S1. Improve safety at road junctions and crossings - for pedestrians and cyclists

- 3.13 Safety is always an important consideration when trying to improve local transport. The LTP has the objective “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.” The Hertfordshire Mid-Area Transport Plan wants to “Reduce the adverse impacts of transport on safety”, and “Improve personal security and safety”. These will be carried forward into the Southern St Albans UTP with this, and the next objective.
- 3.14 Safety issues were mentioned at stakeholder meetings. Problems seemed to be caused by HGVs and speeding traffic, along the typically narrow roads found in the study area. There were several places where stakeholders thought there should be new crossings or speed limits. Another point noted was the lack of pavements along many roads, and the busy routes advised for home-to-school walking.

S2. Improve security at public transport interchanges (stations and stops)

- 3.15 Written consultation responses informed the study that local bus stops and rail stations within the study area were not very safe, or at the very least, did not give a feeling of safety. For example Bricket Wood station (which is on the Community Rail Line), is not well lit and quite remote. This objective would also concur with the Hertfordshire Mid-Area Transport Plan objective to: Improve personal security and safety.

S3. Reduce road traffic accident levels

- 3.16 This fully supports the LTP objective (stated above in paragraph 3.13), and the Hertfordshire Mid-Area Transport Plan objective to: “Reduce the adverse impacts of transport on safety.”
- 3.17 Road traffic accident levels was a high concern of those we consulted, who emphasised the dangers of HGVs, narrow roads and inappropriate speeds along Watling Street. Other hotspots identified included the London Colney roundabout and Park Street Lane.

Accessibility objectives

A1. Improve access to local hospitals by public transport

- 3.18 Research into access to local hospitals by public transport showed relatively poor levels of accessibility in the study area. Looking at travel time (by public transport) to a local hospital from the study area, only those in very small areas north of Park Street and London Colney could access one within 30 minutes, and none of the study area was within 20 minutes travel to a hospital (Figure 2.37).
- 3.19 Consultation results also indicated that access to hospital was poor, and the LTP includes the objective; “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.”

A2. Improve passenger transport connections - particularly east-west links

- 3.20 The problem of poor east-west links came out mainly in the stakeholder consultation, and the Hertfordshire Mid-Area Transport Plan which has an objective to “Improve passenger transport connections - particularly east-west links”.

Consultees said that journeys east to west are currently served by the M25 or the A414/M10, but congestion problems along these roads sometimes make this very difficult. Alternatives should be sought, coupled with improvements to public transport east-west links.

A3. Improve access to employment by public transport

- 3.21 Policy as well as consultation responses were the main origins of this objective. The Hertfordshire Mid-Area Transport Plan states it seeks to “Improve accessibility of employment areas and retail centres by sustainable means”, and this is backed up by the LTP objective “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.”
- 3.22 Consultation with stakeholders (including the Job Centre Plus), indicated that many employees had problems accessing employment outside of ‘normal working hours’, by public transport. Many of the bus services do not cater for shift-work. Measures to address this should be sought.

A4. Improve quality of walking and cycling routes to access key locations

- 3.24 When travelling around the study area, it is evident that many areas do not have pavements for pedestrian access, and there is a limited cycle network. Data analysis from the 2001 Census showed very little walking and cycling to work was taking place.
- 3.25 Consultation with stakeholders told us that, other than the lack of pathways and cycle-paths, walkers and cyclists are deterred by the fast/inappropriate speeds and narrow roads used by HGVs. Stakeholders were pleased to see the introduction of a new off-road cycle route in Bricket Wood & Park Street recently, but felt more could be done.

Environment objectives

E1. Minimise the impact of freight distribution on the local environment

- 3.26 The impact of freight distribution is a key issue for this UTP with the substantial volumes of freight traffic passing through the area, to the warehousing units and also to the retail outlets within and close by.

E2. Reduce the adverse impacts of transport on health and the environment

- 3.27 This objective is taken directly from the Hertfordshire Mid-Area Transport Plan and was derived from the LTP’s objective to “mitigate the effect of the transport system on the built and natural environment and on personal health.”
- 3.28 Transport impacts on health in several ways. Simply reducing vehicle kilometres travelled by motorised vehicles reduces harmful emissions which cause respiratory health problems. Effective ways of achieving this include promoting more sustainable travel via Travel Plans, campaigns and promotion of public transport, walking and cycling. Air quality is a particular problem in the study area, which has two Air Quality Management Areas (around the major motorways running through the area), making it particularly important that this plan tackles this objective.
- 3.29 Transport impacts on health in other ways as well, such as improving individual’s physical fitness. Walking and cycling are ideal ways to achieve this. The risk of coronary heart disease, one of the biggest causes of death in this country, is double for an

inactive person compared with an active person². More can be done to encourage fitness via non-motorised travel such as walking and cycling. This is especially relevant for home to school travel, and also for leisure.

E3. Minimise visual intrusion and community severance arising from transport infrastructure

- 3.30 This objective stems from the LTP objective “To mitigate the effect of the transport system on the built and natural environment and on personal health”. Increased traffic levels and speeds have made community severance worse over time, and it is important to reduce the effects as much as possible. This was echoed in consultation responses.

E4. Manage and make best use of existing infrastructure and services

- 3.31 As a small urban area, it is more efficient to make use of existing infrastructure and services. Consultation and statistics gathered showed that the current bus service and local train stations are under-used, and this could be remedied with many possible solutions such as increased publicity and distribution of information.

Relationship to LTP objectives

- 3.32 The following table (Table 3.1) shows the connection between the LTP and the UTP objectives. It demonstrates that they cover the same categories, but those for the UTP are tailored to the problems in that area. There is also has a column relating the UTP objectives to the LTP’s targets.

Further detail on the LTP targets and indicators is given in detail in Table 3.2.

TABLE 3.1 FORMATION OF UTP OBJECTIVES AND CONNECTION TO LTP INDICATORS

Shared Priorities	LTP objectives	Southern St Albans UTP objectives	LTP indicators relating to each UTP objective
Safety	1. 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.	S1. Improve safety at road junctions and crossings - for pedestrians and cyclists.	RS1, RS2, RS3, CN4, CN5
		S2. Improve security at public transport interchanges (stations and stops).	PB2, PB4
		S3. Reduce road traffic accident levels.	RS1, RS2, RS3, RS4
Congestion	2. To obtain the best use of the existing network through effective design, maintenance and management. 3. To manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time. 4. To develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources.	C1. Reduce the impacts of congestion at key junctions and problem areas.	CN1, CN2, CN3
		C2. Lower the demand for car travel to school and employment.	CN1, CN2, CN3, CN6
		C3. Minimise the impacts of the new developments on congestion.	CN1, CN2, CN3
		C4. Encourage the use of sustainable transport modes as alternatives to the car.	CN2, CN4, CN5, CN6, PB1, AQ1
Accessibility	5. 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. 6. 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.	A1. Improve access to local hospitals by public transport.	AC1, BP3, BP4,
		A2. Improve passenger transport connections - particularly east-west links.	BP1, BP3, BP4, PB2
		A3. Improve access to employment by public transport.	BP1, BP3, BP4, BP5
		A4. Improve quality of walking and cycling routes to access key locations.	HC4, CN4, AC1
Environment	7. To mitigate the effect of the transport system on the built and natural environment and on personal health. 8. To raise awareness and encourage use of more sustainable modes of transport through effective promotion, publicity, information and education. 9. 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.	E1. Minimise the impact of freight distribution on the local environment.	CN1, CN2, CN3, AQ1, HC1, HC2, RS1, RS2
		E2. Reduce the adverse impacts of transport on health and the environment.	CN4, CN5, AC2, AQ1
		E3. Minimise visual intrusion and community severance arising from transport infrastructure	AC2, CN5
		E4. Manage and make best use of existing infrastructure and services.	HC1, HC2, HC3, HC4, AC2, BP5

Targets and Monitoring

The HCC Local Transport Plan has set out a framework to monitor and evaluate the success of the implementation of the Plan. A set of targets and indicators has been developed to serve this purpose. These are shown in Table 3.2 below.

For the UTP, it is proposed to use the same targets and indicators as the LTP to measure progress towards UTP objectives. They will be referred to in the UTP Implementation Plan by the reference number in the left hand column of Table 3.2.

No specific costs for additional monitoring have therefore been included in this Plan. Where possible the data that is collected centrally by HCC should be disaggregated to the UTP level to examine local progress towards objectives.

The LTP indicators that relate to the UTP objectives are shown in Table 3.1 above.

TABLE 3.2 LOCAL TRANSPORT PLAN TARGETS AND INDICATORS

Ref	LTP Indicator	Baseline (2003/04)	Progress 2006/07	On track?	LTP objectives	Target (2010/11)
HIGHWAY CONDITION						
HC1	Principal Road Condition [% of network in need of repair]	8% (2005/06)	8%	Yes	2, 4	8%
HC2	Non-Principal Classified Road Condition [% of network where structural maintenance should be considered]	19.44%	13%	Yes	2, 4	19.44%
HC3	Unclassified Road Condition	19.29%	14%	Yes	2, 4	19.29%
HC4	Footway Condition	52%	29%	Yes	1, 2, 4, 5	52%
ROAD SAFETY						
RS1	Killed and Seriously Injured	1084 (1994-98)	499	Yes	1	No more than 600
RS2	Children Killed and Seriously Injured	113 (1994-98)	37	Yes	1	No more than 56
RS3	Total Slight Casualties	5509	4704	Yes	1	No more than 5509
RS4	Speed Limit Compliance	56% (2004/05)	57%	Yes	1, 2, 7	60%
BUS PATONAGE						
BP1	Public Transport Patronage	31 million journeys per year	32.5 million	Yes	3, 4, 5, 7, 8	31 million journeys per year
BP2	Bus Service, User Satisfaction	55%	45%	No	4, 5	60%
BP3	Bus Punctuality	80% (2004/05)	84.5%	Yes	2, 3, 4, 5	85%
BP4	Passenger Transport Information, User Satisfaction	39%	44%	Yes	4, 5, 8	50%
BP5	Abbey Line (annual passengers)	375,000 journeys	415,841	Yes	2, 3, 4, 5, 7, 8	562,500 journeys
CONGESTION						
CN1	Changes in Peak Period traffic flows	Watford – 22553 St Albans/ Hatfield - 16415	Tri-ennial rotating surveys. Data due for these areas in 2007/08	N/A	2, 3, 6, 7	Watford – 23284 St Albans/Hatfield – 17289

Ref	LTP Indicator	Baseline (2003/04)	Progress 2006/07	On track?	LTP objectives	Target (2010/11)
CN2	Change in Area-Wide Traffic Mileage	20.7 million	19.9 million	Yes	3, 7, 9	22.4 million
CN3	Congestion	To be established	To be established	N/A	2, 3, 4, 6, 7, 8, 9	To be set
CN4	Cycling Trips	2397 trips per day (2004/05)	2539 trips per day	Yes	2, 5, 7, 8	2658 (11% increase)
CN5	Mode Share of Journeys to School	Age 5-10: 49% Age 11-16: 64%	Age 5-10: 57% Age 11-16: 76%	Yes Yes	3, 5, 8	Age 5-10: 51.5% Age 11-16: 66.5% sustainable modes
CN6	School Travel Plan	14% (2003/04)	63.4%	Yes	1, 3, 5, 7, 8	83%
ACCESSIBILITY						
AC1	% of people who find it difficult to travel to a local hospital (Accessibility)	29%	28%	Yes	2, 3, 4, 5, 6, 8, 9	24%
AC2	Rights of Way	61% (2004/05)	69.6%	Yes	2, 4, 5, 7, 8	80%
AIR QUALITY						
AQ1	Air Quality	To be established	To be established	N/A	2, 3, 7, 8, 9	To be set

4. STRATEGY DEVELOPMENT

Long list of interventions

- 4.1 After considering the background issues and information, many possible ideas were put forward for improving the current transport network for this area. The measures aimed to address particular transport problems and help meet the objectives set for the plan. It was recognised that a range of solutions would be needed to address the variety of issues and objectives.
- 4.2 On a broad level, the types of measures put forward followed Government thinking and policy. The DfT generally promote looking for alternatives to constructing additional road network capacity through better network management, increasing choice and facilitating more sustainable travel decisions, wherever possible. The (draft) Guidance on Transport Assessments (DfT, 2006) indicates that developers should focus transport improvements on maximising sustainable accessibility before promoting significant highway improvements.
- 4.3 Measures were derived from meetings with Council Members and Officers, as well as workshops with the consultant appointed to develop the plan with the relevant experts who contributed to the Introductory Report.
- 4.4 The measures were arranged and grouped to make them of a comparable scale and magnitude. The types of measures included bus priority, improved bus ticketing, road safety training and campaigns; traffic restrictions and bans, amongst many more.

Appraisal process

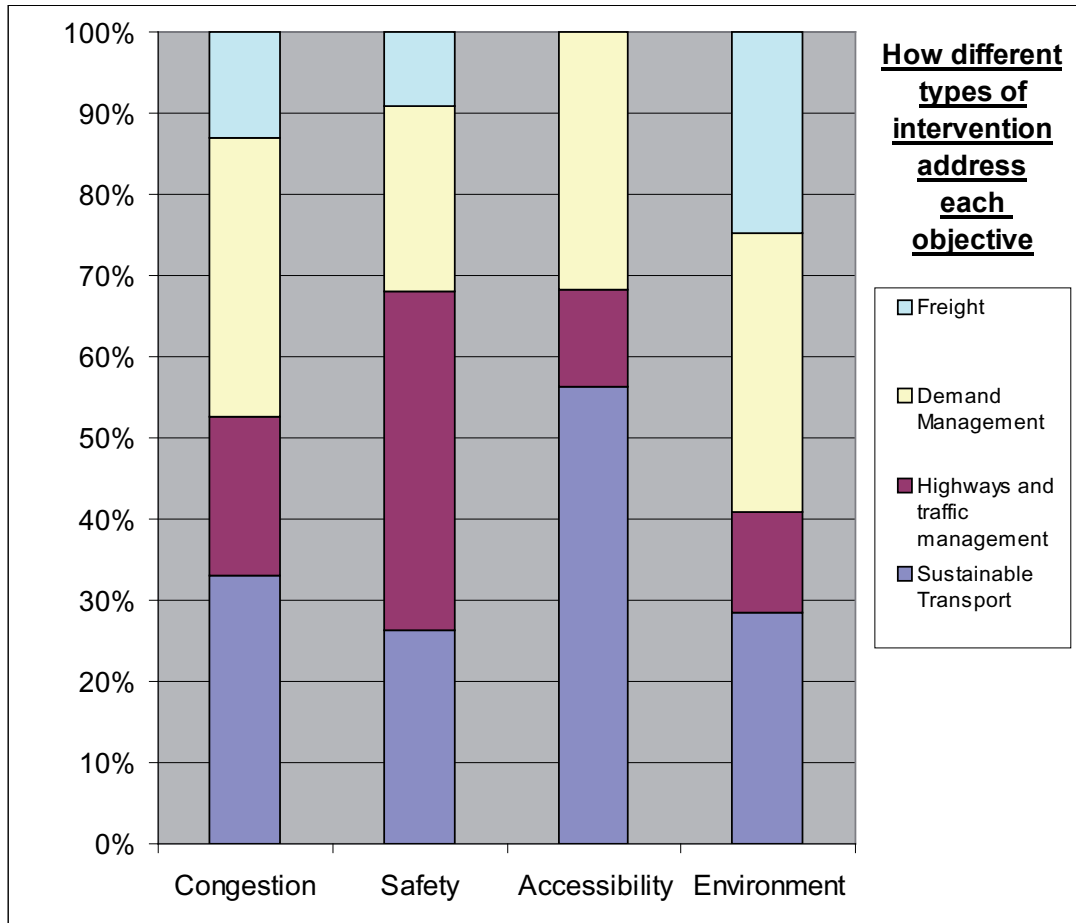
- 4.5 The UTP objectives were used to select the best, most relevant suggestions to improve transport, amongst the list of possible measures. The objectives were put into a matrix, heading each column. They were grouped by the Shared Priorities³; Congestion, Safety, Accessibility and Environment.

First stage of analysis - Scoring

- 4.6 All the interventions were scored against each objective, on a +3 to -3 scale according to consistency with each objective. The results were averaged so that categories could be compared.
- 4.7 We then looked at how the mix of interventions that would be required to address each objective, by calculating the percentage of scores hitting each of the Shared Priority objectives, from each intervention category. It showed that for Accessibility, for example, the Sustainable Transport & Demand Management interventions have greater importance.

³ The Government and Local Government Association (LGA) agreed, in July 2002, a set of seven shared priorities for local government. These priorities, which include raising the standards across schools, transforming the local environment and meeting local transport needs more effectively, are a focus for the efforts of Government and councils for improving public services. The shared priority for transport includes improving accessibility and public transport and reducing the problems of congestion, pollution and safety. A number of other quality of life issues are also related to transport and covered under the sustainable communities shared priority.

FIGURE 4.1 PROPORTIONS OF DIFFERENT INTERVENTIONS NEEDED TO MEET EACH OBJECTIVE



Second stage of analysis – Ranking and Deliverability

- 4.8 The measures were then ranked in order of their overall contribution towards all the objectives (overall average score). At the same time, each of the interventions was tested for 'deliverability'. This considered:
- Feasibility: time, cost, design / build difficulty.
 - Policy and funding: fit with wider objectives and funding sources
 - Acceptability: both public and political.
- 4.9 Steer Davies Gleave assessed this based on professional judgement and previous experience. Each intervention was given a 'traffic light' colour of red, amber or green, depending on its expected level of deliverability. Comments and observations from council members and officers were also taken into account. These were voiced at a consultation meeting on 2nd April 2007, and through further meetings councillors had with the District and County officers regarding the interventions proposed in this area.
- 4.10 Interventions deemed undeliverable were removed. Most of the top scoring measures had been given a predicted 'green' light for deliverability, and a few were 'amber'.

Third stage of analysis – Gap Analysis

- 4.11 Gap analysis was then undertaken to identify if any objectives were not being addressed sufficiently by the proposed interventions.
- 4.12 This involved calculating how much contribution each measure was making towards each objective and looking at how much coverage each objective had. It became evident that there were not enough measures to address two of the objectives:
- A2. Improve passenger transport connections, particularly east-west links.
 - E1. Minimise the impact of freight distribution on the environment.
- 4.13 Some new interventions were then added to increase contribution in these areas, such as increased Demand Responsive Transport (to help passenger transport connections along less commercially viable routes such as the east-west ones), and measures to increase work with freight operators, to minimise the negative impact of freight distribution.
- 4.14 At this stage, there was a meeting with Councillors, who felt the need to re-include some of the measures which were taken out at an earlier stage as they did not score highly enough in the quantitative appraisal. Those put back in were; Small scale traffic engineering measures to improve congestion; and, Traffic restrictions and bans. It was later realised that the latter of these overlapped with an existing measure, so it merged with this one.
- 4.15 The measures which were removed during the process are listed in the table below, along with the reasons for their removal:

TABLE 4.1 SCHEMES WHICH WERE REMOVED DURING THE APPRAISAL

Ref	Name of scheme removed	Reason
1	Bus Priority (at junctions and roundabouts)	Controversy over whether bus priority lanes would increase traffic queues on other lanes – which would be politically unacceptable.
4	Improved bus ticketing	Not a key element to the strategy. Suggestion of use of Oyster not in County's short term policy. Consider as a long-term recommendation.
11	Rail improvements (engineering measures)	The main element of this intervention – a rail loop - is considered too expensive and outside the scope of this plan. It should be retained as a long term aspiration for the area.
12	ITS to relieve traffic congestion at junctions	There are very few junctions which have signals in the study area. SCOOT could possibly be implemented as a longer-term measure and if junctions are revisited as part of an accompanying scheme for the site.
17	Measures to enable significant increases in highway capacity	Considered too expensive, and would induce more traffic, having a negative environmental effect on the area. This goes against the environmental objectives for transport at a county-wide and local level.

Ref	Name of scheme removed	Reason
19	Improve signing and routing for through and local traffic	A road signage improvement programme is already underway and recommendations for any extra signs would be identified via talks with operators. Key elements of this scheme are already included in another intervention. It was felt that a review of the current weight limit system and the accompanying orders and signs would be most effective at deterring unwanted traffic.
23	Marketing (inc internet shopping promotion)	Did not score highly enough at appraisal. Advertising of commercial services for transporting shopping is already undertaken by the private sector. Some elements of this intervention will be covered by other interventions (e.g. walking and cycling promotion).
24	Improve efficiency of freight trips through the area	Members felt that the focus should be more on managing the impacts of freight than improving efficiency.
25	Improved signage for HGVs	This intervention overlaps too much with another intervention.
27	Increase use of the planning process, access and operating controls	The measures within this intervention were already covered in other interventions.

4.16 The final chosen measures that emerged from the appraisal process are described in full in the Section 5, in the Implementation Plan.

4.17 Those which cannot be part of this Urban Transport Plan but that remain long term aspirations for Hertfordshire County Council, are listed in below. These have been derived both from the list of rejected UTP schemes above, and those which have been raised in consultation with councillors as worthy schemes by other promoters.

TABLE 4.2 LONG TERM ASPIRATIONS FOR THE COUNTY COUNCIL

Description of scheme:	Additional information:
Restoration of the old passing loop at Bricket Wood. If implemented, this would facilitate trains running every 30 minutes, instead of the current 45-minute service.	Network Rail turned down this scheme in early 2008. However it remains an aspiration.
New infrastructure considered in the St Albans City and District Council Core Strategy Development Plan Document, Issues and Options Consultation Paper (July 2007)	These proposals have been drafted by St Albans District Council to be considered as part of the Local Development Framework. However extensive investigation would be needed to ensure that the traffic could be dealt with at its destination.
Improved link between M25 and southbound M1 to alleviate use of A405 & Mount Pleasant Lane.	Such a large scheme would have to be brought forward as a Major Scheme, at the County-level.

5. IMPLEMENTATION PLAN

Strategic Context

5.1 The work described above has identified four broad areas that will need to be addressed if the objectives for the study areas are to be met. These are:

- Congestion
- Accessibility
- Safety
- Freight

5.2 Strategies to address these areas are set out below.

Congestion Strategy

The objectives

5.3 To address the problems summarised above, the following objectives, in accordance with existing policy, were set:

- C1. Reduce the impacts of congestion at key junctions and problem areas.
- C2. Lower the demand for car travel to school and employment.
- C3. Minimise the impacts of the new developments on congestion.
- C4. Encourage the use of sustainable transport modes as alternatives to the car.

5.4 The schemes that play a part in the Congestion Strategy are as follows:

1. Support development of strategic ITS Solutions, including Variable Message Signs (VMS) to manage strategic diversions from the network.
2. Small scale traffic engineering schemes to address congestion
3. Personalised Travel Planning delivered to households within the study area
4. Development and promotion of Car Sharing
5. Develop Work-Place Travel Planning strategy for study area
6. Develop an area-wide travel plan for the Colney Fields Retail Park and Smug Oak Business Park
7. Promote Business TravelWise network to employers in the area

5.5 The Congestion Strategy comprises of some technology-based schemes, some traffic engineering schemes and some sustainable travel planning schemes to tackle congestion and potential increases in congestion by encouraging greater efficiency in car use, and developing attractive alternatives.

Scheme descriptions

1. Support development of strategic ITS Solutions, such as Variable Message Signs (VMS), to manage strategic diversions from the network.

5.6 The County Council has been developing an Intelligent Transport Systems Strategy⁴. This includes the development of the Passenger Transport Automatic Vehicle Location

⁴ We have referred to the HCC Report to Members, Highways and Transportation Panel, Meeting of 5th July 2007, Agenda Item 8 to give us the latest update on the progress of the Strategy at the time of writing this report. The consultation of the draft strategy is planned for early 2008, and it is anticipated the results of this will be presented to members in March 2008, prior to submission to the Cabinet.

(AVL) project. This provides base information for bus operators to better manage their services, improving service delivery on a day-to-day basis and using other historical information to improve scheduling and vehicle utilisation.

- 5.7 Improved information can also be used to manage the County's road network and inform drivers about delays and alternative routes. This is particularly relevant to this area, which frequently experiences the problem of traffic diverting through its smaller roads when the motorways (M1, M10 and M25) have traffic jams.
- 5.8 In the development of this ITS Strategy, there is discussion of expanding existing traffic counters and linking them into the central database to provide Real-Time Information about traffic conditions in the County, and to co-operate with adjacent Highway Authorities. The Highways Agency could also provide information about conditions in neighbouring areas. This data, plus information collected from strategically placed highways CCTV cameras and other monitoring systems, would enable much improved traffic management.
- 5.9 The County Council is replacing the existing Urban Traffic Control (UTC) system. The new system will utilise the latest Urban Traffic Management and Control (UTMC) specification. The system will incorporate a Central Database and 'knowledge' stored in this database can be used as input to complementary ITS systems such as automated diversion setting, variable message & car park occupancy signs. The changeover to the new system is likely to be undertaken in the 2008 summer holidays to minimise disruption.
- 5.10 This county-wide strategy may have important benefits to this area in the future. Considerations are currently being made to use the UTMC system to control a larger network of Variable Message Signs (VMS) on the approaches to major towns (which is particularly relevant to this study area, being just south of St Albans). VM signs could be placed at 'decision points' on the principal road network where road users would benefit from congestion information and vary their route accordingly.
- 5.11 As the strategy is still under development, no costs can be attributed to a scheme in this area, specifically, nor to a timescale. However, progress should be tracked and the plan updated as the ITS Strategy emerges.

2. Small scale traffic engineering schemes to address congestion

- 5.12 A number of specific, small scale schemes have emerged from consultation and investigation of problems with congestion in the area. These are listed below, and further detail of cost, funding and timescale can be found in Table 5.2, at the end of this section.
 - a. Feasibility study for signalling Park Street roundabout (M10 Junction 1, with A405 and A414).
 - b. Feasibility study for scheme to improve congestion on A414 from Park Street roundabout (M10) to London Colney roundabout. Primarily focusing on the London Colney roundabout
 - c. Introduce express lane at Park Street roundabout, towards Park Street from London Colney direction – filter out left-turn.
 - d. Investigate integrated solutions for the two junctions to enter Bricket Wood (Mt Pleasant Lane/ Old Watford Rd/ Oakwood Rd, and Mt Pleasant Lane junction with M1 slip road).

- 5.13 The last of these (e) is of a high priority for the area and a solution is in great demand.

3. Personalised Travel Planning delivered to households in study area

- 5.14 Hertfordshire County Council are about to embark on a Personalised Travel Planning (PTP) Travelsmart project in partnership with Watford Borough Council and Sustrans in Watford. Success of this project will provide opportunity for further personalised travel planning work in the County, and this study area should be considered as a strong candidate for a further PTP project.
- 5.15 Census information on accessibility to employment by public transport and walking, car ownership and use to travel to work, coupled with mosaic information, highlights the potential a PTP approach in the UTP area. Experience suggests that such an approach could be particularly effective if undertaken in an area with new improved infrastructure, such as cycle routes, or improved public transport services.

4. Development and promotion of Car Sharing

- 5.16 The car share scheme for Hertfordshire (www.shareacar.com) is currently available but at present, however it is not promoted or supported by the County Council's workplace travel planning team. There is also a car share scheme for St Albans District on line at: www.stalbanstravel.com.
- 5.17 The availability of workplace travel plan staff within the Hertfordshire County Council will enable staff resources to be used to promote car sharing amongst employers, and ensure that this promotion is done in an effective and targeted way. This could include presentations and Question and Answer sessions to key employers, and encouragement for organisations to link their internal intranet sites to the car share scheme. Promotion of the benefits of car sharing whilst affirming the safe and flexible nature of the scheme will be paramount in its success.

5. Develop Work-Place Travel Plans for the study area.

- 5.18 At the present time, the resources available to support work place travel plans at the County level are limited. However, an increase in resources within the County Council is planned. In order to obtain maximum value from this additional resource, a firm strategy for development of workplace travel plans will be required.
- 5.19 A number of employers are based in London Colney and Park Street, with smaller numbers located in Bricket Wood and Chiswell Green. Engaging with these organisations as part of the UTP should be a priority, both to support and to monitor any travel planning activity already underway or to encourage and support new travel planning activity.
- 5.20 Processes for work place travel planning in Hertfordshire are closely linked with work done at the District level. The majority of workplace travel plans relate to travel plans developed as part of a planning requirement. The District Council provide the majority of support to these organisations developing travel plans in these cases.

- 5.21 However, at both County and District level, a coherent strategy for encouraging take up of voluntary workplace travel plans and monitoring all travel plans developed (including those developed as a result of planning requirements) appears to require consideration. This could be done by employing a member of staff at County (or District) level to have responsibility for this. The position could also cover the task in Scheme 4 (developing and promoting car sharing).

6 Develop an area-wide travel plan for the Colney Fields Retail Park and Smug Oak Business Park

- 5.22 Colney Fields Retail Park and Smug Oak Business Park provide significant concentrations of employment land in the UTP area and opportunity for development of area wide travel plans.
- 5.23 An area wide travel plan will provide a framework of Travel Plan measures applicable to all occupiers such as public transport improvements, improvements to cycling and pedestrian routes. These would benefit both employees accessing these sites, but also customers visiting retail outlets and other visitors. These improvements can then be complemented by occupier's own individual transport measures such as showers and changing facilities, or on site cycle parking.
- 5.24 The District Council has been working with employers in the city centre, to begin to develop travel plans and as part of a city centre area wide Travel Plan. This type of work could be expanded to cover associated branches in Colney Fields to develop Travel Plans in a more effective way.

7. Promote Business TravelWise network to employers in the area

- 5.25 In an effort to highlight the wide ranging benefits of workplace travel planning in terms of efficiency, economic gains, health benefits to staff, and improved opportunities for recruitment and retention of staff, the Business TravelWise network should be promoted to employers in London Colney and Park Street. This could become an additional task to a member of staff employed to cover the issues in both schemes 4 and 5.

Safety Strategy

- 5.26 To address the safety-related problems, the following objectives, in accordance with existing policy, were set:
- S1. Improve safety at road junctions and crossings - for pedestrians and cyclists.
 - S2. Improve security at public transport interchanges (stations and stops).
 - S3. Reduce road traffic accident levels.
- 5.27 The interventions that play a part in the Safety Strategy are as follows:
- 8. Audit of train station conditions, including DDA compliance
 - 9. Speed reducing features & speed control schemes, around all schools where necessary, and at other locations
 - 10. Review signing & propose comprehensive, clear and uncluttered signing strategy

11. Assess feasibility of 20mph speed limits around schools and in residential areas
12. Local Safety Schemes
13. Schemes to manage car parking
14. Complete School Travel Plan at London Colney JMI and Nursery
15. Develop School Travel Plan at Forest House School
16. Implement School Travel Plan measures & maintain impacts from existing plans
17. Ongoing review of School Travel Plans

- 5.28 The Safety Strategy consists of a number of interventions aiming to increase safety for children, walkers and cyclists, as well as those travelling by other means. One of the key interventions within the strategy to help achieve these objectives is through local safety schemes, and speed control systems. Some of these more specific schemes had already been identified by officers and councillors. Generally the schemes involve improving routes and junctions to increase protection for those using these facilities (pedestrians cyclists and car drivers alike), and ensuring speeds are kept to a safe level by various means, engineering and non-engineering. To address the safety of children, this strategy aims to finish and maintain the good work of implementing School Travel Plans at every school. These plans identify transport measures to improve safety for school children and encourage safe, sustainable travel.

Scheme descriptions

8. Audit of train station conditions, including DDA compliance

- 5.29 A Community Rail Partnership pilot operates in this area, and is one of the six original national schemes. Consideration should be given to organising an audit of the train station conditions, noting facilities such as access for buses, cycle storage, safe access for pedestrians and disabled people, and the provision of passenger information.
- 5.30 For DDA compliance, the prime need is for the platform to be raised throughout its length in order for the vertical gap to be reduced in scale so that wheelchairs users may board trains. Since the new franchisee (London Midland) took over recently, a trial of this has been taking place at a station (Harrington) in Cumbria, and if successful, the relevant partners (Network Rail, London Midland, the DfT, HCC and the Community Rail Partnership) will work towards getting this put in at Abbey Station.

9. Speed reducing features & speed control schemes, around all schools, and at other locations

- 5.31 Some Schools in the study area would benefit from speed reducing features and speed control systems and the following locations have also been identified as having potential for such treatment:
- a. White Horse Lane (anti-speeding measures along / installation of more crossings. (Being considered as part of the London Colney S106 Working group)
 - b. Park Street/ Watling Street (speed reducing features)
 - c. St Stephen: Mount Pleasant Lane, by the bridge (VAS; Vehicle Activated Signage)

- d. A5183, London Colney High Street, Barnet Road, Kings Road & St Anne's Road (Being considered as part of the London Colney S106 Working group)
- e. Tippendell Lane & Park Street Lane (speed control, school signage and extra crossing).

5.32 At an earlier stage of this plan, there was an additional scheme regarding VAS at Shenley Lane (especially at the junction with St Annes, and on approaches to Telford Bridge). These schemes have been installed as part of the ongoing London Colney Section 106 works.

10. Review signing & propose comprehensive, clear and uncluttered signing strategy

5.33 Several times during the consultation undertaken for this UTP, it was mentioned that the road signage was not clear and sometimes became too cluttered and difficult to understand.

5.34 A review of the current state of the signage in the study area is proposed. This could cost in the region of £15,000-£20,000. Works costs are unknown until the review is carried out, however significant improvements may be possible helping to reduce confusion, delay and possibly even accidents.

11. Assess feasibility of 20mph speed limits around schools and in residential areas

5.35 Hertfordshire's Speed Management Strategy (July 2005) acknowledges that there is often public demand for lower speed limits, and measures to slow traffic, both in urban and rural areas, with a desire to increase general perceptions of safety particularly in residential areas. It recognises the impact speeding has on accidents, but also the need to keep traffic flowing to maintain the economy.

5.36 The Speed Limit Framework⁵ presented in this strategy, shows that 20mph speed limits would only be applicable on Main and Secondary Routes by exception, in villages, town centres with restricted layouts and vulnerable road users. On Local Roads and Access Roads it may be used as part of the Quiet Lanes designation, if the relevant criteria are met. It could also be put in place as part of a Home Zone, or in Town/Village centres where there are no footways and narrow roads, in some residential areas outside schools and along access roads in new developments.

5.37 This scheme would see a review of speeds in the study area to determine the need for 20mph limits in the areas specified. This should be a study conducted by or commissioned by the County Council, costing under £25,000 and taking under 6 months to complete. The Strategy's Framework could then be followed, enabling the installation of new 20mph limits where appropriate.

5.38 It should be noted proposals have been made to central government for implementing mandatory speed limits of 20mph in residential areas (reduced from the current 30mph limit). A report by the Parliamentary Advisory Council for Transport Safety (PACTS) issued in October 2007 stated this would cut fatalities on British roads by two-thirds, from 3,100 to

⁵ Speed Limit Framework - Table 1 of the Speed Management Strategy (page 4). July 2005. The note under the table states; The definition of a village for the purposes of setting speed limits should be based on the following criteria relating to frontage development and distance: there must be 10 or more houses grouped together (or see guidance in replacement of circular 1/93); and a minimum length of 600 metres.

1,000 per year. The immediate response from the Department for Transport was that it supported 20mph limits, but the decision on implementing them would be left to local authorities and it expected them to be installed in accordance with the guidelines in place.

- 5.39 20mph limits in appropriate built-up areas could also encourage more cycling and walking, as well as improving safety.

12. Local Safety Schemes

- 5.40 Research and consultation has resulted in the proposition of the following schemes to enhance local safety:
- a. London Colney Roundabout, London Road, A414 casualty reduction proposals.
 - b. A5183 junction with Harper Lane (St Stephen).
 - c. Park Street Lane – review existing traffic calming and consider replacing chicanes with raised tables and pedestrian crossings.
 - d. Spooners Drive – measures to reduce safety risk from on-street parking around schools.
 - e. A405 outside Burston nurseries – investigate scheme to redirect traffic at entrance of nursery, around the roundabout, rather than crossing straight over.
 - f. Mount Pleasant Lane junction with Bucknalls Drive up to slip road at junction 6 M1, accident risk near school – Park & Stride.
 - g. Watford Road junction with Tippendell Lane – dangerous vehicle movements. Reinforce road markings to order traffic.

It is noted that not all of these sites are included in the County Councils Hazardous Sites list or meet investigatory levels. However where possible they should be considered along side other schemes or for funding from alternative sources from the local Transport Plan.

- 5.41 There were two schemes which were discussed at consultation but have since been removed. One was to investigate drainage problems at Mount Pleasant Lane/School Lane. A scheme to fix this problem was carried out in 2006 so it should no longer be causing a problem. However, the situation there will continue to be monitored to ensure this is maintained. The second scheme suggested pedestrian improvements at the pedestrian crossing at Killigrew Infant School.

13. Schemes to manage car parking

- 5.42 The following schemes have been put forward for better, safer parking in the study area:
- a. Encourage use of off-street car park (Haseldine Park) via publicity and signage.
 - b. Traffic Regulation Order (TRO) to address parking problems at Sycamore Drive at the junction of A5183 and entire length of Sycamore Drive. In addition, a TRO to address parking problem accessing Beeches (off Sycamore Drive), and parking problems along Park Street.
 - c. Watford Road (service road) by Hire One shop – problem with parking on verges. Install (2 hours) limited waiting.

School Travel Plans

- 5.43 The target for Hertfordshire is to have 83% of schools with School Travel Plans by 2010 and in the UTP area this target will be exceeded. Due to the good uptake of School Travel Plans in the UTP area, continuation of implementation of measures, monitoring of impacts and ongoing review is the priority.
- 5.44 The Safer Routes to School (SRTS) process takes approximately 18 months to 2 years per school and involves questionnaires, forum meetings, engineering measures and educational measures. Small Works Projects (SWPs) aim to be 'quick win' projects, with minimum contact with the schools and small measures such as parking restrictions and signage.
- 5.45 Within the UTP area Mount Pleasant Lane, Park Street, Killigrew Juniors and Infants, Bowmans Green and St Bernadette's have all had SRTS initiatives undertaken. In addition to the SRTS work, there is a County Wide programme to upgrade school crossing patrol sites, zebra crossings and signage improvements.

14. Complete School Travel Plan at London Colney JMI and Nursery

- 5.46 London Colney JMI and the Nursery are progressing their travel plans and continued support should be offered to these establishments in developing effective School Travel Plans with realistic targets and measures.

15. Develop School Travel Plan at Forest House Special School

- 5.47 Each primary school developing a Travel Plan in the area is entitled to £3750 + £5 per pupil. This funding is available direct to the school from the Department of Children Schools and Families. The Forest House Special School is the only school in the area not progressing a Travel Plan at present. The School Travel Plan Coordinator should maintain a relationship with Forest House Special School and support them in developing a School Travel Plan if appropriate. The school should be made aware of the benefits of School Travel Plans for all schools, including special schools and the role they can play in assisting children in developing life skills. The funding available for development of a Travel Plan should also be highlighted to the school.

16. Implement School Travel Plan measures & maintain impacts from existing plans

- 5.48 At present the take up of school travel plans in the UTP area is high. Seven of the schools have School Travel Plans already developed, and all the others have them underway except Forest House Special School (which Scheme 14 is addressing).
- 5.49 These Travel Plans should continue to be implemented and monitored. Safer Routes to School funding is available for engineering measures which will assist in the promotion of sustainable travel to school.

17. Ongoing review of School Travel Plans

- 5.50 The majority of schools have School Travel Plans in place in the UTP area. To ensure these continue to perform well as strategies in their own right, it is important that they are reviewed over time, for example every 3 years from initial approval of the School Travel Plan.

Accessibility Strategy

- 5.51 Accessibility is a key problem for this study area. To address this problems described earlier in this document, the following objectives, in accordance with existing policy, were set:
- A1. Improve access to local hospitals by public transport.
 - A2. Improve passenger transport connections - particularly east-west links.
 - A3. Improve access to employment by public transport.
 - A4. Improve quality of walking and cycling routes to access key locations.
- 5.52 The interventions that play a part in the Accessibility Strategy are as follows:
- 18. Bus stop shelter improvements, including improved bus stop design and appearance, DDA compliance & Real-Time Information when available
 - 19. Bus Punctuality Improvement Partnerships
 - 20. Investigate feasibility of constructing a taxi rank in London Colney
 - 21. Advertising taxi numbers in well-known locations
 - 22. Identify opportunities for expanding bus operation hours and network coverage by developer/private funds
 - 23. Extend existing Demand Responsive Transport (DRT) services in the study area
 - 24. Publicise existing DRT services in the study area to increase awareness and maximise use
 - 25. Negotiations with Train Operating Companies (TOCs) to adjust timetables of trains to run at more regular times
 - 26. Traffic management to reduce obstruction to walking around all schools
 - 27. Review optimum locations and install more cycle parking (at local shopping areas, schools, the SavaCentre, and all libraries
 - 28. Schemes to encourage cycling.
- 5.53 The Accessibility Strategy involves improving the standards and increasing the levels of service of public transport in and around the study area. This is achieved through a number of interventions, ranging from encouraging improvements to the bus network to enhancing and publicising Demand Responsive Transport services. Routes and facilities for pedestrians and cyclists are also improved in this strategy to encourage walking and cycling.

Scheme descriptions

18. Bus stop shelter improvements, including smarter bus stop design, Real-Time Information & DDA compliance.

- 5.54 The bus stops in the area look dated and unattractive, and are under-used. This has been highlighted by councillors and was evident from the site visits made for this study. It is important that stops show which number buses stop there. Hertfordshire County Council will be upgrading bus stop poles and flags via the Interlink partnership, however shelter provision is dealt with on a location by location basis in partnership with Parish Councils and via the Clear Channel shelter agreement.

- 5.55 The primary objective of the Intalink partnership⁶, set up in 1999, is;
“To promote, through a cohesive marketing strategy, the concept of an integrated high quality passenger transport system in Hertfordshire which will make increased use of the network more attractive to existing and new customers, thus making the local authorities objectives in the TravelWise Campaign and the passenger transport operators’ objectives to optimise commercial opportunities”
- 5.56 The 2005 Intalink Marketing Business plan for over 100 corridors in the county includes a summary of the County Council’s development ambition for each service.
- 5.57 There are several corridors in this UTP area that will receive attention over the next few years, in particular the London Colney routes are expected to feature in 2008/9 when there will be new stop facilities and the potential for some kerb improvements at the same time as improvements occur to the vehicles in use on the service.
- 5.58 In recent times because of the need to meet DDA requirements, buses on some of these services have converted to single deck operation. DDA requires low floor vehicles and suitable kerbs to be introduced network wide, improvements are likely to be going on throughout the network for some years to come in order to achieve this level of facility.
- 5.59 As the County Council does not have sufficient funding to meet the improvement needs of all of the services in the county, a prioritisation approach is being introduced in order to focus on the most appropriate services for improvement in timely fashion. The prioritisation takes due account of the potential to maximise the advantage from the investment, in terms of such things as patronage improvement and marketing opportunities. It also takes into account the practical constraints that inevitably also influence the priorities for action in such a major on-going network-wide programme of improvement to vehicles and infrastructure (such as when the likely introduction of low floor vehicles is likely to occur on the route and the consequent need for raised kerbs for DDA compliance).
- 5.60 The partnership strategy is founded on principles involving the improvement of data about services and patronage, the improvement of information services including the provision of real time and electronic information, and improvements including better stop displays and multi-operator ticketing initiatives. There is also to be more by way of strategic marketing and tactical marketing activity to promote the use of services.
- 5.61 With this in mind it is entirely appropriate for the Southern St Albans UTP area to benefit from improvements in the various services in the north orbital corridor and also those running in the north south axis through the area.
- 5.62 Other initiatives to be pursued through partnership working might include a multi- operator ticket for people living in the area so they can benefit from the different operator services and modes of service available to them.
- 5.63 A possible initiative to improve patronage on local mainline public transport services rather than to encourage more specialist services only open to some people would be to introduce a service, connecting up bus with rail services - requiring better information management and reliability. This would need planning, implementation, support, monitoring and continuing oversight if a project were to be introduced

6 Further information, including the strategy itself, is available on the website: www.intalink.org.uk.

successfully. Were such an idea to be pursued then it would need good information, confidence in the information and guaranteed connections, in order for it to work.

- 5.64 There is a different stream of work being done at the Council which will contribute to this measure in due course, via the ITS Strategy (see page 74). The development of AVL (Automatic Vehicle Location) as part of this will eventually provide the inputs to Real Time Information systems. Currently, it is estimated that once the AVL system is operating reliably, the Real Time Information element may take 12-18 months to come into operation, after the first vehicles are fitted with AVL equipment.

19. Bus Punctuality Improvement Partnerships

- 5.65 Hertfordshire County Council is establishing bus punctuality improvement partnerships in the Watford, Hemel Hempstead and St Albans areas, working with stakeholders including the district councils, the operators and the police in order both to monitor problems and to intervene in order to improve conditions.
- 5.66 Under the Traffic Management Act 2004 there are operational timekeeping targets, set and reviewed by the traffic commissioners for bus operators to observe, and county councils, given their partnerships with the bus operators have a responsibility to fulfil their highway network management duties in order to help to secure better more reliable bus operation.
- 5.67 This new process is in its early years but promises to assist in securing a better more reliable network of bus services in future. In the context of this Urban Transport Plan it will be appropriate for those monitoring events to report any difficulties to the County Council's traffic manager.
- 5.68 The St Albans bus improvement partnership should have considerable impact on services running through the area as it moves from the planning stage to reality. Currently it is anticipated that progress will be dependent upon the availability of good data on bus movements in the area and this is in turn dependent upon the introduction and commissioning of an automatic vehicle location system associated with bus system management and with the county council's traffic signalling systems which is expected to be put in place by 2010.
- 5.69 The extent to which the partnership's work improves bus service reliability will depend upon the degree to which there is traffic management intervention to make this happen. The draft Local Transport Bill heralds the prospect that the Traffic Commissioners for the area will in due course be able to call in operators and the County Council both to examine partnership arrangements and punctuality of bus services and to hold the county council to account, as highway authority and traffic manager, over the management of congestion and action to secure reliable bus service provision. This, if it happens, should secure improvements in reliability in due course.
- 5.70 Authorities wanting to use the legislation to help improve the reliability of buses could also employ stricter demand management measures in their busiest areas using this legislation to help them do so.

20. Investigate feasibility of constructing a taxi rank in London Colney.

- 5.71 Currently the only taxi rank is at the SavaCentre, and the need for more ranks has been expressed by Councillors, in particular at the centre of London Colney. The demand for this has not yet been proven and there may not be sufficient call for taxis to wait in this area, so it would be logical to do a study to confirm this need. The study would include making contact with the local taxi trade to assess their interest and options before designing any rank. It is likely to take no more than a few days to investigate this.
- 5.72 The study could even be done as part of an investigation of the *connect* service. The local taxi mode is one way of fulfilling the “guaranteed connection” promised by *connect*, and there may be some value in speaking to the local taxi trade as part of that process.
- 5.73 If a taxi rank was to be constructed, it is estimated to cost around £30,000 for construction, with a 6 month lead-in time.

21. Advertising taxi numbers in well-known locations.

- 5.74 Advertisements are currently placed in stations (Park Street ward only), London Colney High Street, schools, shops, and pubs. This needs to be monitored and ensured that the information is reliable and useful to users
- 5.75 This would be a job for a representative of the local parish / district council and or other local interests. The cost would be negligible as information leaflets, cards and posters would be supplied by taxi companies.

22. Identify opportunities for expanding bus operation hours and network coverage by developer/ private funds.

- 5.76 London Colney already has a good bus service level, with six or seven buses an hour in each direction across the day through the area to St Albans. However, in Park Street and the other urban areas of the UTP, services are infrequent and/or lacking.
- 5.77 Hertfordshire County Council has a Bus Strategy which was developed for the second LTP in 2005. Further to this, it has done a Bus Network Review⁷ as it felt the Strategy could not cover all of the local issues in a complex bus network area. This has focused on 20 out of a possible 100 corridors where the potential to have the most impact has been identified. Two, out of the twenty corridors chosen corridors pass through this study area. These are;
- 602 Hatfield - Watford via St Albans and Shenley/Radlett
 - 602/655/656 Hatfield – Borehamwood via St Albans and Radlett/Shenley

⁷ Bus Strategy Area Network Reviews – part of an HCC Report to Members, Highways and Transportation Panel, Meeting of 5th July 2007, Agenda Item 6.

- 5.78 Bus Network Review states, for the first of these corridors, that the possibility of additional integration of school movements via bus, between Radlett and Watford should be investigated. The corridor is mainly running commercial routes, but has HCC contract routes for some evenings and weekend services. The review states that the Council should support operator initiatives through the Interlink partnership scheme⁸. It points out that one of the main infrastructure issues for the corridor is the 'Delays at London Colney A414 roundabout'. This corridor is identified as part of the St Albans and Watford Bus Punctuality Improvement Partnerships, and is "one of key corridors to improve usage by continued vehicle, marketing and infrastructure work".
- 5.79 The second corridor (602/655/656) is a mix of commercial and HCC contract services, with the latter type covering all of the evening and Sunday services. The issues the Review identifies in the region of this study area, are;
- Long term commercial sustainability of the section of 602 between St Albans and Borehamwood via Shenley. HCC becoming responsible from February 2007.
 - Heavy school peak requirement between Borehamwood and Francis Bacon school requires duplication by HCC contract.
 - Need to retain even headways between 655 via Radlett and 602 via Shenley.
 - The corridor is impacted by delays on the A414 at the London Colney roundabout.
- 5.80 The Review contains a number of proposals for new service developments. The ones most relevant to the study area are; to link new developments at Napsbury at Harperry into the Borehamwood – St. Albans service development, in due course. The report does identify that the access to the Napsbury Park has been problematic to date and there may be resistance from the developer. Another proposal is; to market the corridor as a whole between Borehamwood and St. Albans and show all services including 656 evening and Sunday variations. This corridor is part of the St Albans Bus Punctuality Improvement Programme.
- 5.81 Additionally, the Southern St Albans links between bus and rail services (as mentioned in Schemes 18 & 20) could be useful for expanding network coverage, perhaps more so than seeking increased bus service frequencies where they are not commercially viable.

23. Extend existing DRT services in the study area

- 5.82 There are already a high number of DRT services in the study area, although several of these are somewhat restrictive in terms of eligibility criteria. This is shown in Table 5.1.
- 5.83 For several of these services, it would be useful to review the current system in terms of demand, need for new vehicles, and where any new routes could go.

⁸ The prospect of increasingly productive partnership working is high, as a result of the legislative changes that are going through parliament at present (Draft Local Transport Bill).

TABLE 5.1 DEMAND RESPONSIVE TRANSPORT IN THE STUDY AREA

Service	Eligibility
Age Concern St Albans - A 12 seat minibus, equipped with a tail-lift. Visits can be made to day centres and clubs and for any other trips for social, leisure and recreational purposes. A passenger in a wheelchair can be accommodated. A suitably experienced driver may need to be provided by users.	Available for hire by elderly people or groups
British Red Cross Society (Hertfordshire) - Provides transport and escort services. The car driver scheme is available to users who live in the local authority districts of East Herts, Broxbourne, Welwyn-Hatfield and St Albans. The charge during 2001 is £0.37 per mile for each client journey .	For people unable to use public transport to medical and other appointments
Carts and Carriages - Carts and Carriages has a fleet of 30 specially adapted minibuses available to hire. Although based at Bayford, just south of Hertford Town they operate in all the surrounding areas (e.g. Hertford/Stevenage/Harlow/Bishops Stortford/Potters Bar/St Albans/Cheshunt/Waltham Cross/Letchworth/Enfield/North London - Tottenham/Edmonton), and will go much further a field for specific journeys given availability and sufficient notice. The majority of their work centres on "Special Needs" schools and college long term contracts.	To groups or individuals throughout the county for any purpose, including trips to hospitals, airports, theatres and shopping centres
Hertfordshire Dial a Ride - This service is available to residents of Hertfordshire who have a permanent disability, are in receipt of a mobility allowance or those who qualify on age. The service can be used for local journeys to shops, libraries, visiting friends or places of interest and local GPs and dentists. Dial a Ride does not provide transport to hospitals as an outpatient, to full time education or to social services/health service day centres. Dial a Ride fares are comparable with passenger transport. The fares are quoted for a single journey and the booking office should tell you the cost of each journey.	For the elderly, disabled and those people who cannot easily use passenger transport
St Albans Good Neighbour Scheme - St Albans Good Neighbour Scheme provides a telephone helpline for practical assistance such as: collecting prescriptions; transport to medical appointments; shopping; small jobs around the home and befriending.	For the elderly, disabled and mothers, to be transported to hospital, doctors' surgeries, shopping and urgent personal business
Barbara Bus Fund - a small fleet of adapted vehicles for wheelchair users. The vehicles may be borrowed by individuals or groups, care homes & schools for up 2 weeks at a time	For wheelchair users.
Hertfordshire Action on Disability - this is a non-profit making wheelchair-accessible transport service available 24 hours a day	For wheelchair users.
St Albans Association for the Disabled - 10 seat tail-lift vehicle taking 5 wheelchairs available for hire with user providing driver. Seating (removable) for up to 12 passengers. Unavailable during the daytime on Wednesdays, Thursdays and Fridays.	For wheelchair users.
Health Shuttle - A door to door service which has operated in Hertfordshire since March 2005. All users pay a fixed fare and a fleet of five modern, small vehicles is used. Recently the service has been extended to serve Stevenage, Hitchin, Letchworth, Baldock and surrounding areas, providing transport between the Lister and the QEII hospital in Welwyn Garden City. The service does not currently operate at weekends or public holidays. The service is currently used by 26,000 people annually (around 500 hundred a week) and is funded by the three partners (although will become self-funding over time). The partners are Hertfordshire County Council, the East and North Hertfordshire NHS Trust and the East of England Ambulance Service. The Shuttle recently won the award in the 'accessibility' category at the annual National Transport Awards.	For patients who might otherwise find it difficult to get to appointments and visitors.

- 5.84 Although not officially a DRT, the 'connect' service (mentioned in Scheme 18) is a good alternative solution for bus users who have to make use of the public services in the area.
- 5.85 If a review found that a new DRT service is required to serve the study area, the costs could be as follows: Assuming only one vehicle/ driver was needed to operate the service at any one time, cost would be approx £25 per operated hour, or £100k per year (12hrs Mon to Sat, 8 on Sunday). Cost would come from revenue budgets. Alternatively, a kickstart bid could be considered (if the fund is continued) to cover costs for 3 years.

24. Publicise existing DRT services in the study area to increase awareness and maximise use

- 5.86 Although there are already many schemes on offer, they are not sufficiently publicised and are limited in availability at certain times and days. A publicity campaign could be funded, advertising services in the local papers and notice boards. Cost could range from £3,000 - £10,000.
- 5.87 It would need to be set up by the County Council and /or community transport scheme organisers, or a volunteer bureau, acting on behalf of the wider interest. It could be set up over a three month period but would need periodic updating to keep it in the public's minds so perhaps there would also a small refresher cost over time.

25. Negotiations with TOCs to adjust timetables of trains to run at more regular times

- 5.88 A Community Rail Partnership pilot operates in this area, and is one of six national schemes. It is reported to be going well with increasing patronage that could have reached its limit within the constraints of the existing 45 minute frequency of service level. The Parish Council have voiced aspirations for the Abbey Flyer service to be improved to a half-hourly service. The previously revenue-funded (County Council supported) Sunday service on the Abbey line is now part of the new franchise operation and there have been a few promotional evening service operations that are doing well, in terms of use.
- 5.89 There have been discussions with central government (the Department for Transport) regarding the re-building of a passing loop at Bricket Wood station, further to this remains a barrier to the introduction of more frequent services and a half hourly service remains the ambition of the partnership. No conclusions have been drawn yet and the ambition remains, with ongoing discussions involving all the relevant parties. HCC is commissioning a study to look at lighter rail options, however it is acknowledged that the cost of any works is substantial and long term.

26. Traffic management to reduce obstruction to walking around all schools

- 5.90 This scheme is to investigate and implement the best traffic management solutions to reduce obstructions around all schools and the following specific locations where problems have been identified:
- Telford Road/ Manor Road (LC)
 - Alexander Road (LC)
 - St Anne's Road
 - Spooners Drive
 - Peters Avenue
 - Mount Pleasant Lane

27. Review optimum locations and install more cycle parking

- 5.91 Identified as an under-used mode in the study area, providing facilities for parking bicycles would work towards increasing the number of people cycling to key facilities. Such a review would be quick and relatively inexpensive to undertake, and would identify prime locations to install cycle parking and lock-up facilities. Suggested locations from consultation included the local shopping areas, schools, the SavaCentre, and all libraries.

28. Schemes to encourage cycling

- 5.92 The cycling schemes highlighted by consultation, feedback from officers, and by reviewing the St Albans Cycling Campaign's list of suggested improvements to current facilities, there are two prominent schemes in the area.
- 5.93 a) *Schemes to reduce severance of London Colney and Park Street, caused by the A414.* The A414 runs between Park Street to the west of the study area, and London Colney to the east. This is a fast, busy road, which is not attractive to cyclists. Further study needs to be done to put forward this scheme, but the possibility of upgrading the existing footpath alongside the road into a shared use one would be very beneficial. The cost of this would depend on whether any significant engineering work would need to be done for example widening to alter the footpath, but if this was not necessary, it would be a low cost scheme with a high benefit to cyclists.
- 5.94 The unsignalled crossing for the Hatfield-St Albans cycle path has also been highlighted as a potential concern. Although the Highways Agency has responsibility for any alterations to this roundabout, the UTP notes the barrier-effect of the road and encourages further investigation of this issue.
- 5.95 b) *Review Shenley Lane traffic calming central islands with a view to improving the route for cyclists.* Traffic calming measures along this route have made it difficult to cycle along, so a review needs to be done to decide whether it may be possible to remove the islands, or alter them. Reference could be made to TfL's design guidance⁹, as this gives a good overview for reducing barriers to cycling.

Freight Strategy

- 5.96 The key UTP objective related to freight was “to minimise the impact of freight distribution on the local environment” (E1).
- 5.97 The final recommended freight interventions are;
29. Develop Freight Quality Partnership (FQP) for Ventura Park to minimise the freight impacts on the surrounding area
 30. Develop FQP for the Retail site and Riverside industrial estate at junction 22 of the M25
 31. Compulsory consideration of access arrangements for deliveries, servicing and construction for all new developments.
 32. Encourage use of Freight Advisory Route rather than routing through Watling Street & Frogmore
 33. Review signage for TROs and work with Hertfordshire Police to achieve a more effective enforcement of existing TROs relating to freight.
- 5.98 The Freight Strategy contains a mix of schemes to encourage better working arrangements between private and public sector components of the industry, resulting of better management of the network. Some specific problems are addressed, such as the misuse (or lack of awareness) of the Freight Advisory Route through the study area. These measures will result in positive impacts for both safety and congestion, with additional benefits on the environmental objectives of the UTP.

Scheme details

29. Develop Freight Quality Partnership (FQP) for Ventura Park to minimise the freight impacts on the surrounding area

- 5.99 A Freight Quality Partnership is a body made up of all of the stakeholders in freight activity within a certain geographical area to address freight-specific issues and problems by involving all parties with an interest, including the freight industry. There are numerous examples of FQPs in place in the UK, and the initiative is fully supported as a key mechanism for delivering the Department for Transport’s Sustainable Distribution Strategy.
- 5.100 The rationale for creating a specific FQP for the Ventura Park area is that this industrial site is a key freight generator, and the majority of road freight activity along the A5183 will have the Park as either an origin or a destination. There also appears to be considerable concern from the community about the impacts of this traffic, particularly on the residential communities in Park Street, Frogmore, whilst there is little engagement with the freight community, to understand the reasons why the traffic is generated, and any issues that affect their day-to-day operations.
- 5.101 In reality, the FQP is a delivery mechanism for achieving buy-in and assistance in addressing freight related issues. It is a means rather than an end in itself.
- 5.102 There are four elements of this work:
- Identification of FQP members, set up and launch
 - Identification of problems and research into potential solutions
 - Development of agreed objectives and action plan
 - Delivery of action plan

- 5.103 The identification of FQP members, set up & launch should take less than 6 months. It should be locally led with council officers assisting and leading where necessary, and cost less than £25,000.
- 5.104 Members will include:
- Council Officers
 - Highways Authority
 - Police
 - Operators regularly using site
 - Large Companies based at Ventura Park (must include B&Q)
 - Ventura Park Business representatives
 - Local residents representative
- 5.105 It should be a relatively small group, and needs to be carefully managed to ensure it does not become 'businesses versus residents'.
- 5.106 The identification of problems and research into potential solutions typically takes less than six months. The UTP should be used as a starting point, but the issues should be revisited and updated where necessary. There would be a need to consult more widely, and probably bring in an independent reviewer. Problems already highlighted in this area include:
- Use of Freight Advisory Route rather than A5183 through Frogmore
 - Congestion at key junctions on the strategic network to/from Ventura Park
 - Rat runs along Tippendell Road from junction with A405 through to A5183
 - Rat runs along Smug Oak Lane, Station Road and Mount Pleasant Lane from junction with A5183 to junction 6 M1
 - Turning lorries on the A5183 at the junction with Old Parkbury Lane
- 5.107 Other costs are associated with ongoing management of the FQP include approximately £10,000 per annum for administration, plus the time from all members to attend and contribute. Delivery of outputs will depend on the solutions the FQP come forward with, however a concerted effort to achieve early wins suggests at least £25,000 to £50,000 should be set aside for the first year to act as an incentive for the FQP to deliver real improvements. It may be possible to encourage partners to part-fund where clear benefits can be demonstrated.

30. Develop FQP for the Retail site and Riverside industrial estate at junction 22 of the M25

- 5.108 This is a key freight generating area within the study area, and although deliveries to/from these destinations appear to be well planned and managed, there are clear opportunities to understand more about the nature of current freight activity in this area, its impacts on local residents and road users and to achieve efficiency benefits for all parties.
- 5.109 The set up of an FQP is described in the scheme above (paragraphs 5.99 to 5.107).

5.110 Specific problems related to freight in this area include:

- Impact of congestion at peak times
- Interaction of delivery vehicles serving different outlets
- Issues with freight signage to/from strategic network
- On street parking of delivery vehicles
- Impact of shift patterns at warehouse on local traffic
- The list of potential partners for this FQP is given below.
- Council Officers
- Highways Authority
- Police
- Shopping Centre Manager
- Sainsbury
- M&S
- Other retailers
- Riverside Industrial Park Business representatives
- Chamber of Commerce

31. Compulsory consideration of access arrangements for deliveries, servicing and construction for all new developments.

5.111 All new developments in the area of a certain size and nature are subject to a transport impact assessment. It is proposed that the wording of this requirement be adjusted to ensure that due consideration of access arrangements for deliveries and servicing vehicles during both the construction and operational phase is undertaken as part of this process.

5.112 Although it is difficult to set pre-defined criteria that all new developments should conform to, there should be a clear checklist of information that should be provided. It should request that the developer provides evidence of appropriate consultation in addressing these areas. These include:

- Volume of freight traffic generated
 - At different stages of development
 - By mode
 - This is likely to be a range
- Types of vehicles likely to access the site
- Adequate loading/unloading arrangements
- Adequate access for servicing and waste collection
- Adequate access for emergency vehicles.

5.114 This will enable the development control officer to take a judgement on whether or not the freight impacts of the development have been given due consideration and that the development is suitable to receive planning permission.

5.115 Implementation timing probably depends upon revision of planning requirements; cost should form part of that process. Ongoing costs will be part of the cost of reviewing planning applications therefore there is no specific funding requirement.

32. Encourage use of Freight Advisory Route rather than routing through Watling Street & Frogmore

5.116 There is an existing Freight Advisory Route for Goods Vehicles accessing the industrial facilities in Park Street. However, evidence gathered during this study indicates that there are substantial volumes of freight traffic continuing to route their vehicles through residential areas in Frogmore, Park Street and Bricket Wood. Clearly, this is the shortest route for many of the vehicles, and there are no restrictions to prevent this activity, and therefore there is no penalty for doing so. In addition the advisory route does have problems in terms of infrastructure and a measure of its ability to cope with additional freight traffic needs to be undertaken.

5.117 Bearing in mind its status as an advisory route, there is a need to better publicise its existence and the rationale for using this rather than the more direct routes. As the majority of freight using this road is associated with Ventura Park, the proposed Freight Quality Partnership described above would act as an excellent conduit for capturing views of operators and for disseminating information, however there are a number of concrete actions that can be undertaken in addition:

- Develop specific freight signage along the route and on main access points (junctions with A414)
- Develop maps of the advisory route for dissemination and publication
- Upload the advisory route onto GPS and routing software to ensure that drivers using these tools are informed of the appropriate directions when visiting the area
- Infrastructural improvements to Freight Advisory Route (in particular the junction between Watling Street and Harper Lane)

5.118 Signage: This could be done in less than one year. The cost of new signage is dependent upon the number of signs needed.

5.119 Maps: Again, this could be done in less than one year. It would costs less than £25,000 to produce and disseminate map. This could be co-ordinated through FQP, FTA, RHA or Ventura Park themselves.

5.120 GPS & Routing Software: This could take 1-2 years. It would cost less than £25,000 to employ research into how best to achieve this and cover all suppliers, a further £25,000 to implement.

5.121 Infrastructural improvements: This could take from 2-3 years. The cost would be likely to exceed £250,000, depending upon scheme and supplier. It would come from the Highways Authority budget. It may be possible able to access grants, depending on the scheme.

33. Review signage for TROs and work with Hertfordshire Police to achieve more effective enforcement of existing TROs relating to freight

- 5.122 There are a number of traffic restriction orders in place in the Southern St Albans area, most of which place limitations on the movement of goods vehicles of certain dimensions and weights. Evidence from the consultation undertaken during the development of this UTP has highlighted that there are instances where these restriction orders are not being followed, causing disruption to residents and other road users in the area. It is noted however, that restrictions do not apply when the road is used for access, so not all goods vehicles using these roads are in contravention of the ban.
- 5.123 Observation suggests that the demarcation of these restrictions and the signage of alternative routes for these types of vehicles could be of a higher standard, therefore a thorough review of suitability and coverage should be undertaken as an initial starting point. The Freight Quality Partnerships suggested in the schemes 29 & 30 (above) could be used as a mechanism for accessing the views of local operators in this regard.
- 5.124 Additionally, it is suggested that a dialogue is commenced with the police service in relation to the enforcement of the existing traffic restrictions. Understanding the constraints of road traffic policing in terms of resource and geographical coverage will help to identify the potential for more effective enforcement, and where there is the ability/requirement to focus on delivering improvements. This dialogue should cover all traffic management activity in the area and not just that related to goods vehicles.
- 5.125 Review of signage: This should take less than one year, and cost less than £25,000 to undertake a review. The cost of new signage is dependent upon number and type.
- 5.126 Enforcement: Dialogue and implementation of outcomes would take less than one year. The dialogue aspect would have a negligible cost, and the cost of additional enforcement is likely to be borne by the police.

Full Implementation Table

5.127 The schemes described above need to be clearly represented in an easy-to-read, summary form, in order to quickly assess which are the most cost-effective, and should be implemented now, and which can be funded at a future date. In order to be as concise as possible, there are some abbreviations, so a key is provided below.

Key for general abbreviations:

Location: London Colney (LC), Park Street (PS), Bricket Wood (BW), Chiswell Green (CG)

Other: TRO: Traffic Regulation Order; LTP: Local Transport Plan; TOC: Train Operating Company; DDA: Disability Discrimination Act; DRT: Demand Responsive

Cost:

Pounds Signs represents an estimate cost of:

£: £0 to £25,000

££: £25,000 to £50,000

£££: £50,000 to £100,000

££££: £100,000 to £250,000

£££££: £250,000+

Contribution to objectives and targets:

Stars represent extent of contribution (see Tables 4.1 & 4.2 in Section 4 for LTP objectives and targets)

* Low

** Medium

*** High

TABLE 5.2 IMPLEMENTATION PLAN TABLE

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
Congestion Strategy				
1	Support development of strategic ITS solutions (such as variable message signs) to manage strategic diversion from motorway network	All	C1, C4 S3, A3, E4	1* 2** 3*** 4* 6*** 8*
2	Small scale traffic engineering schemes to address congestion:			
	a. Feasibility study for signalising Park Street roundabout (M10 Junction 1, with A405 and A414)	PS	C1, C3, S1, S3, E4	1* 2* 3* 4** 6*
	b. Feasibility study for scheme to improve congestion on A414 from Park Street roundabout (M10) to London Colney roundabout (by Savacentre)	PS		
	c. Feasibility study for scheme to improve congestion on Oakwood Road (St Stephen)	BW		
	d. Introduce express lane at Park Street roundabout, towards Park Street from London Colney direction – filter out left-turn	PS		
	e. Investigate integrated congestion solutions for the two junctions to enter Bricket Wood (Mt Pleasant Lane/ Old Watford Rd/ Oakwood Rd, and Mt Pleasant Lane junction with M1 slip road). Possible retiming of traffic signals to allow longer red phase			
3	Personalised Travel Planning delivered to households in study area	All	C1, C2, C3, C4 S3, A1, A3, E2, E3, E4	3** 7* 8*** 9*

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
RS4 *	ITS Strategy being developed. Need 1-3 years to roll out to this area.	Not currently available	HCCH	Hertfordshire County Council (HCC)
CN3 ***				
AQ1 **				
RS1 *				
RS2 *				
RS3 *	6 months timeframe for study. Ready to go.	££	HCC	St Albans District council (SADC) / HCC
CN3 **	4 month timeframe for study. Ready to go.	££	HCC	HCC / SADC
AQ1 *				
	4 month timeframe for study. Ready to go.	£	HCC	HCC / SADC
	Further study required. Works would have long timeframe.	££££	HCC	HCC / SADC
BP1 **	Need to plan extent and coverage of scheme. Fast set-up and complete in 1 year	££	HCC	HCC/SADC
CN1 *				
CN2 *				
CN3 **				
CN4 **				
CN5 **				
AQ1 *				

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
4	Development and promotion of Car Sharing	All	C1, C2, C3	3* 7* 8*
5	Develop Workplace Travel Planning strategy for the study area	All	C1, C2, C4, S1, S3, A3, E2, E3, E4	3* 6* 7* 8*** 9**
6	Develop an area wide travel plan for the Colney Fields Retail Park and Smug Oak Business Park	LC & BW	C1, C2, C4, S1, S3, A3, E2, E3, E4	3* 6* 7* 8*** 9**
7	Promote Business TravelWise network to employers in the area	All	C1, C2, C4, S1, S3, A3, E2, E3, E4	3* 6* 8** 9***
Safety strategy				
8	Audit of train station conditions, including DDA compliance.	PS, BW, HW	C1, C2, C4, S2, E4	2* 3* 4* 5* 6* 7*

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
CN1 * CN2 * CN3 * AQ1 *	Car Share scheme already in place but needs development and promo	£	HCC	HCC/SADC
CN1 ** CN2 * CN3 ** CN4 ** AQ1 *	Requires employment of new staff responsible for any/all of these three schemes. Take-up depends on willingness of employer.			
CN1 ** CN2 * CN3 ** CN4 * AQ1 *		£	HCC/ businesses within Retail/ Business Parks	HCC/ SADC/ relevant retail/ businesses
CN1 ** CN2 * CN3 ** AQ1 *		£	HCC/ Hertfordshire Chamber of Commerce & Industry	HCC/SADC
BP4* BP5*	Audit could be undertaken quickly and easily. Follow up work and upgrades could take longer and any engineering work would be costly.	£ (Follow-up work: £££)	HCC/ Community Rail Partnership could fund audit. Follow up work: either LTP major schemes bid or a TOC commitment in a new franchise	HCC (Community Rail Partnership)/ Operator/ DFT Rail

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
9	Speed reducing features and speed control schemes, around designated schools, and at other locations such as:			
	a. White Horse Lane (anti-speeding measures along / installation of more crossings.)	LC	C1, C2, C3, S1, S3, A4,	1*** 2**
	b. Park Street/ Watling Street (speed reducing features)	PS	E1, E2	3* 7**
	c. St Stephen: A5183, Mount Pleasant Lane, by the bridge (VAS; vehicle activated signage)	BW		
	d. A5183, London Colney High Street, Kings Road & St Anne's Road (create safer space; 20mph zone?).	LC		
	e. Tippendell Lane & Park Street Lane (speed control, school signage and extra crossing).	PS		
10	Review signing and propose comprehensive, clear and uncluttered signing strategy.	All	C1, S2, S3, A4, E1, E3	2* 4* 6* 7*
11	Assess feasibility of 20mph speed limits around schools and in residential areas	All	C1, C3, S1, S3, E1, E2	1*** 2* 4* 7*

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
RS1 ** RS2 ***	Easy to implement. Timeframe of 1-2 years	££	Section 106 Developer contribution	HCC
RS3 ** RS4***	Timeframe: 1-2 years	££	LTP	HCC
NB. Scores for individual schemes to be determined after further scheme development	Timeframe: 1-2 years from beginning study. Need to source funding.	££	Section 106? (accident level not high enough to qualify for LTP)	HCC
	Timeframe: 1-2 years	£££	LTP	HCC
Timeframe: 1-2 years	£££	LTP	HCC	
CN3 * RS3 *	Review could take 6 months, with another 12-18 months to implement.	££	LTP	HCC/SADC
RS1 ** RS2 ** RS3 *** RS4 **	Feasibility study could take 6months. Consultation required before installing new limits.	££	HCC/ developer	HCC

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
12	Local Safety Schemes			
	a. London Colney Roundabout, London Road, A414 casualty reduction proposals.	LC	C2, C4, S1, S2, S3 A4, E2, E3, E4	1*** 2* 3* 4** 7***
	b. A5183 junction with Harper Lane (St Stephen) build roundabout.	PS		
	c. Park Street Lane - replace chicanes with raised zebra crossings.		PS	
	d. Spooners Drive – measures to reduce safety risk from on-street parking around schools.	PS		
	e. A405 outside Burstons nurseries – investigate scheme to redirect traffic at entrance of nursery, around the roundabout, rather than crossing straight over.	CG		
	f. Mount Pleasant Lane junction with Bucknalls Drive up to slip road at junction 6 M1, accident risk near school – Park & Stride.	BW		
	g. Watford Road junction with Tippendell Lane – dangerous vehicle movements. Reinforce road markings to order traffic.	CG		

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
RS1*** RS2* RS3 ** RS4* NB. Scores for individual schemes to be determined after further scheme development	Easy to implement. Timeframe of 1-2 years	££	LTP (safety budget)	HCC
	Scheme already in outline design stage. Timeframe: 1-2 years	££££	LTP (safety budget)	HCC
	Scheme awaiting funding. Could be implemented within one year.	£	LTP	HCC
	Easy to implement. Timeframe of 1-2 years	£	LTP	HCC
	Investigation needed. Scheme expected to take 2-5 years.	£	LTP	HCC
	Easy to implement. Timeframe of 1-2 years	£	Safer Routes to School have funding available.	HCC
	Easy to implement. Timeframe of 1-2 years	££	Local Area Office	HCC

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
13	Schemes to manage car parking:			
	a. Encourage use of off-street car park (Haseldine Park) via publicity and signage.	LC	C1, C2, C3 S1, S3, E3	1* 2* 7**
	b. TRO (Traffic Regulation Order) to address parking problems at Sycamore Drive at the junction of A5183 and entire length of Sycamore Drive. In addition, a TRO to address parking problem accessing Beeches (off Sycamore Drive).	PS		
	c. Watford Road (service road) by Hire One shop – problem with parking on verges. Install (2 hours) limited waiting.	CG		
14	Complete School Travel Plan at London Colney JMI and Nursery.	LC	C1, C2, C4 S1, S3, E2, E3, E4	1** 3* 5** 7** 8**
15	Develop School Travel Plan at Forest House Special School.	LC		
16	Implement School Travel Plan measures & maintain impacts from existing plans	All	C1, C2, C4 S1, S3, E2, E3, E4	1** 3* 5** 7** 8**

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/ Ownership
RS2* RS3** CN3*	Easy to implement. Timeframe of 1-2 years	£	LTP / Section 106 Developer contribution	SADC/ HCC
Easy to implement. Timeframe of 1-2 years	£	Local Area Funding	SADC/ HCC	
	Easy to implement. Timeframe of 1-2 years	£	SADC Decrim Parking	SADC
RS2 ** CN1 * CN2 * CN3 ** CN4 ** CN5 *** AQ1 *	Continuation of ongoing work	£	Dept. of Children, Schools and Families + Safer Routes to School if any extra engineering measures	HCC
	Depending on school's willingness to uptake Travel Plan.	£	As above	HCC
RS2 ** CN1 * CN2 * CN3 ** CN4 ** CN5 *** AQ1 *	Need to recruit additional Travel Plan officer support. Could be running within 3 months, depending on recruitment practices	£	Safer Routes to School	HCC

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
17	Ongoing review of School Travel Plans	All	C1, C2, C4 S1, S3, E2, E3, E4	1** 3* 5** 7** 8**
18	Bus stop shelter improvements, including Smarter bus stop design, Real-Time Information (RTI) & DDA compliance.	All	C1, C2, C3, C4, A1, A2, A3, E4	2** 3* 4** 8***
19	Bus Punctuality Improvement Partnerships <i>(this is an LTP strategy to improve % buses keeping to schedule - awaiting further details on content)</i>	All	C1, C2, C3, C4 A1, A2, A3. E4	2* 4** 6* 8*
20	Investigate feasibility of constructing a taxi rank in London Colney	LC	C4, A1, A2, E3, E4	2* 4* 5* 8*
21	Advertising taxi numbers in well-known locations. (e.g. Stations in PS & BW, bus stops & LC High Street)	All	C4, A1, A2, E3, E4	8*
22	Identify opportunities for expanding bus operation hours and network coverage by developer/ private funds	All	C1, C2, C3, C4 S2, A1, A2, A3, E2	2** 5*** 8*

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
RS2 ** CN1 * CN2 * CN3 ** CN4 ** CN5 *** AQ1 *	As above	£	Safer Routes to School	HCC
BP1 ** BP2 *** BP4 ** CN5 * AC1 * AQ1 *	Further development of existing Interlink programme would be quick and easy. For larger scale aspects such as RTI allow 2-4 years	££ per annum	LTP Integrated Transport block, or developers – where stops are within new developments	HCC/Parish Councils
BP1 ** BP2 ** BP3 ***	Short (1-2 years)	££	As above	HCC/SADC
AC1*	Short (6mths feasibility and 6 months construction)	££	LTP Block Allocation/Developer	SADC/HCC
AC1*	Bus stops could display taxi numbers very rapidly	No additional cost	N/A	SADC/HCC/Retailers
BP1 *** BP2 ** BP3 ** BP4 ** CN2 * CN5 * AC1 *	Some opportunities have been identified via Bus Network Review. 6months –1 year to develop these ideas. Ongoing negotiations with developers to fund	£-££	Developer S106/private funds	HCCSADC

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
23	Extend existing DRT services in the study area.	All	C4, A1, A2, E3, E4	5** 7* 8*
24	Publicise existing DRT services in the study area to increase awareness and maximise use	All	C4, A1, A2, E3, E4	5** 7* 8***
25	Negotiations with TOCs to adjust timetables of trains to run at more regular times (e.g. every half hour).	PS, BW, HW	C1, C2, C4, A2, A3, E4	2** 3** 4* 5* 6* 8*
26	Traffic management to reduce obstruction to walking, around all schools. Specific problems highlighted at: a. Telford Road/Manor Road (LC) b. Alexander Road (LC) c. St Anne's Road d. Spooners Drive e. Peters Avenue	All	C1, C2, C3, C4 S1, S3 A4. E2, E3, E4	1*** 2* 6* 7**
27	Review optimum locations and install more cycle parking	All	C1, C2, C3, C4 S1, S3. A4. E2, E4.	2* 5* 7** 8*

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/ Ownership
AC1 ***	6 months lead in time, (depending on network planning req. to prioritise schemes, resolve funding issues and produce timetables/ marketing.)	£	Cost would be revenue, funded by local authority and partners (e.g. health auth). Consider kickstarting bid (if the fund is continued) to cover costs for 3 years.	SADC & DRT partners
AC1 **	Could arrange publicity quickly and easily. Up to 6months to implement	£	As above	SADC & DRT partners (charities)
BP5 ***	Discussions ongoing regarding possible passing loop to enable more frequent services on the Abbey Line. Timeframe would be long (5 years +)	£££££	Either LTP major schemes bid or a TOC commitment in a new franchise	HCC
HC4 * RS2 * CN5 **	Once solutions are agreed appropriate to each location, schemes could be constructed in 1-2 years	££ per scheme	HCC/ developer	HCC
CN4 *** CN5 *	Review could take up to 6 months. Installation of cycle parking is cheap and very quick. Could be done by developers/retailers at the larger parks.	£20k (10 new locations at £2k per cycle parking.)	Developer funding where possible, match funding or LTP Integrated Transport funding.	HCC/SADC

Scheme No	Scheme description (further detail in Section 6 of Final Report)	Location	UTP objective fit	Contribution to LTP obj's
28	Schemes to encourage cycling. Specifically identified: a. Schemes to reduce severance of London Colney and Park Street, caused by the A414 b. Review Shenley Lane traffic calming islands with a view to improving the route for cyclists.	All	C1, C2, C3, C4 S1, S3. A4. E2, E4	1* 2* 5* 7* 8**
Freight Strategy				
29	Develop Freight Quality Partnership (FQP) for Ventura Park to minimise the freight impacts on the surrounding area.	PS	C1, C3, E1, E3, E4	2* 4* 6***
30	Develop FQP for the Retail site and Riverside industrial estate at junction 22 of the M25	LC	C1, C3, E1, E3, E4	2* 4* 6***
31	Compulsory consideration of access arrangements for deliveries, servicing and construction for all new developments	All	C1, C3, S1, E1	2* 6***
32	Considering encouraging use of Freight Advisory Route rather than routing through Watling Street & Frogmore.	All	C1, C3, S3, E1, E3, E4	1* 2* 4* 6***
33 (28)	Review signage for TROs and work with Hertfordshire Police to achieve more effective enforcement of existing TROs relating to freight	All	C1, S3, E1	2* 4* 6**

Contribution to LTP targets	Feasibility	Cost	Funding source	Responsibility/Ownership
CN4 *** CN5 *	Need to undertake review of exact requirements at each location. 3 months per review. Depending on outcome, schemes could take 3-6 months to implement	Up to £25k, depending on scheme	LTP Integrated transport	HCC/SADC
RS3 * CN3 * AQ1 *	High effort in set-up period (6 months), establishing clear objectives. Then steady maintenance.	£ - ££	Council-funded in first instance, with scope for sharing costs with freight operators.	District /Parish Council led, possibly with an independent reviewer.
RS3 * CN3 * AQ1 *	As above	£ - ££	As above	As above
RS3 * CN3 * AQ1 *	Not a separate scheme – needs to be discussed and agreed with planning authority for inclusion in planning requirements.	No individual cost (tied into planning)	N/A	SADC & HCC (development control)
RS3 * CN3 * AQ1 *	Depending on outcomes of discussions with freight operators (part of FQP). Could take from 1 year to 3 years	£ (up to ££ if installing GPS systems)	Maps, signage & GPS council funded. Infrastructure improvements funded by Highways Authority, with possibility of grants	SADC (& HA)
RS3 * CN3 *	Less than 1 year to get up and running	£	HCC /Police	SADC

Conclusions and Next Steps

- 5.128 This document sets out the way in which it is proposed to implement the Hertfordshire Local Transport Plan in the Southern St. Albans area. The implementation of the UTP will result in a major contribution to meeting the County's targets and objectives as set out in the Local Transport Plan.
- 5.129 The work has included:
- Identifying local problems,
 - Setting local objectives that provide local detail to the over-arching Local Transport Plan objectives,
 - Identifying the types of schemes that will be most effective in meeting the objectives and solving the problems in the local area,
 - Developing strategies for addressing issues and objectives relating to congestion, accessibility, safety and freight, and
 - Producing an implementation plan of schemes to meet the objectives.
- 5.130 The UTP has been subject to on-going consultation with Members and stakeholders and has also been subject to a public consultation exercise. All comments have been addressed and taken into consideration for final document. The final UTP will now be used as the basis for bidding for funding from the Local Transport Plan schemes against other Urban Transport Plan areas across the county.

APPENDIX A

POLICY CONTEXT

A1 POLICY CONTEXT

European and UK Government transport and land-use policy

European policy

- A1.1 The main EU policy of relevance to this document is the EU *Directive on Strategic Environmental Assessment* that requires the environmental consequences of all plans, including the Hertfordshire Local Transport Plan (LTP), to be consistently and comprehensively assessed, prior to implementation. The aim is to minimise any potential adverse consequences of proposed interventions and to ensure that mitigation measures are undertaken as appropriate.

UK national policy for transport

- A1.2 In the UK transport policy is derived from the 1998 White Paper, *A New Deal for Transport* (DfT, 1998) that sets out the approach to transport planning, including introducing five-year Local Transport Plans (LTPs). The aim is to shift travel behaviour away from private car use towards greater use of more sustainable transport: public transport, walking and cycling. Future aspirations are outlined in the Governments "Towards a Sustainable Transport System" papers (2007) and the "Eddington Reort" (2006) highlighting transport's pivotal role in supporting the UK's future economic success. It recommended a number of reforms to the planning, funding and delivery of transport interventions to maximise sustainable returns from investment, as well as recognising the need to improve the environmental performance of transport.
- A1.3 A later Transport White Paper, *The Future of Transport* (DfT, 2004) asserts the need to make "better trade-offs across different modes of transport, and across the parallel agendas of regeneration and housing", with better decision-making potentially being effected at the regional and local level.
- A1.4 Local authority actions are influenced by three objectives from *The Future of Transport*. These aim to ensue that;
- the road network provides a more reliable and freer-flowing service for both
 - personal travel and freight, with people able to make informed choices about how and when they travel;
 - bus services that are reliable, flexible, convenient and tailored to local needs; and
 - walking and cycling are real alternatives for local trips.
- A1.5 Given the government's desire to reduce car dependency and encourage other modes of travel, it is promoting *Smarter Choices – Changing the way we travel* (DfT, 2004). Measures to be encouraged include workplace and school travel plans; personalised travel planning; travel awareness campaigns; public transport information and marketing; car clubs and car sharing schemes; teleworking, teleconferencing and home shopping. The government believes that a much more widespread implementation of present good practice could generate:
- a reduction in peak period urban traffic of about 21% (off-peak 13%);
 - a reduction of peak period non-urban traffic of about 14% (off-peak 7%); and
 - a nationwide reduction in all traffic of about 11%.

- A1.6 The DfT set out its ambitions for improving road safety in *Tomorrow's Roads – Safer for Everyone* (DfT, 2000). A new 10-year target was set and a new road safety strategy launched. The new targets aim to help everyone to focus on achieving a further substantial improvement in road safety over the next 10 years. By 2010 the DfT wants to achieve, compared with the average for 1994-98:
- a 40% reduction in the number of people killed or seriously injured in road accidents;
 - a 50% reduction in the number of children killed or seriously injured; and
 - a 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.
- A1.7 In 2003 the Social Exclusion Unit report, *Making the Connections*, identified the problems of social exclusion caused by poor access to the main services: healthcare; education; training and employment; and fresh food shopping. Responsibility was given to the DfT to take forward the government's accessibility planning agenda to help those who are socially excluded to overcome the barriers to accessing services. Local authorities, with their partners, must now implement their accessibility strategy (part of the LTP) designed to improve access to local services and activities.
- A1.8 Railway policy is summarised in *The Future of Rail White Paper*, published by the DfT in 2004. This White Paper identified six key changes to build the right structure for the railway. These changes aim to drive up standards, improve overall performance and underline who is best placed to deliver;
- government (through the DfT) has taken charge of setting the strategic direction of the railways;
 - Network Rail has been given responsibility for operating the network, and crucially for its performance, timetabling and route utilisation;
 - train and track companies are expected to work more closely together;
 - the role of the London Mayor is increasing, and more local decision making being introduced;
 - the Office of the Rail Regulator covers safety, performance and economic regulation; and
 - a better deal for freight is intended enabling the industry and its customers to invest for the long-term.
- A1.9 The White Paper's central assumption is that rail is a service specified by the public sector and delivered by the private sector.
- A1.10 The White Paper, *The Future of Air Transport* (DfT, 2003), sets out a strategic framework for the development of airport capacity in the United Kingdom over the next 30 years, against the wider context of the air transport sector. The government's first priority is to make best use of the existing runways at the major South East airports. Beyond that, it supports the building of two new runways in the region in the period to 2030.
- A1.11 The *National Cycling Strategy* (1996) provides a framework for increasing the number of journeys made by bicycle. Originally it contained a headline target of quadrupling cycling trips between 1996 and 2012. Although this target has been dropped, in favour of more robust local targets set by local authorities, the government remains "*strongly committed to the overall goals of the strategy.*"

- A1.12 *The Ten-Year Transport Plan - Transport 2010* (DfT, 2000), allocated substantial funding to take initiatives forward. For example, it encourages innovative schemes to expand rural public transport as well as investment to provide safer roads with less impact on the environment.
- A1.13 Legislation enabling local authorities to enter into Quality Bus Partnerships and Contracts with operators was introduced by the *Transport Act 2000*. The Act also provides for the introduction of workplace parking charges and congestion charging, which, although of primary concern for urban areas, could significantly influence travel into towns from the countryside.
- A1.14 Local transport planning is carried out through the process of Local Transport Plans (LTPs). Devised at local level in partnership with the community, LTPs set out 5-year comprehensive integrated transport strategies for their area, linked to local development and regeneration proposals. They also contain costed programmes to improve local transport, used as the basis for making capital allocations to local highway authorities. The study area (south of St. Albans city centre) is covered by the Hertfordshire LTP, prepared by Hertfordshire County Council.

UK National policy for land-use

- A1.15 A key driver of UK Government land-use policy is the *Sustainable Communities Plan* (2003) which sets out a long-term programme of action for delivering sustainable communities in both urban and rural areas. It aims to tackle housing supply issues in the South East and the quality of public spaces. It has formalised approaches to planning and redevelopment which hold social objectives as equally important as the physical elements of growth.
- A1.16 The *Planning and Compulsory Purchase Act (2004)* introduced a number of changes to the land-use planning system at the regional level. Regional Spatial Strategies (RSSs) will replace the Regional Planning Guidance (RPG) and the Regional Transport Strategy (RTS). For Hertfordshire the RSS is being prepared by the Regional Planning Body, the East of England Regional Assembly (EERA). RSSs are more specific than RPG: strategy rather than guidance. They provide the spatial framework within which LTPs can be prepared, as well as Local Development Documents (LDDs). RSSs provide regional priorities for the environment, housing, economic development land development and re-development, as well as transport investment, over a 15 to 20 year period. LTPs must be consistent with these.
- A1.17 The *Planning and Compulsory Purchase Act* also introduced Local Development Documents (LDDs) at the local level containing a Local Development Framework (LDF). LDDs will replace local plans and the countywide Structure Plan. LDDs should be consistent with the Sustainable Community Strategy for the area, and set out the spatial aspects for the delivery of the local authority's vision for the area, as defined in the Sustainable Community Strategy. An LDF will comprise development plan documents, supplementary planning documents, a statement of community involvement, a local development scheme and annual monitoring reports. For the majority of planning applications, the Local Planning Authority (LPA) is the district or borough Council, such as St Albans City and District Council.

- A1.18 In general the introduction of RSSs and the development of LDFs has brought about a shift in the focus of planning principles, whereby 'spatial planning' takes place rather than land use planning. This emphasis on the spatial dimension a whole town approach that deals with both the physical environment and the full range of activities within it to provide integrated technical, social, economic and design solutions.
- A1.19 The spatial approach is particularly suited to the current planning and development conditions in the southern St. Albans study area. Sites coming forward provide an opportunity to resolve some of the problems created by the piecemeal approach to development planning in the past.
- A1.20 There are other policy dimensions at a regional level with a potential impact on transport needs and transport impacts, particularly with regard to the potential for changes in employment opportunities and associated transport impacts. Regional Development Agencies (RDAs) are "*strategic drivers of regional economic development in their region*", and produce Regional Economic Strategies (RESs), identifying the economic priorities for the region and their land-use and transport implications with a 5 to 10 year Action Plan. RDAs are often concerned with regeneration in their region, and administer some funding such as the Single Regeneration Budget. EEDA (the East of England Regional Development Agency) covers Hertfordshire.
- A1.21 National Planning Policy Guidance (PPG), currently being replaced with Planning Policy Statements (PPSs), supports national land-use policy. Of particular relevance are PPG 3 (Housing), PPS 6 (Planning for Town Centres), PPS 7 (Sustainable Development in Rural Areas), PPS 11 (Regional Spatial Strategies), PPS 12 (Local Development Frameworks) and PPG 13 (Transport). LPAs must follow the principles of land-use planning set out in the PPGs and PPSs which are designed to influence the broad patterns of settlement and when they respond to individual development proposals.
- A1.22 LPAs respond to proposals for development by determining planning applications. They are likely to consider the accessibility of a proposed development, as well as discussing with the developer the promotion of accessibility. St Albans City and District Council has a significant role to play in ensuring that key services are sited in the most accessible possible areas, and mixed land use in a central location accessible by several modes of transport.
- A1.23 These national and strategic level growth policies have an important impact on policy-making at county and local levels, as the overall objectives for achieving growth and sustainability are distilled down into district and town specific policies. At the local level, these policies are important in that they will allow growth to take place without overwhelming the facilities within this study area, or harming its identity, by providing guiding principles for new developments.

Regional and local level policy

East of England Plan

- A1.24 The most important over-arching policy for influencing the future of the area is the East of England Plan (RSS 14 – DEEP). The RSS provides the statutory framework for local authorities to produce more detailed Local Development Documents (LDDs) for their areas. The East of England Plan was first published in draft form in December 2004 and has subsequently been revised before the finalised document was published in May 2008.
- A1.25 The spatial planning vision for the East of England (from the RSS) is to realise its economic potential and provide a high quality of life for its people, including by meeting their housing needs in sustainable and inclusive communities. At the same time it will reduce its impact on climate change and the environment, including savings in energy and water use and by strengthening its stock of environmental assets.
- A1.26 In seeking to meet the overall vision and objectives of the RSS, the objectives of the Regional Transport Strategy are to give a clear priority to increase travel by more sustainable modes, while reflecting the functionality required of the region's transport networks in support of the spatial strategy. These objectives are transport policy will seek to meet the following objectives:
- To manage travel behaviour and the demand for transport with the aim of reducing the rate of road traffic growth and ensuring the transport sector makes an appropriate contribution to the required reduction in greenhouse gas emissions;
 - To encourage efficient use of existing transport infrastructure;
 - To enable the provision of the infrastructure and transport services necessary to support both existing development and that proposed in the spatial strategy;
 - To improve access to jobs, services and leisure facilities.
- A1.27 The 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 centers, health provision and other key destinations;
 - Reduced greenhouse gas emissions;
 - 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.
- A1.28 The RSS requires the City and District of St Albans to provide 7,200 homes in the period 2001-2021. Of these 2,212 have already been built, leaving a further 4,988 to be provided. There is also potential for housing and associated growth at Hemel Hempstead (Dacorum Borough) and Welwyn Hatfield District to extend into the City and District of St Albans. This would be in addition to its 7,200 homes requirement.

- A1.29 Colney Fields out-of-town centre retail site is identified within the document as a location at which consideration should be given to whether it should remain purely a retail centre or alternatively develop into centres with a fuller range of service provision. However, this approach should only be adopted where it would improve social, environmental and economic sustainability and deliver improved sustainable transport accessibility, particularly by public transport.
- A1.30 The RSS states that improvements to inter-urban public transport should be focussed on Regional Transport Nodes, and St. Albans is named as one of these. The priorities for improvements to inter-urban public transport will be: (i) to facilitate movement between the Regional Transport Nodes; (ii) to facilitate access to London and to national networks, and, (iii) within the Regional Transport Nodes, to improve the interchange between modes and the integration of strategic and local networks. Measures should include:
- improved access, particularly by sustainable local transport, to main line railway stations;
 - facilities to support and encourage high quality interurban bus / coach services, particularly east-west links and other situations where rail is not available, coordinated with rail and local public transport; and
 - strategic Park and Ride with the aim of reducing car use.
- A1.31 The importance of improving east-west links in the area is also emphasised.

Regional Economic Strategy (RES)

- A1.32 *The Regional Economic Strategy for the East of England*, (EEDA, 2004 updated draft 2008) is the framework within which many different organisations can work with businesses, communities and individuals to improve the region's economic performance and the quality of life of those who live and work here. The strategy emphasizes the significance of international gateways and transport corridors in the region. The regional economic strategy sets out targets and priorities to make the East of England an exemplar in sustainable economic growth. In so doing, it understands the complex effects of economic growth and reflects a responsibility to promote and enhance the environmental, economic and social well-being of everyone in the East of England, both now and for future generations. The strategy, has therefore adopted the shared UK principles of sustainable development, as set out in the national strategy *Securing the Future*.
- A1.33 The East of England's transport infrastructure serves not just the needs of local residents and businesses but also national and international traffic. London Stansted Airport is one of the fastest growing airports in the UK, and London Luton Airport is continuing to expand.
- A1.34 The region is home to some of the busiest and most congested sections of road in the UK. Car ownership in the region is above the national average and road traffic has continued to increase, owing in part to the region's rural character.
- A1.35 EEDA's vision for the East of England is to be "*A leading economy, founded on our world-class knowledge base and the creativity and enterprise of our people, in order to improve the quality of life for all who live and work here*".

A1.36 For transport EEDA's goals are:

- a reduction in the cost of congestion in the region
- a free-flowing transport system with improved journey times and increasing journey-time reliability
- flourishing transport gateways that are exemplars of sustainable economic development, served by reliable and effective multi-modal surface access
- parity in transport investment with leading international competitor regions
- greater direct and wider economic benefits realised from an increase in public and private investment in transport priorities
- a leading region for embedding technology in the transport system to increase efficiency and reduce environmental impact
- stabilising and then progressively reducing the carbon emissions resulting from transport by increasing the use of public transport.

The RES contains a number of strategic transport priorities which address the economic development of the region and which are relevant to the study area.

- Priority 1: A resilient transport system that is used effectively and efficiently
- Priority 2: Investment in transport to maximise economic growth
- Priority 3: Increased economic benefit to the East of England from major international gateways
- Priority 4: Reducing the environmental impact of moving goods and people

The RES was reviewed by EEDA during 2006-2008. The draft RES was submitted to government in June 2008

A1.37 The draft RES vision is for the East of England, by 2031, is to be known as:

- internationally-competitive with a global reputation for innovation and business growth
- a region that harnesses and develops the talents and creativity of all
- at the forefront of the low-carbon and resource-efficient economy

known for:

- exceptional landscapes, vibrant places and quality of life
- being a confident, outward-looking region with strong leadership and where communities actively shape their future.

Integrated Regional Strategy

A1.38 EERA has developed an Integrated Regional Strategy (IRS), *Sustainable Futures - The Integrated Regional Strategy for the East of England* (EERA, 2005) to provide the basis for decision-making. The White Paper, *Your Region, Your Choice*, (ODPM, 2002) presented an opportunity for the development of the IRS. The White Paper encouraged public bodies, operating in the region, to develop a 'joined up' approach and to identify and drive forward the main priorities for the region.

A1.39 The IRS tackles the critical issues facing the region, for example housing, transport, health, skills and economy. It combines a strategic vision for the region with the necessary co-ordination framework for all other strategies, regional partnership bodies and delivery mechanisms.

A1.40 Underpinning the vision and high level outcomes are eight Crucial Regional Issues that the region must confront and resolve. All of these are complex and most include elements that are contradictory. Two relate specifically to transport:

- **Crucial Regional Issue 2 Transport, travel and infrastructure:** This reflects the growing demand for travel as incomes rise and, increasingly, the growing need to travel given the way that the region 'works'. It raises questions about the sustainability of transport solutions and it flags the potential disjunction in policy between demands for major infrastructure improvements but also a commitment to reduce the need to travel. There is, at root, a challenge in terms of decoupling economic growth from increasing demands for transport infrastructure. These issues have particular cogency in the East of England in the context of its growing but double-edged role with respect to international gateways; and
- **Crucial Regional Issue 5 Deprivation and access to services:** Despite the strength of the regional economy and, for the most part, the quality of environmental assets, serious poverty, disadvantage and exclusion continues in the East of England. It is apparent in areas with weak economies, but it is also prevalent in some of the most buoyant parts of the region. It suggests major and continuing challenges in terms of improving the quality of life for all who live and work in the East of England; building social capital must be a priority.

The London Plan 2004

A1.41 London has a significant impact on the study area. Around 17% of the population of St Albans district commutes into the capital for work. Furthermore many businesses locate in Hertfordshire to service the Capital's economy. The county has good radial routes (both road and rail) from London, but these are operating at (or near) capacity. Published in 2004, the *London Plan* (The Spatial Development Strategy) sets out the vision of the Mayor to address the issues arising from planned growth. The aim is to develop London as a sustainable world city, based on three interwoven themes:

- Strong, diverse long term economic growth;
- Social inclusivity to give all Londoners the opportunity to share in London's future success; and
- Fundamental improvements in London's environment and use of resources.
- Hertfordshire Sustainable Community Strategy

Key Points

Identifies a number of significant challenges for the county including delivering a step-change in passenger transport, continuing to increase accessibility, whilst continuing to tackle congestion and improve journey time reliability.

The final Sustainable Community Strategy for Hertfordshire was published by Herts Forward in June 2008 and was subsequently ratified by the County Council in July. It forms the highest level strategic plan for the county and is owned by the organisations that form Hertfordshire Forward – the county's Local Strategic Partnership. i.e. The county and district councils, health trusts, businesses, university of Herts, voluntary and community sector, police authority and the learning and skills council.

A1.42 The strategy identifies nine key areas of concern of which Transport and Access is one. Within this area a number of longer term objectives have been identified and some more specific short term actions. Delivery of these will be achieved through the work of partner organisations and success will be measured through the Local Area Agreement – a contract between Hertfordshire’s local authorities and the government to deliver key targets relating to the sustainable community strategy.

A1.43 Long term Objectives 2008-2021

- Reduce the need to travel and encourage the use of alternatives to the car
- Improve access to services, including education and health, no matter where you live
- Bring about a step change in the provision, quality and use of public transport in Hertfordshire
- Improve the reliability of journey times and improve East to West travel
- Improve access to the countryside, open spaces and cultural activities for recreation and health
- Ensure effective long term management and maintenance of the transport network
- Improve road safety.

A1.44 Short term actions 2008-2011

- Tackling the worst congestion hot spots
- Exploring an innovative approach to all public transport modes in Hertfordshire with Government and public transport providers
- Improve accessibility for disadvantaged groups (including rural residents), through enhancing travel choice.
 - e.g. Increasing the % of bus services running on time [LAA target]
 - Improving access to hospitals [LAA target]
- Promote walking, cycling and other sustainable transport through travel plans by:
 - implementing business travel plans for major employers
 - initiating a programme of residential and station travel plans;
 - ensuring that the majority of schools have a travel plan.
- Carrying out further study into East to West travel options
- Maintaining the footways and roads of the county in a safe condition, making best use of existing resources
- Reducing road casualties.

Hertfordshire LTP

A1.45 The County Council submitted its second Local Transport Plan (for the period 2007/8-2010/11) to the DfT in July 2006. This set out the vision for what the future of transport in Hertfordshire over the next 20 years. It 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.”*

A1.46 The vision assumes that the car will remain the dominant form of transport in terms of the number of journeys made, but that its physical dominance will be reduced so as to allow everyone a choice of travel mode. This means:

- People will be and will feel safer travelling on Hertfordshire's roads;
- Hertfordshire will have a transport network that moves freely and efficiently transporting people and goods;
- People will have a reasonable cost and time to their journeys to access key facilities such as education, healthcare, work and shopping;
- People will have access to information to inform their travel choices by different modes to their choice of destination; and
- Hertfordshire will have a network that is managed in a sustainable manner to ensure residents do not have their quality of life impeded.

A1.48 The transport objectives for the second LTP evolved from the eight defined in the first LTP. The objectives all contribute to the delivery of the shared priorities that the DfT has outlined that all Local Highway Authorities (LHAs), including Hertfordshire County Council, must deliver. The nine LTP objectives are listed below under the DfT's stated shared priorities:

TABLE 5.3 HERTFORDSHIRE LTP OBJECTIVES

Central Government's Shared Priorities	LTP2 Objectives
Safety	1 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.
Congestion	2 To obtain the best use of the existing network through effective design, maintenance and management. 3 To manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time. 4 To develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources.
Accessibility	5 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. 6 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.
Air Quality	7 To mitigate the effect of the transport system on the built and natural environment and on personal health.
Quality of Life	8 To raise awareness and encourage use of more sustainable modes of transport through effective promotion, publicity, information and education. 9 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.

A1.48 To ensure that the County Council's vision becomes a reality over the next 20 years, delivery of the LTP objectives is essential to bring about the changes required to achieve the vision.

A1.49 The County Council has also published a number of daughter documents that complement the delivery of the LTP:

- **Bus Strategy:** a statutory strategy (from the Transport Act 2000) representing the vision for bus transport for the next 5 years. The strategy notes a continual decline in usage and bus patronage is running at very low modal share levels in the area in general. The Strategy explains how the County Council will fill the gaps that the commercial network does not meet, and how the Council will work with others to achieve a bus network that meets the needs of users and local communities;
- **Cycling strategy:** A County Wide set of objectives and good practise guidance to be considered as part of any plan or scheme.
- **Rail Strategy:** represents the vision for rail transport for the next 5 years, and shows how the significant changes in the rail industry affects Hertfordshire;
- **Road Safety Plan:** sets out the strategy to deliver the county's casualty reduction targets, and outlines the programmes developed to achieve casualty reduction through prevention and reduction measures;
- **Accessibility Strategy:** a statutory strategy in response to the government's Social Exclusion Unit report, *Making the Connections* (2003). The strategy assesses the level of accessibility problems in Hertfordshire (around access to work, education, health facilities and food shops), and sets out the process whereby solutions can be found;
- **Rights of Way Improvement Plan:** a statutory document in response to the Countryside and Rights of Way Act (2000). The plan provides the context for the future management of, and investment in the rights of way network and other access activities, for Hertfordshire's residents and visitors to the county; and
- **Strategic Environmental Assessment Environmental Report:** a statutory assessment resulting from the EU *Directive 2001/42/EC*. The assessment follows the complete process of developing a LTP, from agreeing the objectives to the publication of the final document.

A1.50 The LTP currently sets out a target of increasing the number of cycling trips by 11% by 2010/11 (baseline year 2004/05). It is the County Council's intention to over-achieve and exceed this target wherever possible. The adoption of the cycling strategy is seen as a significant step in this process.

Mid Herts Plan

A1.51 Mid Hertfordshire links the South West Hertfordshire and Lea Valley areas, and includes both St Albans and London Colney. The total population is over 150,000. As well as local transport issues, the Mid Hertfordshire Area Plan also considers the problem of poor east-west links across the county.

A1.52 The aim of the Mid Hertfordshire Area Transport Plan (March 2006) is to provide an overall transport strategy for the study area. The vision of this document is: *"To develop, in consultation with local people, an integrated, sustainable transport system for Mid Hertfordshire to reduce the need to travel by car in order to enhance the environment and economy of the area."* The objectives for the Mid Hertfordshire Area were aimed at achieving the vision outlined above. The objectives were grouped into four main areas for which improvements can be targeted namely:

- Transport;
- Environment / Quality of Life;
- Economic; and
- Social / Equal Opportunities.

A1.53 Some 29 strategies were identified as a means of delivering objectives set forth in the four areas outlined. The strategies are listed under nine major areas according to their level of priority:

- Safety;
- Pedestrians;
- Cycling;
- Passenger Transport;
 - Bus
 - Rail
 - Taxis
- Traffic management and control;
- Parking;
- Freight;
- Information and education; and
- Rural.

A1.54 The key issues the strategy is aiming to address are:

- Declining bus patronage as a result of high car usage;
- High traffic volumes within the study area;
- High car usage with a low percentage of car sharing;
- Low usage of sustainable modes like cycling and walking;
- The level of accidents and casualties in the study area decreased in 2003;
- The effect of local and through traffic combined, contributing to a high level of congestion in urban areas especially St Albans city centre;
- Illegal parking, especially of HGVs, poses a problem in the study area, in that it impedes pedestrian footpaths for the mobility impaired and reduces road space, thus increasing journey time for buses;
- Good north – south radial links from London by public transport but east – west ‘cross country’ routes are not to the same standard; and
- Major developments in the study area will significantly increase demand on the road network particularly to access key employment sites and education facilities.

A1.55 The Mid Hertfordshire Area is based around four urban area plans. The Mid Hertfordshire Area Plan, which will integrate all of these elements, is currently being developed. Mid Hertfordshire will also benefit from investment from the countywide themes and programmes to maintain existing service levels as appropriate.

Local priorities for St Albans District

A1.56 In its statement to support the Hertfordshire LTP St Albans City and District Council states that it is committed to the development and implementation of sustainable transport and development policies and strategies to promote the economic, social, historic and general environment of the district. St Albans is an historic city and the policies and strategies have to be sympathetic to the conservation of the historic environment as well as promoting the economic, social and general environmental well being of the district.

A1.57 The transport priorities for St Albans District Council are:

- To improve roads, signs and pedestrian footways, with minimum disruption to local people;
- To provide easily accessible and integrated transport for residents and businesses;
- To reduce road casualties;
- For the public sector to lead by example, by using more environmentally-friendly 'green' forms of transport; and
- To improve access to services.

A1.58 The desire to improve conditions within St Albans is strong. A key objective is to achieve modal shift away from the car, whilst enhancing and maintaining the economic prosperity of the city. The city has a target of reducing journeys to work by car from 64.2% in 2001 to 56% in 2021. These ambitions cover London Colney, Park Street and St. Stephens wards as well as the city.

A1.59 The Council is in the early stages of producing several Development Plan Documents (DPDs – the LDDs for the area), including:

- The core strategy;
- Site allocations and proposals; and
- Development control policies.

A1.60 The DPDs will look to 2021 and will include transportation policies and proposals, reflecting the East of England Plan, the LTP and the urban transportation plans for London Colney and St Albans. Once adopted in 2009, the DPDs will replace the 1994 District Local Plan Review. The formal submission of the DPDs to the Secretary of State is due in early 2008 (with further public consultation thereafter).

A1.61 Until the approval of the LDF the District Local Plan Review (adopted 1994) will remain the key land-use allocation tool for the locality. This sets out 10 objectives:

- To continue to protect and maintain the green belt;
- To protect and enhance the character of existing settlements and define the nature and intensity of developments acceptable in the settlement hierarchy;
- To make provision for an increase in dwelling;
- To provide sufficient land and floor space to cater for full employment and provide for different kinds of employment use whilst not encouraging substantial additional commuting into the district;
- To consider the transportation needs of the district, including:
 - Improvements to the highway system
 - Traffic management schemes including improvements to the environment of residential and shopping areas
 - Car parking, pedestrian and cyclist requirements
 - The future role of public transport
 - The implications of future development proposals
- To maintain the viability and vitality of existing shopping centres and to make reasonable provision for new forms of retailing;
- To carefully consider the environmental effects of planning decisions and to conserve and improve the historic, architectural and archaeological fabric of settlements, in particular St Albans city centre and Roman Verulamium;

- To make provision for leisure uses especially taking advantage of opportunities to restore mineral sites and to support tourism related developments on appropriate sites; and
- To protect and enhance the natural beauty, amenity and ecology of the countryside and to retain high quality agricultural land.

A1.62 Several transport policies were defined to support these objectives, but these are now covered by the LTP.

A1.63 The St Albans Local Strategic Partnership (LSP) was set up in 2002 to produce the Community Strategy, *A Vision for St Albans and District - The Community Strategy 2003-2007*. The partnership is made up of representatives from public, private, voluntary and community sector organisations based in and around the district. The purpose of the strategy is to create a vision for improving the quality of life of everyone who lives, works or visits the district.

A1.64 The LSP's vision for St Albans and district is as follows: *"We want the district to continue to be an attractive and prosperous place, one where the whole community can enjoy the high living standards, good employment prospects and high quality of life already enjoyed by the majority. We want to protect and enhance the environment of our beautiful city and surrounding district, and to safeguard our rich heritage for the future."*

A1.65 The action plans in the strategy are broad and overarching, but are supported by detailed implementation plans that show how the priorities will be achieved for each theme.

A1.66 The LSP recognises that essential work to maintain and replace roads, footways, streetlights, traffic lights and signs, and pipes and services of utility companies (such as water, gas and electricity) can seriously disrupt traffic and inconvenience pedestrians. Balancing economic needs with better and safer transport is one of the big challenges facing the district.

A1.67 The transport and land-use planning priorities for St Albans LSP are to:

- Improve roads, signs and pedestrian footways, with minimum disruption to local people;
- Provide easily accessible and integrated transport for residents and businesses
- Encourage sustainable development of business in line with the needs of the local economy;
- For the public sector to lead by example, by using more environmentally-friendly, 'green' forms of transport;
- Maximise the supply of affordable housing;
- Improve access to services;
- Promote independence and a healthy lifestyle; and
- Integrate services and promote joint working to improve service provision.
- Proposed developments in the study area.

Harperbury Hospital site

A1.68 A large, predominantly residential development at the former Harperbury Hospital site has been proposed, and a development application is expected to be submitted to the Council shortly. It is expected that around 400 units of residential accommodation will be proposed, along with some healthcare facilities and related offices. Proposal will probably include a roundabout at the entrance to the site.

A1.69 Due to the fact that this development site is not ideal in terms of sustainability (it is quite isolated from other similar development, and from shops & services), there are likely to be accompanying proposals to help mitigate the extra travel generated. The developer may give Section 106 money towards public transport and/or cycling and walking routes. There are also some dangerous junctions (A5183 Harper Lane & Watling Street junction, and at the other end of Harper Lane, the junction with Bell Lane and Shenley Lane), which may receive some attention. However at this stage it is all speculative, as no formal application has yet been lodged.

Other developments

A1.70 Within the study area itself, at exiting retail sites, the amount of retail space has been proposed for expansion. Specifically at the Colney Fields retail centre (near Junction 22 of the M25), the Marks and Spencer's unit is set to expand by 4000m². Permission for this was granted some time ago, and the extra space is currently being added. The impact on transport is likely to be increased traffic to and from the retail site (particularly at the Bell roundabout) and further problems with car parking - the car park site there is already considered quite full. Other retail units have also considered expansion plans although these have not been made public yet.

A1.71 There are some new developments in the nearby St. Albans which could have an impact on transport in the study area as well as St. Albans city centre:

- The proposed re-development of the playing field site on King Harry Lane where up to 400 dwelling units could be provided generating yet more congestion at the King Harry/Watford Road roundabouts and at Bluehouse Hill; and
- The redevelopment of the former warehouse site in Frogmore, where 183 new dwelling units are being created. Journeys to local schools from this development would involve crossing the A5183 during the morning peak.

A1.72 Possible hospital developments include the down sizing of the St. Albans City Hospital and Hemel Hempstead Hospital. With A&E facilities being moved to Watford General Hospital as part of major redevelopment.

Revisions to regional planning allocations and policy

A1.73 The East of England Plan (EEP), the region's Regional Spatial Strategy, originally had a target of providing 79,600 new dwellings between 2001 and 2021, with 7,000 in St. Albans. After a six-month public inquiry, it was announced that the St Albans target had been revised to 7,200. This was reported in the recent proposed changes to the EEP document (December 2006¹⁰). 1,830 of these have already been built (between 2001-2006), but there remains 5,370 outstanding. The annual average rate of build per year has been 370 dwellings. In addition, more housing is proposed in the nearby Hatfield, Hemel Hempstead and Welwyn.

A1.74 The recent EEP 'proposed changes' also mentions the Colney Fields out-of-town centre retail site, which is considered of local importance. To have regional importance the site must be on the scale of Lakeside in Thurrock.

A1.75 The EEP 'proposed changes' states that improvements to inter-urban public transport should be focussed on Regional Transport Nodes, and St. Albans is named as one of these. The priorities for improvements to inter-urban public transport will be: (i) to facilitate movement between the Regional Transport Nodes; (ii) to facilitate access to London and to national networks, and, (iii) within the Regional Transport Nodes, to improve the interchange between modes and the integration of strategic and local networks. Measures should include:

- improved access, particularly by sustainable local transport, to main line railway stations;
- facilities to support and encourage high quality interurban bus/coach services, particularly east-west links and other situations where rail is not available, co-ordinated with rail and local public transport; and
- strategic Park and Ride with the aim of reducing car use.

A1.76 The importance of improving east-west links in the area is also emphasised in the recent proposed changes.

Summary

A1.77 The review of policy document has resulted in the following summary of issues for the UTP:

- The strategy must be consistent with national, regional and local transport policies, in particular, with the Local Transport Plan, the Mid-Hertfordshire Transport Strategy, and the local policy context.
- The strategy objectives should fit with the objectives of these policy documents, adapted as necessary to reflect local issues.
- A key focus of the strategy should be on maximising the contribution of sustainable travel to increase travel choices, whilst recognising the contribution that the private car will continue to make to transport in the study area.
- A specific area in need of improvement is access to employment, shopping, education, leisure and health facilities for all, including those without a car and those with impaired mobility.
- Proposed developments include a largely residential development at Harperbury Hospital. There are also considerable numbers of dwellings allocated to the area in the draft East of England Plan.