

ST ALBANS URBAN TRANSPORT PLAN

April 2009

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SUMMARY

1. Hertfordshire County Council has developed this Urban Transport Plan (UTP) for the City of St Albans, building on previous work and taking into account new information and developments. The UTP follows on from the broader, more strategic Hertfordshire Local Transport Plan (LTP) and the Mid Hertfordshire Area Transport Plan. It forms part of programme of UTPs that the County Council is producing to cover 25 of Hertfordshires largest towns in more depth and to identify schemes that will help to achieve the LTP objectives.
2. Information sources for gathering fact and opinion regarding the issues, problems and opportunities facing St Albans included existing policy, site visits, data sets and stakeholder consultation. These helped form the baseline, from which the key issues and problems were:
 - High levels of car ownership, car dependency and expected growth in traffic
 - Constrained, historic, city centre network, with a lack of continuous designated ringroad
 - Perceived Lack of suitable parking in the city centre and parking signage
 - Specific black-spots where accessibility levels are low (low levels of car ownership and public transport provision)
 - Narrow, uneven pavements and lack of street lighting in places
 - Lack of safe and secure parking in the city centre, with illegal parking obstructing the carriageway
 - A lack of safe cycling facilities with existing traffic calming measures forcing cars into cyclists roadscape
 - Poor planning, routing, facilities and signage for freight
 - Impact of freight vehicles on circulation, contributing to congestion (leading to air and noise pollution).
3. Once the baseline was established, in consultation with stakeholders, specific UTP objectives were set to address the issues (which were categorised into the main themes emerging: congestion, safety, accessibility and freight). A long list of schemes was drawn up and filtered down by appraising the schemes against the UTP objectives and deliverability, which included the feasibility, policy, funding and acceptability of the schemes. The draft document was then issued for public consultation in June 2008 and all comments were logged and taken into account for this final version
4. The final schemes for this UTP are categorised into the key strategy areas of: Congestion, Accessibility, Safety, and Freight. These are summarised below.
5. **Congestion strategy:** This strategy comprises mainly sustainable transport improvements and “smarter choices” travel planning. There is also a recommendation for St Albans City & District Council to develop a parking strategy to compliment the St Albans Urban Transport Plan Congestion Strategy. This has been underpinned with a need to update and develop the evidence base for making transport planning decisions and increase the modelling capacity for St Albans.

6. **Accessibility Strategy:** Measures for improving accessibility recommended by the St Albans Urban Transport Plan consist of public transport improvements and promoting the walking and cycling priorities of residents and visitors. All recommended improvements to sustainable transport also incorporate better provision of information and the promotion of that information.
7. **Safety strategy:** There is already much safety information provided for cyclists, horse riders, and drivers via the County Council website, as well as collision monitoring information. There is considerable ongoing work with schools in the city to create school travel plans, provide school crossing patrols, and for providing road safety education. Collision figures show a general decline in collision levels in the past three years. However, there are a number of areas with high collision levels, and the plan proposes investigating appropriate speed management measures to address these. It is also recommended that other indicators further to collisions are established to allow a wider understanding of safety to be gained, such as “near miss” data.
8. **Freight Strategy:** This contains schemes to encourage better working arrangements between private and public sector components of the industry, resulting in improved management of the network. The establishment of a stakeholder body known as a Freight Quality Partnership is recommended for this. In addition, the plan proposes compulsory freight planning in new developments, as well as improved signing and routing measures, and better enforcement of traffic restrictions for goods vehicles. These will result in positive impacts for both safety and congestion objectives, with additional benefits for the environment.
9. The schemes are described in the document and further detail is given in the Implementation Table in Appendix B, which includes their implementation schedule, approximate cost, funding source, responsibility and location.
10. This final UTP will now be used as a bidding document for funding from the Hertfordshire Local Transport Plan.

1. INTRODUCTION

Background to the St Albans Urban Transport Plan

- 1.1 Hertfordshire County Council has developed this Urban Transport Plan for the City of St Albans, building on previous work and taking into account new information and developments. The County Council is developing this plan to match the bright future of the historic city of St Albans. St Albans City and District Council's vision is to:
- “preserve and enhance the distinctive character of St Albans city and district, making it an outstanding place in which to live and work and to visit, where everyone enjoys a range of quality and efficient services in a progressive, caring and environmentally concerned community”¹.
- 1.2 Following the development of the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and the Mid Hertfordshire Area Transport Plan, which set out the strategic context for transport, Urban Transport Plans are being developed specifically for the towns and city within the area - St Albans, Welwyn Garden City, Hatfield, and London Colney.
- 1.3 In developing urban transport plans, it has been possible to identify local problems and propose solutions supporting the aspirations outlined above. The objectives and strategies set by the overarching Regional Transport Strategy; Hertfordshire Corporate Plan; Hertfordshire Local Transport Plan 2006/7 to 2010/11 and Mid Hertfordshire Area Transport Plan strategy documents amongst others have guided the St Albans Urban Transport Plan.

Overview of Process

- 1.4 Figure 2.1 outlines the process used with the level of consultation and outputs for each stage of developing the St Albans Urban Transport Plan.

1 City and District of St. Albans Corporate Plan 2007 - 2010

FIGURE 1.1 OVERVIEW OF STRATEGY DEVELOPMENT PROCESS



Structure of the Urban Transport Plan

1.5 The St Albans Urban Transport Plan consists of the following sections:

- Section 1: Introduction
- Section 2: Issues, Problems and Opportunities – these were identified through policy reviews; site visits; data analysis and stakeholder consultation. The alphanumeric coding used within Section 2 is as follows:
 - CI1 – Congestion Issue 1
 - SP2 – Safety Problem 2
 - A05 – Accessibility Opportunity 5
- Section 3: Objectives – informed by reviewing existing related policy documents; analysis of the issues, problems and opportunities; and through stakeholder consultation. Coding for Section 3 is as follows:
 - Objectives
 - CB3 – Congestion Objective 3
 - FB1 – Freight Objective 1
 - Targets
 - S4 – Safety Target 4
 - O2 – Other Target 2

- Section 4: Strategy Development – outline of how long-lists of potential schemes were appraised to deliver the schemes of the recommended strategy. Strategy sections have been created for the areas deemed most specific for St Albans, rather than a pre-defined set of strategy areas.
- Section 5: Congestion Strategy – the strategy in response to the existing and anticipated congestion problems of St Albans.
- Section 6: Accessibility Strategy – solutions to accessibility issues, problems and opportunities.
- Section 7: Safety Strategy – a safety strategy to continue the good work undertaken in Hertfordshire and St Albans to reduce incident and casualty levels.
- Section 8: Freight Strategy – a mode specific strategy to manage freight in St Albans and the surrounding strategic route network.
- Appendix A – Implementation Plan
- Appendix B – Freight Review.

1.6 There are two Supporting Volumes. The first is an 'audit' linking all issues, problems and opportunities with recommended schemes, and linking all schemes to objectives, indicators and targets – the Implementation Plan. The second is a Freight Review containing all background analysis which informed the Freight Strategy.

2. ISSUES, PROBLEMS AND OPPORTUNITIES

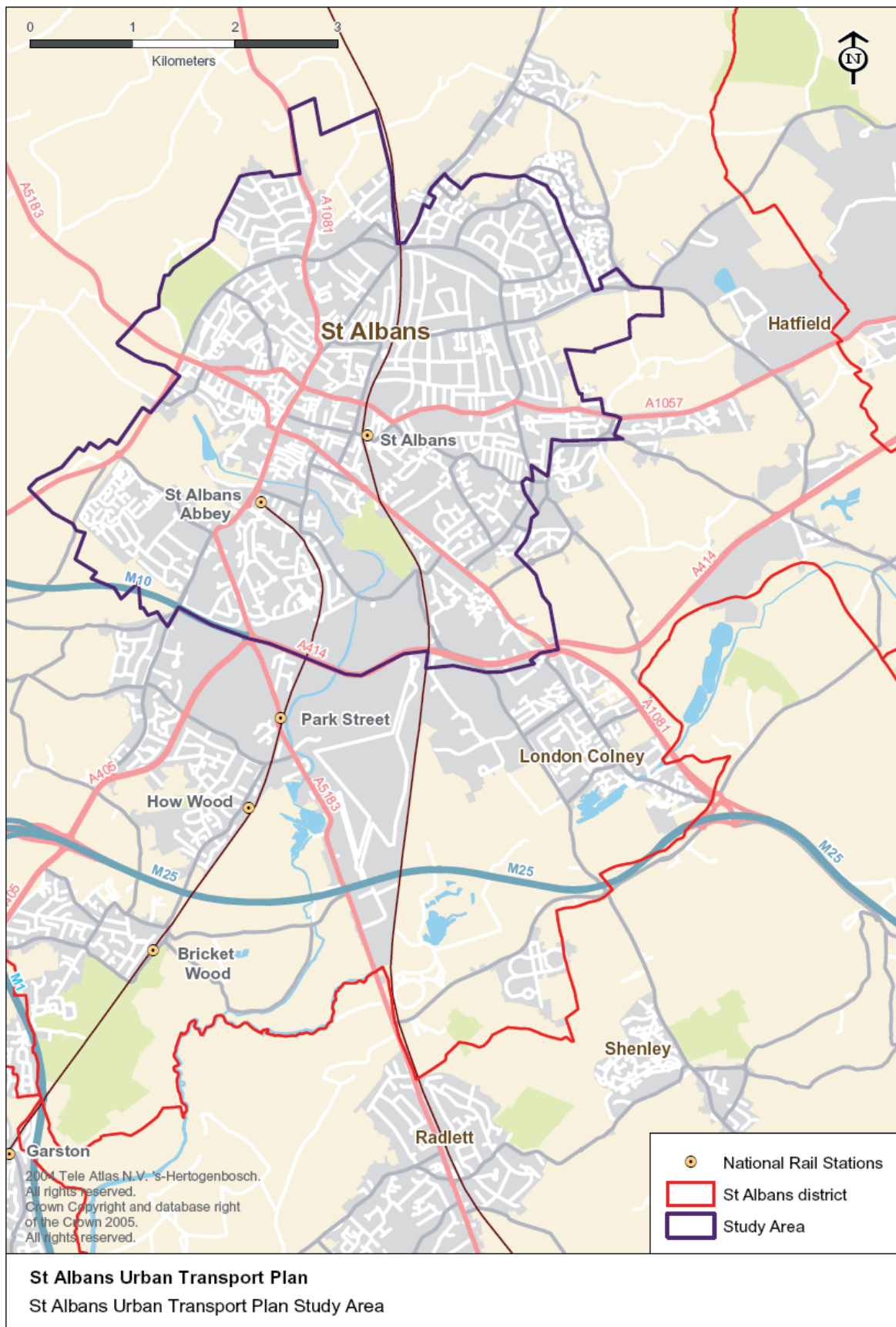
Method

- 2.1 Information sources for gathering fact and opinion regarding the issues, problems and opportunities facing St Albans included:
- existing policy – policy was reviewed to gain a contextual understanding of present and proposed measures to address the issues, problems and opportunities being faced in St Albans. This involved not only geographical plans such as the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and the Mid-Hertfordshire Area Transport Plan; but also modal and thematic transport plans (e.g. Hertfordshire Bus Strategy and Speed Management Strategy); as well as related land-use planning and community plans (e.g. Regional Spatial Strategy and Hertfordshires Sustainable Community Strategy).
 - site visits – visits were made to increase understanding of congestion; accessibility; safety hazards; sustainable transport modes; freight; travel planning and intelligent transport solutions through observation and collection of anecdotal evidence.
 - data sets – analysis of data sets held by Hertfordshire County Council or data that is publicly or widely available was conducted.
 - stakeholder consultation – three consultation exercises held with Officers, Members and other stakeholders.
- 2.2 Issues, problems and opportunities have been given their own unique alphanumeric reference (e.g. Congestion Issue 1 = CI1; Congestion Problem 1 = CP1; and Congestion Opportunity 1 = CO1) within the four key strategy areas of the St Albans Urban Transport Plan.

Background

- 2.3 Figure 2.1 is a map of the area studied within the St Albans Urban Transport Plan comprising the following nine wards – St. Peter's; Clarence; Ashley; Cunningham; Sopwell; Verulam; Batchwood; Marshalswick South; and Marshalswick North.
- 2.4 This old and historic city has several locational benefits. The city is served by four motorways including the M25 London orbital, the M1 from London to Leeds, the M10 feeder and the A1(M), all of which are less than three miles from the city centre. In addition to employment within the city and commuting into London, St Albans also serves the labour markets of Hatfield, Watford, Stevenage, Luton, Bedford and Cambridge.
- 2.5 Currently, the transport system serving St Albans city is characterised by high levels of congestion, and large numbers of commuting patterns to and from London. Managing freight issues efficiently is one of the biggest challenges and so is the improved integration of all sustainable transport modes. Proximity to London generates significant commuting, mainly by rail from St Albans City station. In addition much travel to work occurs to north London, mainly by car.

FIGURE 2.1 ST ALBANS URBAN TRANSPORT PLAN STUDY AREA



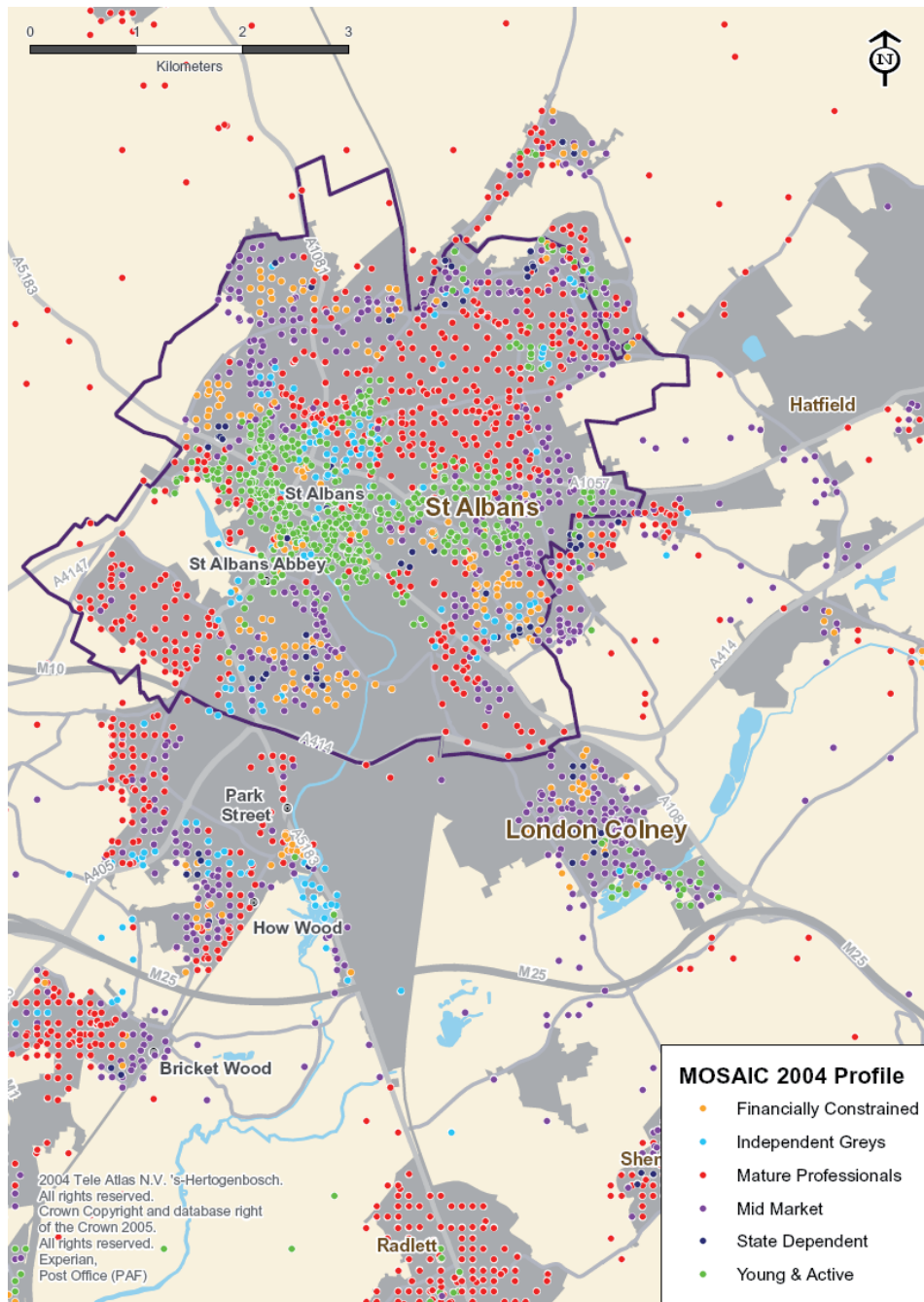
- 2.6 Future growth in the area, as described in the East of England Plan (the Regional Spatial Strategy for the East of England), will require a very different transport mix to the current offering and this ambitious study will put a plan in place to serve and support that growth. Developments taking place in St Albans and the South East and East of England ask for practical transport programmes of schemes and policies to be designed, so as to support them. This presents a big opportunity for St Albans to develop its transport vision and become a key access point in the area, by ensuring efficient and sustainable links to London and the other developing areas are in place. St Albans is located in a strong growth area with close proximity to London. Benefiting from low unemployment the local economy is also characterised by the services sector, light industry and the visitor economy typify the local economy. The district area has been one of continued economic growth and prosperity and houses 130,000 residents.

Socio-economic Profiling

- 2.7 MOSAIC profiling of the resident population is shown in Figure 2.2. MOSAIC uses a combination of census, electoral roll, housing and financial data to classify postcodes into different socio-economic groups. This map shows specifically the various types of profession as a proxy indicator of wealth and lifestyle.
- 2.8 The MOSAIC profile shows a dominance of “young and active” households in the city centre, surrounded by largely “mature professionals” suburbs. Pockets of “independent greys” and “mid market” households can be found and, whilst the overall picture of St Albans is one of wealthy sectors of society, Cunningham, Sopwell and Batchwood have higher level of “financially constrained” households compared to other wards.

AI1: Areas of financially constrained” households in Cunningham, Sopwell and Batchwood

FIGURE 2.2 SOCIO-DEMOGRAPHIC MOSAIC PROFILE OF ST ALBANS



St Albans Urban Transport Plan
Socio Demographic Mosaic Profile of St Albans

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. The categories in the map above are based on the following characteristics:

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

Congestion

Car Ownership

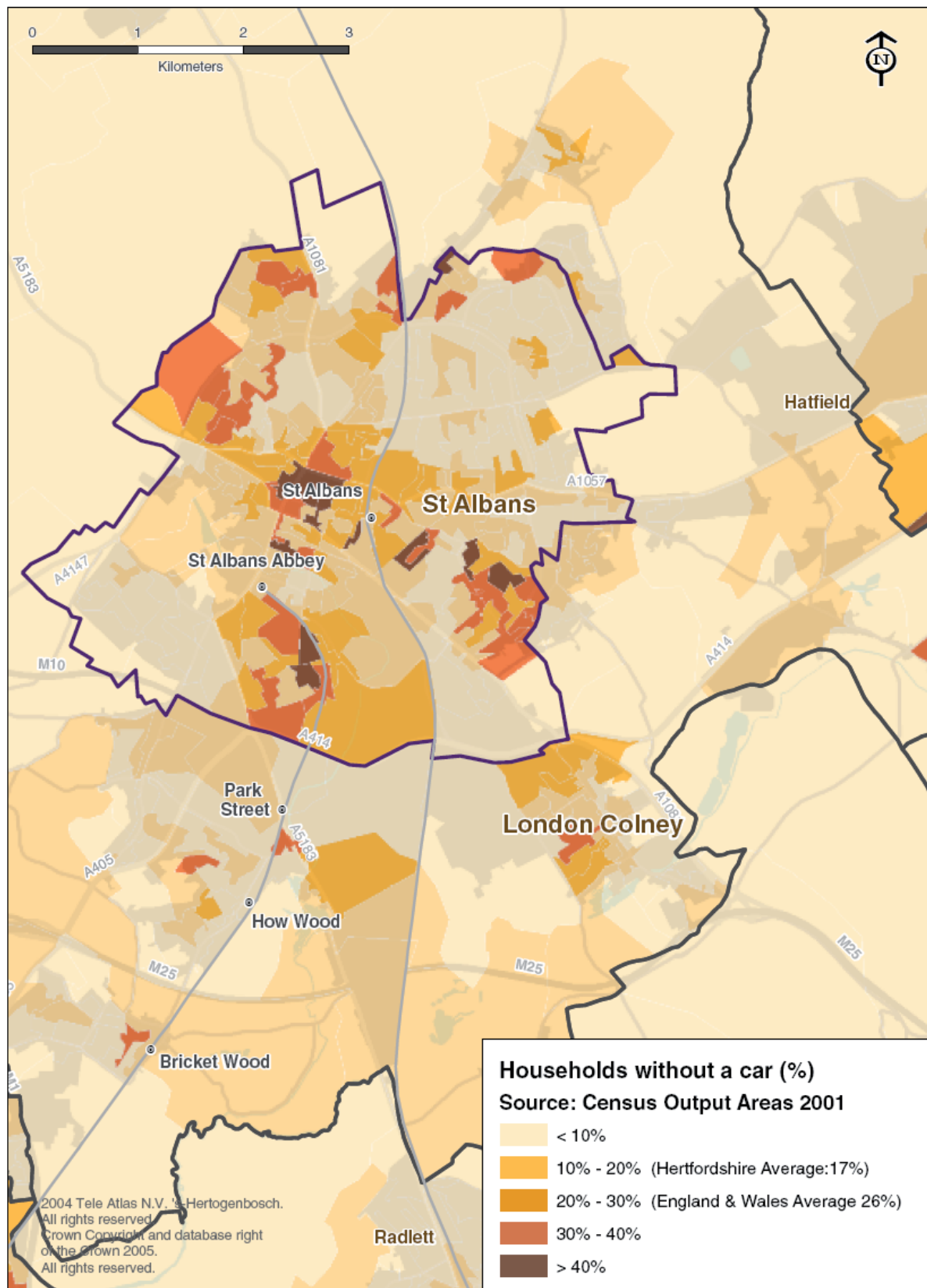
- 2.9 Hertfordshire has the 4th highest car ownership in England (0.558 cars per head). 82% of households have access to one or more cars; 41% of households have access to two or more cars; and 9% have access to three or more cars².

CI1: High overall levels of car ownership

- 2.10 Figure 2.3 shows the levels of households with no access to a car. Pockets of no car ownership exist in St. Peter's, Cunningham, Sopwell and Batchwood. In St. Peter's, this is perhaps to be expected as the most central of all wards. The suburban wards with low car ownership match the socio-demographic MOSAIC data for the wards containing the greatest number of "financially constrained" households.

AI2: Areas of low car ownership in Cunningham, Sopwell and Batchwood

FIGURE 2.3 HOUSEHOLDS WITHOUT ACCESS TO A CAR IN ST ALBANS



St Albans Urban Transport Plan

Households without access to a car in St Albans

Journey Purpose and Mode Share

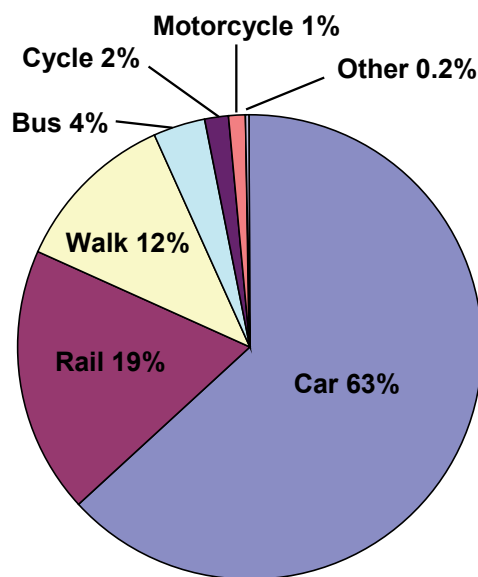
- 2.11 Table 2.1 shows the journey purpose split for trips made in St Albans City. The modal journey purpose is for work followed by recreation and social purposes. Education and shopping generate equal numbers of trips.

TABLE 2.1 AVERAGE WEEKDAY JOURNEY PURPOSE

	Work	Employer's Business	Education	Shopping	Personal Business	Recreation/Social
St Albans City	27%	5%	18%	18%	9%	24%

- 2.12 In St Albans, 44% of all journeys are less than 5km, but less than a third of these journeys are made by walking or cycling. Figure 2.4 displays the mode split for journeys to work in St Albans. Compared against the England and Wales average for car travel to work (67%) and the Hertfordshire average (71%), car travel appears low. However, in an urban area such as the City of St Albans a higher mode share by sustainable transport modes would be expected. Mode share for rail (19%) is particularly high compared to county (12%) and national (8%) averages, due to excellent north-south rail links in the district³.

FIGURE 2.4 TRAVEL TO WORK BY MODE IN ST ALBANS



CP1: High car dependency

- 2.13 Figure 2.5 shows the trip origins of people working in St Albans. People are commuting from as far as North London and across Hertfordshire, with the majority of work trips originating from within the City and District of St Albans.
- 2.14 For work trips originating in St Albans, Figure 2.6 shows residents travelling to The West End of London, The City of London and Canary Wharf, as well as North London and across Hertfordshire. The majority of work trips are more local within the City and District of St Albans.

- 2.15 For users of St Albans City Station travelling into London, data from the London Area Travel Survey shows that for trips to the station of more than one kilometre, the car mode share increases dramatically, particularly in the north west, north east and south east of the city.
- 2.16 Countywide, 51% of primary school children and 36% of secondary school children travel to school using non-sustainable modes⁴. Across all schools, the county average for travel by car is 33% against a car mode split of 40% in St Albans⁵.

CO1: Mode shift potential from car to sustainable transport modes

⁴ 2005/6 target baseline for the Mode Share of Journeys to School indicator in Hertfordshire Local Transport Plan 2006/7 to 2010/11
⁵ Hertfordshire School Travel Survey (2005)

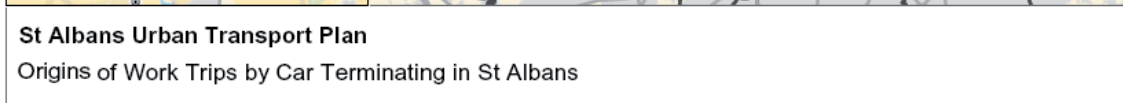
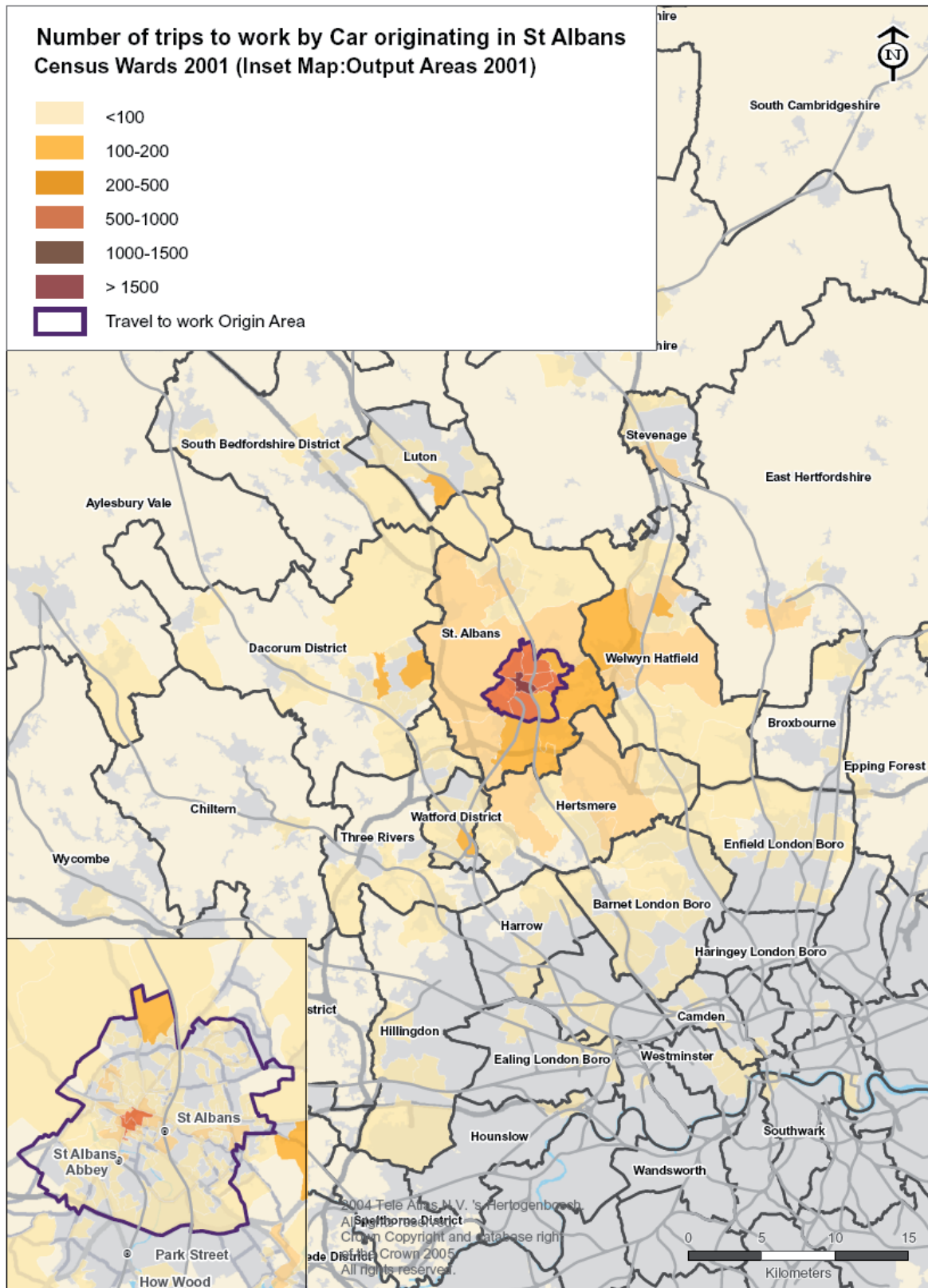


FIGURE 2.6 DESTINATION OF WORK TRIPS BY CAR ORIGINATING IN ST ALBANS



St Albans Highway Description and Traffic Flows

- 2.17 St Albans has excellent strategic road connections. The town 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, to the south of St Albans, link the two motorways together and provide a southern bypass. Further south is the M25 which connects into routes to the east, west and south of the UK.
- 2.18 Close proximity to major motorways can have disadvantages for St Albans, primarily after road closure caused by collision or at times of heavy congestion. The M1 is one of the busiest motorways in Britain. The section between Junction 6A and Junction 10 is approximately ten 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.
- 2.19 Congestion on the major motorways often generates diversions into St Albans along the A405, A414 and M10. When incidents arise on the motorways the majority of drivers use Watford Road, Hemel Hempstead Road and Bluehouse Hill.

CP2: Traffic diverting from the strategic road network into the city centre

- 2.20 One issue is that St Albans lacks a continuous, designated and effective ring road. This role is currently being unofficially filled by King Harry Lane and Watling Street in the west, and Bluehouse Hill, Batchwood Drive, Beech Road, and Marshalswick Lane in the north which has a significant level of residential land use in close proximity to the highway network. All of these highways are single carriageway. The North Orbital Road (A414), a dual carriageway highway that links into the M1 via the M10, serves as the ring road in the south.

CI2: Lack of continuous, designed, ringroad

- 2.21 The socio-economic and transport conditions in and around St Albans means that there are high levels of car use. The lack of a ring road causes much of this traffic to be funnelled into the city centre and suburban residential network from arterial roads. Unfortunately the historic nature of the road network and townscape means that St Albans is particularly unsuited to high traffic levels. Road capacity is limited causing queuing and delay, often throughout the day, and there is little opportunity to widen the roads.

CI3: Constrained historic network in the city centre

CP3: Arterial route and city centre congestion

CP4: Traffic diverting onto residential roads

- 2.22 St Peter's Street in the city centre between Hatfield Road and Victoria Street was closed for long periods from February 2006 to May 2006 for road safety, maintenance and street scene enhancement works. Data reviewed is inconclusive as to whether the works have increased footfall on St Peter's Street. No counts were conducted whilst St Peter's Street was closed, but a survey conducted by MORI found that residents and visitors preferred the closure of St Peter's Street to car and motorcycle traffic.

CO2 / A01: Remove car traffic from St. Peter's street to reduce bus journey times and increase bus reliability

Junctions and Signals

- 2.23 St Albans currently has several signalised junctions in the city centre using intelligent SCOOT (Split Cycle Offset Optimisation Technique) technology to respond to traffic levels and optimise traffic flow. No traffic signals exist currently on Hemel Hempstead Road, Bluehouse Hill and Batchwood Drive until its junction with the Harpenden Road.

CO3: Signals improvements to increase capacity on western orbital road network

Road Schemes

- 2.24 Three important motorway projects will affect St Albans and its environs:
- M1 Junctions 6a to 10 widening - Works were completed in the Autumn of 2008 to widen the M1 to reduce congestion, improve both safety and journey time reliability. Works were carried out on both carriageways between junction 6a and 10 to bring it up to a full standard eight lane motorway with continuous hard shoulder including the construction of new parallel roads between junctions 7 and 8 to cater for local traffic travelling between Hemel Hempstead and St Albans.
 - M25 Junction 16 to Junction 23 widening – plans for future widening aiming to help tackle congestion and improve journey times.
 - De-trunking and the M10 – the North Orbital Road (A414), a dual carriageway highway that links into M1 via the M10 serves as the ring road in the south. Down-grading of the M10 (to the A414) following de-trunking, if it proceeds, could change the local traffic conditions and potentially allow St Albans / Hemel Hempstead traffic to avoid using the M1.

CO4: Strategic road network widening to increase highway capacity and reduce levels of diverting through traffic

- 2.25 District Council options within the Core Strategy Development Plan document - issues and options consultation paper (July 2007) included a new link from the M10 to the A4147, an eastern distributor Road from London Road to Hatfield Road and extension of Griffiths Way 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.

CO5: Highway construction to increase highway capacity on western orbital road network and reduce levels of through traffic

Development and Growth

- 2.26 The East of England Plan estimates an additional 7,200 dwellings in the City and District of St Albans need to be built between 2001 and 2021 to meet housing needs, with approximately half of these dwellings estimated to be distributed in and around the city itself. Additional housing near Hatfield and Hemel Hempstead on the boundary of the district and close to St Albans city is probable in addition to the 7,200 dwellings. There is an estimated increase in jobs of 5,900 across the district⁶.
- 2.27 Traffic has grown 64% since 1980, with a consistent increase of 2 to 3% per year during the 1990s. Traffic is expected to grow 18% by 2011, and 33% by 2021 (from a 2001 base)⁷, slightly higher than national forecasts.

CP5: High expected growth in traffic

Parking

- 2.28 Parking is decriminalised in Hertfordshire, with the responsibility for parking provision and enforcement lying with the ten District Councils across the county. It is recognised by Hertfordshire County Council that close working is required with St Albans City & District Council if the desired parking improvements that are recommended in the St Albans Urban Transport Plan are to be implemented. This is in terms of:
- parking improvements;
 - reducing the negative impacts of parking; and
 - using parking as a tool to achieve other transport objectives
- 2.29 St Albans Parking management and enforcement is currently contracted to NCP under a ten-year contract which commenced in 2004 (although significant amounts of private parking areas are in other hands). Within the contract, St Albans City & District Council specified that parking charges were to rise at a rate above inflation.

CI4: Lack of parking signage

CI5: Perceived Lack of suitable short-stay, on-street parking in the city centre

CI6: Perceived Lack of suitable short-stay, local parking away from the city centre

CI7: Lack of long stay, residential parking

CP6 / SI1: Illegal parking obstructing the carriageway footway and damaging verges

CP7: Traffic circulating looking for suitable parking

CP8: On-street parking reducing the width of the highway

SI2: Perceived lack of safe and secure parking in the city centre

AP1: Perceived High cost of city centre parking

AP2: Lack of city centre parking suitable for mobility impaired users

CO6: A St Albans city parking strategy

⁶ Policy H1 of The Regional Spatial Strategy 14 (RSS14)

⁷ Figures derived from TEMPRO V1.6 (update 2005), Department for Transport

Sustainable Transport

Rail

- 2.30 Control of rail operations lies outside the control of local transport authorities and with central government, Network Rail and the Rail Operating Companies. The issues, problems and opportunities identified here are recommendations to represent the views of the County Council and local stakeholders.
- 2.31 The County Council rail strategy shows clear support for Abbey Line CRP, lifts at St Albans Station, accessibility improvements at the St Albans Abbey Station and support for a passing loop on the Abbey Line although the latter is considered no longer viable by the County Council, DfT and Network Rail with whom discussions had been taking place. Hertfordshire county council is to commission a study to consider lighter rail options that may be more cost effective whilst still delivering the benefits associated with a passing loop.

CP9: Crowded morning peak first capital connect services to London

A02: Accessibility improvements at St Albans Abbey station

CO7 / A03: passing loop on Abbey rail line

Bus

- 2.32 The County Council are keen to promote bus services in St Albans. At present the potential of the network is constrained by persistent congestion through St. Peter's Street and on some of the arterial routes. Although there is a Hertfordshire express coach network, this does not call at St Albans, and city centre congestion is felt to be one cause of this.
- 2.33 Bus services are not provided to a uniform quality. The operators all use their own liveries, which vary from highly variable and do not give the impression that bus services in St Albans are provided at a consistently high quality. The County Council has its own "Intalink" branding, and whilst this is displayed on some vehicles, it is not universally seen or displayed in prominent places.
- 2.34 Bus services are deregulated and thus some routes run sub-optimally as a result of the desire of operators to compete (so four buses an hour may be spaced at half hourly intervals). Hertfordshire County Council and St Albans City & District Council subsidise routes and an opportunity exists to remove this inefficiency.
- 2.35 Currently, bus operations are guided strategically by the Local Transport Plan and related bus strategy. Bus Network Reviews have been conducted and the findings of which will provide necessary information to inform the schemes listed in this strategy. We will look to conduct all work in Partnership with the relevant stakeholders.

CP10: Lack of uniformity between the four main bus operators in on-board quality

CP11 / AP3: Concern over bus frequency

CP12 / AP4: Concern over bus reliability

CP13 / AP5: Relatively poor bus information provision and promotion

SI3: (Perceived) vulnerability at bus stops

CO8 / A04: Improved information provision and promotion

CO9 / A05: Bus priority measures on arterial routes

CO10 / A06: Quality Bus Partnerships

CO11 / A07: Improve East-West bus and coach links

Walking and Cycling

- 2.36 St Albans is a relatively compact city with a distinct centre. It does not have a network of dual carriageways, which gives potential for all roads into the city centre to be viable cycling routes. The railway line passing through St Albans City station (First Capital Connect) does cause some degree of severance. In addition, narrow and uneven pavements are unsuitable for pushchairs, wheelchairs and mobility buggies.
- 2.37 The Regional Transport Strategy seeks to widen travel choice and encourage modal shift to more sustainable modes. Cycling is identified as an important mode for making local journeys. The Local Transport Plan 2006/7 – 2010/11 sets out a vision to “provide a safe, efficient and affordable transport system that allows access for all to everyday facilities”. The Local Transport Plan sets out nine key objectives listed under the shared priorities of safety, congestion, accessibility, air quality and quality of life. Clearly, cycling has a role to play in addressing each of these areas, being a low cost and environmentally efficient mode of transport.
- 2.38 Hertfordshire County Council revised its cycling strategy in 2007. The new strategy sets out two objectives:
- More people cycling more often as a convenient, quick, healthy and sustainable form of transport for short journeys.
 - More people cycling more often as an activity that contributes positively to the primary shared local transport objectives.”
- 2.39 The Cycling Strategy sets out an action plan introducing a series of policies aimed at promoting cycling, including partnership working between the County and District Councils, marketing and promotion, cycle training, infrastructure and maintenance.

- 2.40 At the District level, St Albans City & District Council has produced a Cycle Strategy aimed at increasing the levels of cycling in the area. The strategy has six objectives based on hard and soft approaches (infrastructure and information). In 2007, cycling parking provision in the city centre and at St Albans station increased and work in schools providing National Standard Cycle Training continues. A draft Walking Strategy has been approved for consultation. The consultation is being carried out in the second half of 2008.
- 2.41 Issues, problems and opportunities related to walking and cycling are listed in the table below.

A011: Improve accessibility along key pedestrian and wheelchair user desire lines

CP14: Lack of cycle parking in the city centre and St Albans station

CP15: Lack of promoted information on walking and cycling routes

CP16 / SI4: Lack of (continuous) cycle lanes

CP17 / SI5: Lack of road and junction crossings

CP18 / SI6: Lack of secure cycle parking, changing and showering facilities in workplaces

SI7 / AP6: Narrow and uneven pavements

SI8 / AP7: Cycle parking prominent and secure as well as conveniently located

SI9: Speeding, dangerous driving and lack of enforcement

CO12 / A08: Improve walking and cycling conditions

Travel Planning and Behavioural Change

- 2.42 Hertfordshire County Council and St Albans City & District Council are implementing various initiatives to encourage mode shift. The primary objective for these initiatives is to achieve greater use of alternative modes of travel to the single occupancy car by expanding travel choice (i.e. Travel Planning). The challenge for local authorities and their partners is on the one hand to provide a range of good quality travel alternatives and secondly to ensure that individuals are able to make an informed travel choice, which could include deciding not to travel at all.
- 2.43 The Hertfordshire Local Transport Plan 2006/7 – 2010/11 stated a desire to extend the Business TravelWise links to further influence the business sector in terms of its travel impacts in the County. A key element of this approach involves greater encouragement of businesses to participate in workplace travel planning (providing information and advice on travel options to workplaces encouraging use of sustainable transport modes) activity.

- 2.44 The School Travel Action Group has the aim of delivering a network of safer, more sustainable transport links to all schools in Hertfordshire by working with parents, pupils, teachers and local residents. The considerable progress made to date in the promotion of school travel planning across the county puts St Albans in a very strong position when to continue this good work.
- 2.45 Many opportunities to introduce new measures that are not currently being explored exist and are listed below.

CO13: Build on the strong position in St Albans for school travel planning

CO14: Engage more with the business community

CO15: Introduce Personalised travel planning

CO16: Incorporate residential travel planning into the planning process for new developments

CO17: Introduce car clubs and car sharing

Intelligent Transport Systems (ITS)

- 2.46 Implementation of ITS initiatives, such as;
- Hertfordshire County Council procurement of additional Selected Vehicle Detection at signalised junctions;
 - SCOOT signals;
 - real-time bus tracking system; and
 - public information provision,
 - will allow better bus priority and management of traffic on an already congested network, as well as empower individuals with additional travel information.

CO9 / A05: Bus priority measures on arterial routes

CO18 / A09: Real-time information provision for bus users

CO19: Signal Improvements to increase highway capacity

Accessibility

- 2.47 Hertfordshire's Accessibility Strategy was submitted in July 2006 as part of the second Local Transport Plan. This will form a key target in the Hertfordshire's Local Area Agreement.

- 2.48 Within St Albans, the most inaccessible key service as perceived by members, officers, and other stakeholders are hospital services, due to the relocation of many facilities to other towns - travel to Watford General Hospital is often necessary and considered difficult at present.

AP8: Poor access to primary health care

- 2.49 Consultees considered there to be few general problems accessing key services, other than healthcare, due to the urban and compact nature of St Albans. However, opportunity for improved accessibility for individuals exists through improving public transport, community transport and improving accessibility along the main desire lines of pedestrians and wheelchair/scooter users.

A010: Improve community transport

A011: Improve accessibility along key pedestrian and wheelchair user desire lines

Safety

Overall Collision Levels

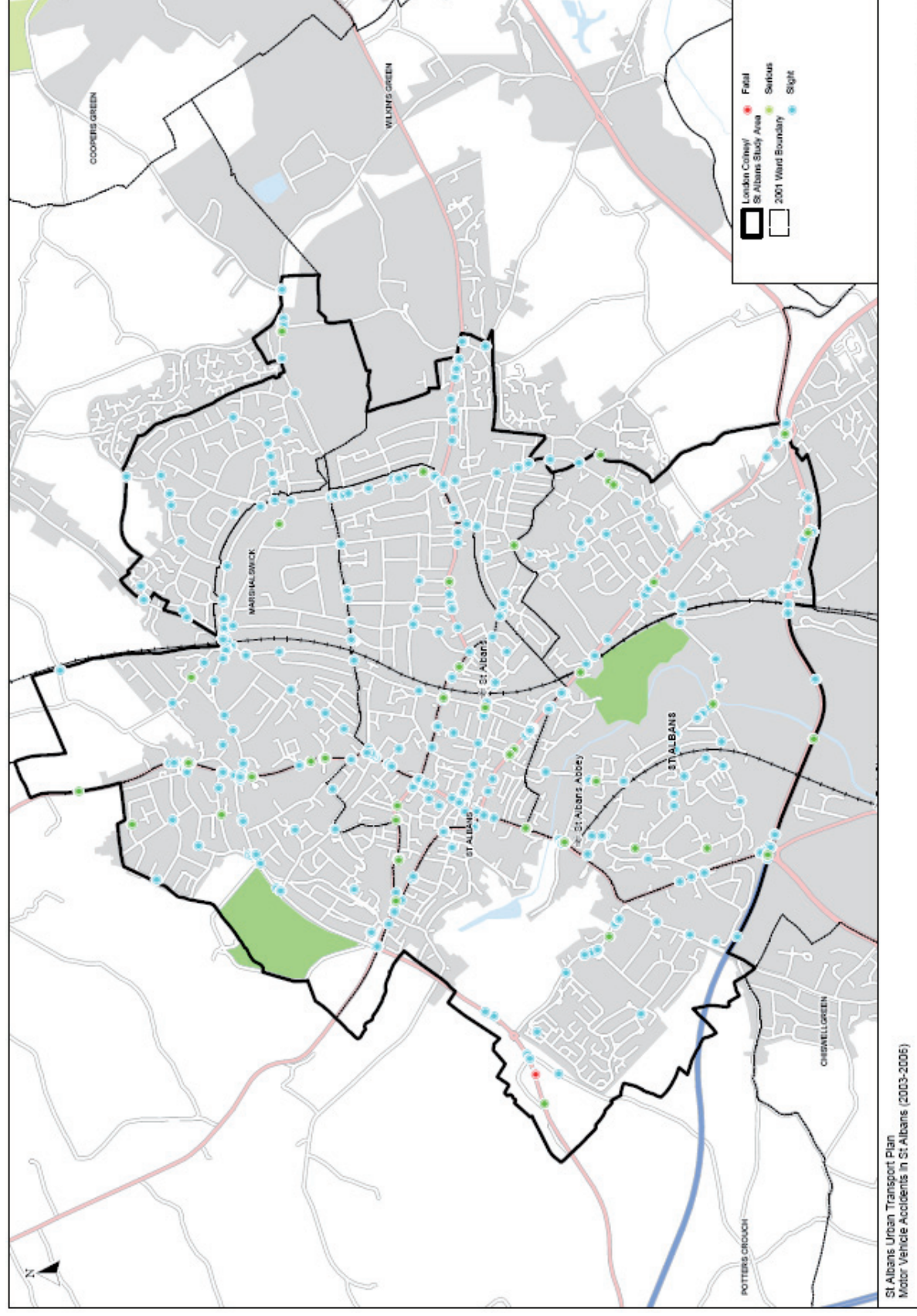
- 2.50 In the year running up to March 2006 there were 164 reported collisions in St Albans. There were also 40 child casualties and 132 pedestrian or cycle casualties over this period. Table 2.2 shows a summary of collisions over the last three years. There has been a decline in the number of collisions during this period. There were no fatal injuries during June 2003 to March 2004 compared to one in each of the following years, and serious injuries have declined.

TABLE 2.2 REPORTED COLLISIONS IN ST ALBANS, (MARCH 2003 TO JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
April 2003 – March 2004	-	27	191	218
April 2004 – March 2005	1	18	177	196
April 2005 – March 2006	1	16	147	164
Total	2	61	515	578

- 2.51 Figure 2.7 shows the location of collisions in St Albans that only involve motor vehicles (i.e. does not include pedestrian or cyclist related casualties).

FIGURE 2.7 MOTOR VEHICLE COLLISIONS IN ST ALBANS (2003 - 2006)



Child Safety

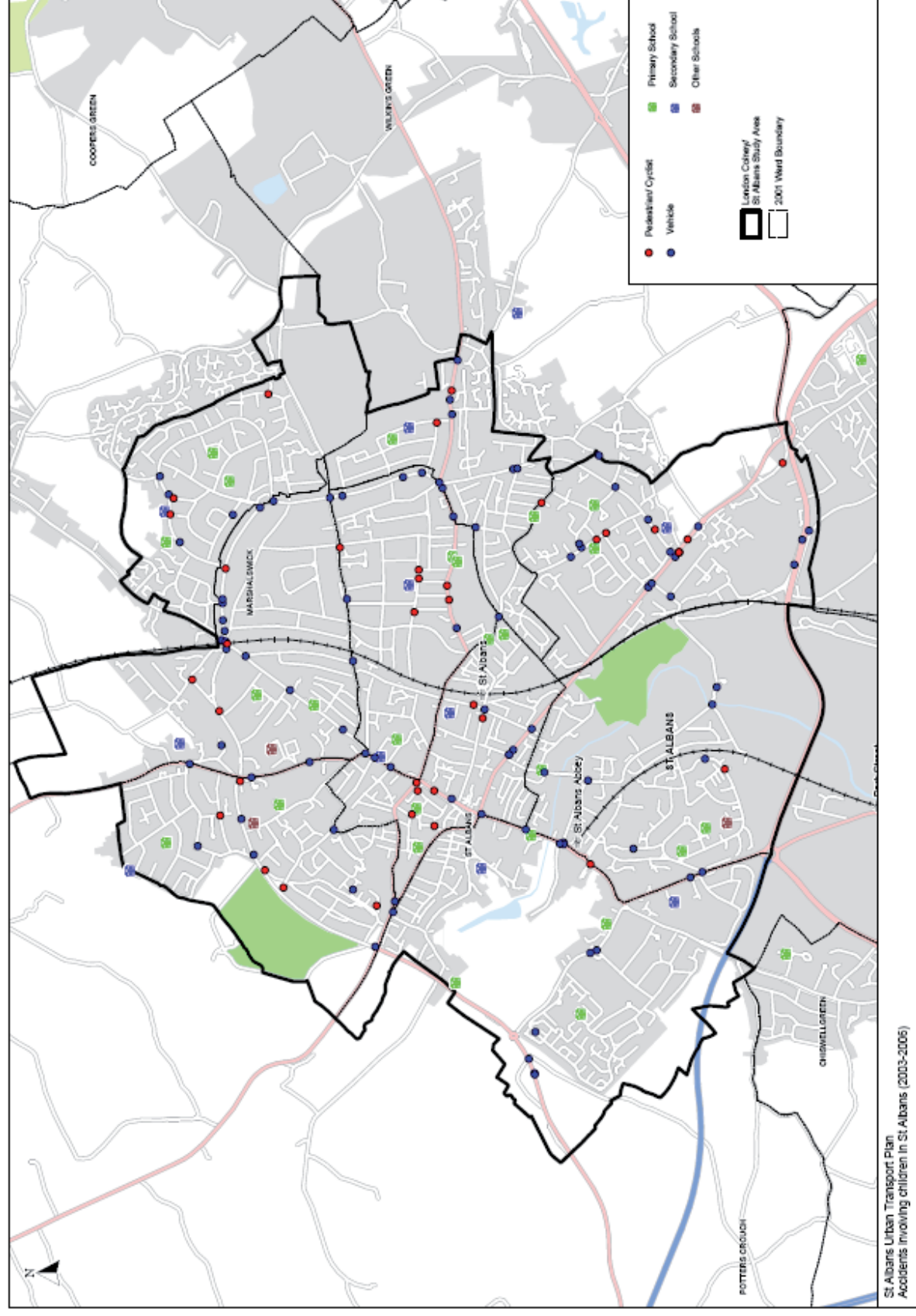
- 2.52 Table 2.3 below shows child casualty rates in St Albans. There have been no fatal collisions involving children in the last three years and few serious injuries. The general trend shows falling levels of collisions.

TABLE 2.3 CHILD CASUALTIES IN ST ALBANS (MARCH 2003 - JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
April 2003 – March 2004	-	4	43	47
April 2004 – March 2005	-	1	54	55
April 2005 – March 2006	-	7	33	40
Total	-	12	130	142

- 2.53 Figure 2.8 shows the collisions in St Albans that involved children and is broken down by whether they were in a motorised vehicle or walking / cycling. The spread of collisions are similar for the rest of the population in most cases. The only exception are that there is a higher concentration of walk / cycle collisions in the area around Francis Bacon School in the southeast of the city and near Verulam School in the Fleetville area.

FIGURE 2.8 COLLISIONS INVOLVING CHILDREN IN ST ALBANS (2003 - 2006)



Pedestrians and Cyclists

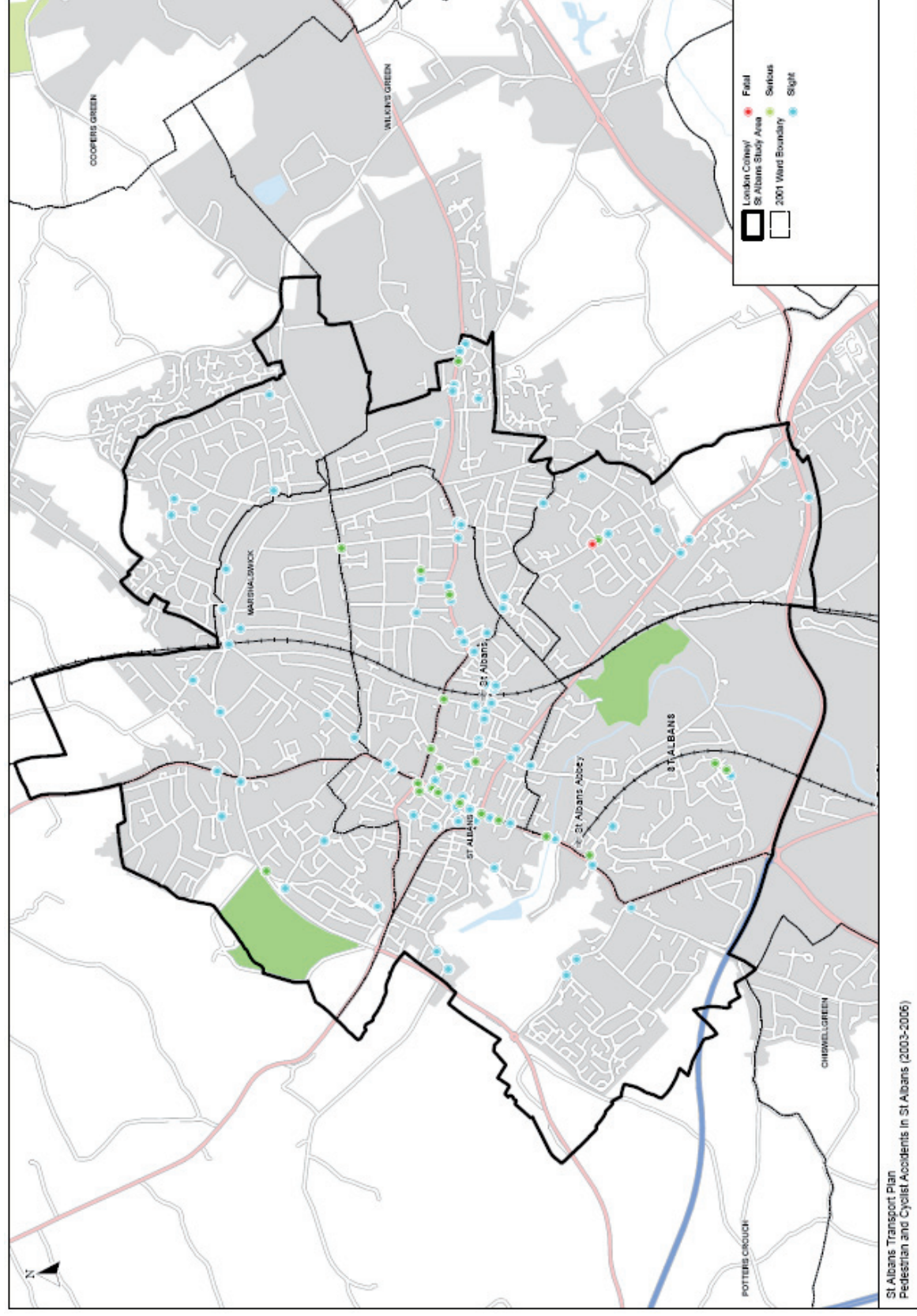
- 2.54 Table 2.4 below shows the number of pedestrians and cyclist casualties. There has been a decline in these levels over the three years. Also pedestrians and cyclists collisions are considerably fewer than to people in motorised vehicles.

TABLE 2.4 PEDESTRIAN AND CYCLING CASUALTIES IN ST ALBANS (MARCH 2003 - JUNE 2006)

Annual Period	Fatal	Serious	Slight	Total
April 2003 – March 2004	-	9	32	41
April 2004 – March 2005	-	7	36	43
April 2005 – March 2006	1	5	29	35
Total	1	21	97	119

- 2.55 Collision levels amongst pedestrians and cyclists are displayed in Figure 2.9. The works completed in St Peter's Street in 2006 were intended to reduce collision levels in the city centre. The other area where there is a concentration of collisions is near St Albans City station where high flows of pedestrians, cyclists and vehicles are found.

FIGURE 2.9 PEDESTRIAN AND CYCLIST COLLISIONS IN ST ALBANS (2003 - 2006)



- 2.56 In summary, from the analysis above, issues and problems lie in the causes and location of collisions.

Issues and Problems

SI1 / CP6: Illegal parking obstructing the carriageway and footway

SI4 / CP16: Lack of (continuous) cycle lanes

SI5 / CP17: Lack of road and junction crossings

SI9: Speeding, dangerous driving and lack of enforcement

SI10: Traffic calming measures, such as central islands that force cars into cyclist road space

SP1: Collision hotspots in the city centre, on arterial routes, orbital routes, major junctions and roundabouts

Opportunities

SO1: Increase use of speed management and enforcement

SO2: Increased levels of road safety education for children and cyclists and training for drivers

SO3: Road safety campaigns targeted at particular user groups and problem areas

Freight

- 2.57 Other than through-traffic, there are no active flows of freight into or out of the study area by rail. Therefore, the focus on freight activity within the St Albans Urban Transport Plan is on the use of road for the movement of goods to and from St Albans. Accompanying this plan is a supporting volume containing the full analysis of issues, problems and opportunities for freight in St Albans. Whilst several freight issues are related to wider issues of congestion, accessibility and safety, they retain their own alphanumeric coding (FP1, FO1 etc.) for prioritised attention within the plan.

Issues and problems

FP1: Planning - lack of available data; poor links between council planners and businesses; no one council planner responsible for freight

FP2: Access and routing - am peak congestion; congestion on single carriageway roads in the city centre; through traffic

FP3: Circulation - congestion; restrictions on stopping and movement

FP4: Facilities - poor on-street loading facilities; poor signage; lack of longer-term parking; distance from parking facilities to delivery / pick-up points

FP5: Information - poor signage; difficult to access information regarding diversions

FP6: Safety and security - several collision hotspots on arterial and ring roads

FP7: Environment - air and noise pollution of freight vehicles, especially when caught in congested traffic at peak times

Opportunities

F01: Planning – thorough and regular data; single point of contact at Hertfordshire County Council for freight

F02: Access and routing – more appropriate local access routes; identification and management of pinch-points

F03: Circulation – reduction of congestion; rationalisation of traffic restrictions

F04: Facilities – more on-street loading bays; better guidance on appropriate use of on-and off-street parking

F05: Information – better signage; Intelligent Transport Systems

F06: Safety and security – identify and manage collision hotspots

F07: Environment – consider freight in the development of any environmental plans

Summary

- 2.58 The following tables group the issues, problems and opportunities for each of the four problem areas across all modes and themes.

Congestion

Issues

- 2.59 The key congestions issues identified in the St Albans Urban Transport Plan are:
- CI1: High overall levels of car ownership
 - CI2: Lack of continuous designated ringroad
 - CI3: Constrained, historic, city centre network
 - CI4: Lack of parking signage
 - CI5: Lack of suitable short-stay, on-street parking in the city centre
 - CI6: Lack of suitable short-stay, local parking away from the city centre
 - CI7: Lack of long-stay, residential parking.

Problems

- 2.60 The key congestion problems identified in the St Albans Urban Transport Plan are:
- CP1: High car dependency
 - CP2: Traffic diverting from the strategic road network into the city centre
 - CP3: Arterial route and city centre congestion
 - CP4: Traffic diverting onto residential roads
 - CP5: High expected growth in traffic
 - CP6: Illegal parking obstructing the carriageway
 - CP7: Traffic circulating looking for suitable parking
 - CP8: On-street parking reducing the width of the highway.

Opportunities

- 2.61 The key congestion opportunities identified in the research stages of the St Albans Urban Transport Plan are:
- C01: Mode shift potential from car to sustainable transport modes
 - C02: Remove car traffic from St. Peter's Street to reduce bus journey times and increase bus reliability
 - C03: Signal improvements to increase highway capacity on western orbital road network
 - C04: Strategic road network widening to increase highway capacity and reduce levels of diverting through traffic
 - C05: Highway construction to increase capacity on western orbital road network and reduce levels of through traffic
 - C06: A St Albans City parking strategy
 - C07: Passing loop on Abbey rail line
 - C08: Improved information provision and promotion
 - C09: Bus priority measures on arterial routes
 - C010: Quality Bus Partnerships
 - C011: Improve East-West bus and coach links
 - C012: Improve walking and cycling conditions
 - C013: Build on the strong position in St Albans for school travel planning
 - C014: Engage more with the business community
 - C015: Introduce personalised travel planning
 - C016: Incorporate residential travel planning into the planning process for new developments
 - C017: Introduce car clubs and car sharing
 - C018: Real-time information provision for bus users
 - C019: Signal improvements to increase highway capacity.

Accessibility

Issues

- 2.62 The key Accessibility issues identified in the St Albans Urban Transport Plan are:
- A11: Areas of "financially constrained" households in Cunningham, Sopwell and Batchwood
 - A12: Areas of low car ownership households in Cunningham, Sopwell and Batchwood

Problems

2.63 The key accessibility problems identified in the St Albans Urban Transport Plan are:

- AP1: Concern over cost of city centre parking
- AP2: Lack of city centre parking suitable for mobility impaired users
- AP3: Concern over bus frequency
- AP4: Concern over bus reliability
- AP5: Relatively poor bus information provision and promotion
- AP6: Narrow and uneven pavements
- AP7: Lack of street lighting, well-lit public cycle parking and CCTV
- AP8: Poor access to primary health care.

Opportunities

2.64 The key accessibility opportunities identified in the research stages of the St Albans Urban Transport Plan are:

- A01: Remove car traffic from St Peter's Street to reduce bus journey times and increase bus reliability
- A02: Accessibility improvements at St Albans Abbey station
- A03: Passing loop on Abbey rail line
- A04: Improved information provision and promotion
- A05: Bus priority measures on arterial routes
- A06: Quality Bus Partnerships
- A07: Improve East-West bus and coach links
- A08: Improve walking and cycling conditions
- A09: Real-time information provision for bus users
- A010: Improve community transport particularly to the more deprived areas of the city
- A011: Improve accessibility along key pedestrian and wheelchair user desire lines.

Safety

Issues

2.65 The key safety issues identified in the St Albans Urban Transport Plan are:

- SI1: Illegal parking obstructing the carriageway
- SI2: Perceived lack of safe and secure parking in the city centre
- SI3: Perceived vulnerability at bus stops
- SI4: Lack of (continuous) cycle lanes
- SI5: Lack of road and junction crossings
- SI6: Lack of secure cycle parking, changing and showering facilities in workplaces
- SI7: Narrow and uneven pavements
- SI8: Lack of street lighting, well lit public cycle parking and CCTV
- SI9: Speeding, dangerous driving and lack of enforcement
- SI10: Traffic calming measures, such as central islands, that force cars into cyclist road space

Problems

2.66 The key safety problems identified in the St Albans Urban Transport Plan are:

- SP1: Collision hotspots in the city centre, on arterial routes, orbital routes, major junctions and roundabouts

Opportunities

2.67 The key safety opportunities identified in the research stages of the St Albans Urban Transport Plan are:

- SO1: Increase use of speed management
- SO2: Increased levels of road safety education for children and cyclists and training for drivers
- SO3: Road safety campaigns targeted at particular user groups and problem areas

Freight

Issues and Problems

2.68 The key freight issues and priorities identified in the St Albans Urban Transport Plan are:

- FP1: Planning - lack of available data; poor links between council planners and businesses; no one council planner responsible for freight
- FP2: Access and routing - AM peak congestion; congestion on single carriageway roads in the city centre; through traffic
- FP3: Circulation - congestion; restrictions on stopping and movement
- FP4: Facilities - poor on-street loading facilities; poor signage; lack of longer-term parking; distance from parking facilities to delivery / pick-up points
- FP5: Information - poor signage; difficult to access information regarding diversions
- FP6: Safety and security - several collision hotspots on arterial and ring roads
- FP7: Environment - air and noise pollution of freight vehicles, especially when caught in congested traffic at peak times.

Opportunities

2.69 The key freight opportunities identified in the research stages of the St Albans Urban Transport Plan are:

- FO1: Planning - thorough and regular data; joint working by Hertfordshire County Council and St Albans City and District Council regarding freight and related issues
- FO2: Access and routing - more appropriate local access routes; identification and management of pinch-points
- FO3: Circulation - reduction of congestion; rationalisation of traffic restrictions
- FO4: Facilities - more on-street loading bays; better guidance on appropriate use of on- and off-street parking
- FO5: Information - better signage; Intelligent Transport Systems
- FO6: Safety and security - identify and manage collision hotspots.
- FO7: Environment - consider freight in the development of any environmental plans.

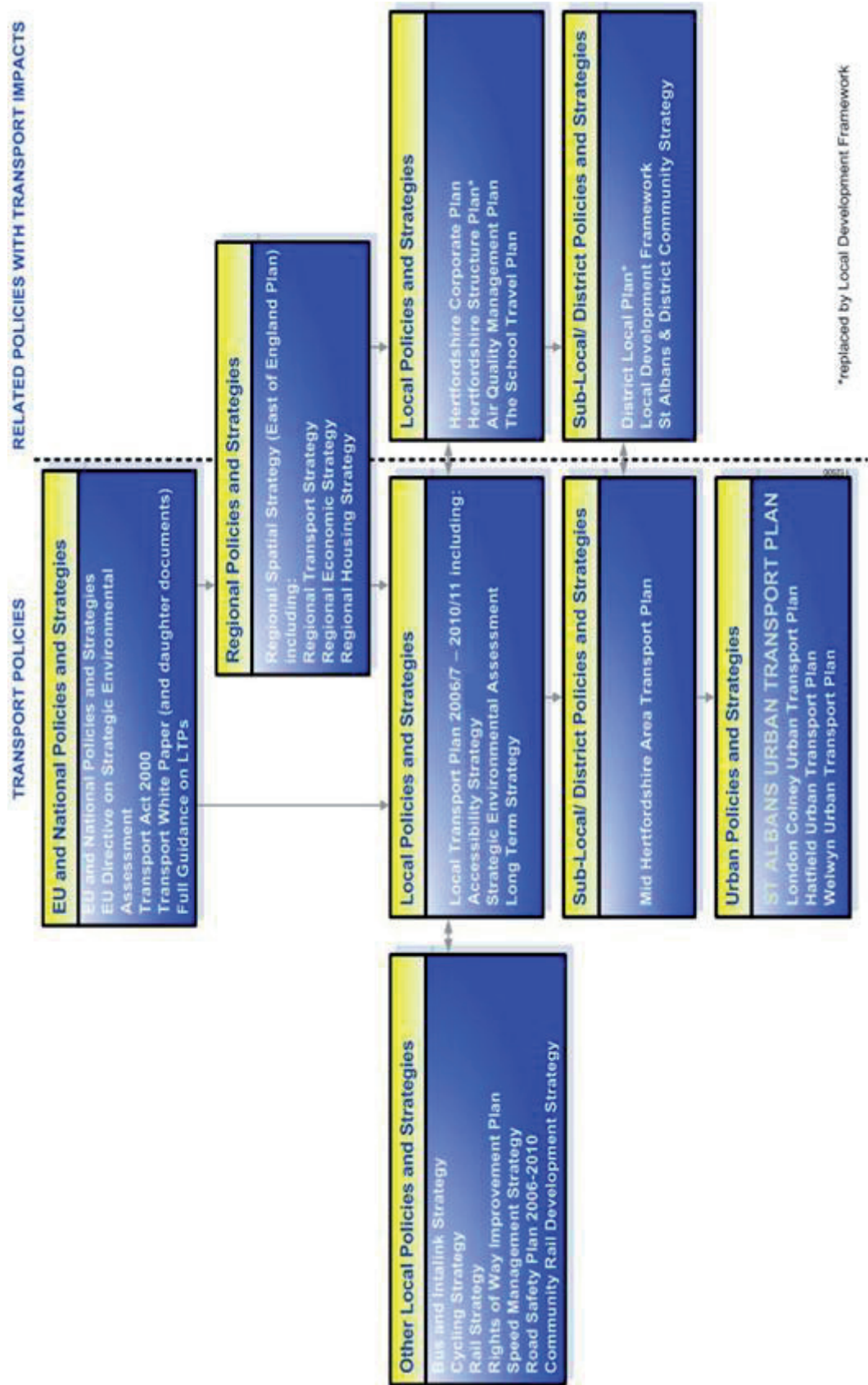
3. OBJECTIVES, INDICATORS AND TARGETS

Method

- 3.1 Objectives for the St Albans Urban Transport Plan were derived from the following sources:
- In direct response to issues, problems and opportunities identified in Section 2.
 - In conjunction with the national shared priorities for local transport and objectives of other policy documents, particularly the Hertfordshire Corporate Plan, Hertfordshire Local Transport Plan 2006/7 – 2010/11 and the Mid-Hertfordshire Area Transport Plan (see Figure 3.1 below).
 - In consultation with Council members and officers.
- 3.2 Objectives were grouped into the shared priorities for local transport⁸ along with additional aspirations of the Council. These are:
- Congestion
 - Accessibility
 - Safety
 - Environment and Health
 - Freight.
- 3.3 Indicators and Targets follow those of the Local Transport Plan and monitoring for these targets is expected to be conducted by Hertfordshire County Council.

⁸ 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.

FIGURE 3.1 POLICY AND OBJECTIVE FIT OF THE ST ALBANS URBAN TRANSPORT PLAN



Congestion

- 3.4 Seven congestion objectives were derived from the process outlined above. Table 3.1 below lists these objectives, as well as showing their objective fit with the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and Mid-Herts Area Transport Plan.

TABLE 3.1 CONGESTION OBJECTIVES

Hertfordshire Local Transport Plan	Mid-Herts Area Transport Plan	St Albans Urban Transport Plan
-	-	CB1: Reduce impacts of through traffic including diversions from the strategic road network and use of unsuitable roads
To obtain the best use of the existing network through effective design, maintenance and management	Manage and make best use of existing infrastructure and services	CB2: Manage and make best use of existing infrastructure and services
To develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources	Identify and resolve by sustainable means the causes of current movement problems	
To manage the growth of transport and travel volumes across the county, and thereby secure improvements in the predictability of travel time	Reduce growth in travel demand by motor vehicle	CB3: Reduce demand for car travel, particularly journeys to work and school
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	Minimise the need to travel through closer integration with land use planning and through encouraging the use of emerging technologies	CB4: Minimise the negative impacts of new developments on congestion
N/A	Develop parking strategies, recognising the important role that management of car parking can play in influencing travel choices	CB6: Reduce negative impacts of on-street parking and traffic in the city centre searching for suitable parking
To raise awareness and encourage use of more sustainable modes of transport through effective promotion, publicity, information and education	Encourage the use of other modes as an alternative to the car	CB7: Encourage the use of sustainable modes as alternatives to the car

Accessibility

- 3.5 Six accessibility objectives were derived from the process outlined above. Table 3.2 below lists these objectives, as well as showing their objective fit with the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and Mid-Herts Area Transport Plan.

TABLE 3.2 ACCESSIBILITY OBJECTIVES

Hertfordshire Local Transport Plan	Mid-Herts Area Transport Plan	St Albans Urban Transport Plan
To ensure that the 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	Improve passenger transport, cycling and pedestrian access for shorter trips and routes to local centres	AB1: Improve access to local hospitals by sustainable transport modes
	Improve accessibility to employment areas and retail centres by sustainable means	AB2: Improve access to employment by sustainable transport modes
	-	AB3: Improve access to schools by sustainable transport modes
	Improve accessibility and ease of use of the transport system for all users	AB4: Improve physical access to the transport network and city centre
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	Minimise the need to travel through closer integration with land use planning and through encouraging the use of emerging technologies	AB5: Improved integration of land-use and transport planning
To develop an efficient, safe, affordable and enhanced transport system which is attractive, reliable, integrated and makes best use of resources	Improve passenger transport connections, particularly east-west links	AB6: Improve east-west access by public transport

Safety

- 3.6 Three safety objectives were derived from the process outlined above. Table 3.3 below lists these objectives, as well as showing their objective fit with the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and Mid-Herts Area Transport Plan.

TABLE 3.3 SAFETY OBJECTIVES

Hertfordshire Local Transport Plan	Mid-Herts Area Transport Plan	St Albans Urban Transport Plan
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	Improve personal security and safety	SB1: Improve safety for walkers and cyclists
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	Improve personal security and safety	SB2: Improve safety for children
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	Reduce the adverse impacts of transport on safety	SB3: Reduce road traffic collision levels

Environment and Health

- 3.7 Five Environment and Health objectives were derived from the process outlined above. Table 3.4 below lists these objectives, as well as showing their objective fit with the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and Mid-Herts Area Transport Plan.

TABLE 3.4 ENVIRONMENT AND HEALTH OBJECTIVES

Hertfordshire Local Transport Plan	Mid-Herts Area Transport Plan	St Albans Urban Transport Plan
To mitigate the effect of the transport system on the built and natural environment and on personal health	Reduce the adverse impacts of transport on health and the environment	EB1: Reduce the adverse impacts of transport on health and the environment
As above	Minimise visual intrusion and community severance arising from transport infrastructure	EB2: Minimise visual intrusion and community severance arising from transport infrastructure
As above	N/A	EB3: Continue to protect and maintain the Green Belt
N/A	N/A	EB4: Promote personal health through increased levels of walking and cycling

Freight

- 3.8 A single freight objective was derived from the process outlined above. Table 3.5 below states the objective, as well as showing the objective fit with the Hertfordshire Local Transport Plan 2006/7 – 2010/11 and Mid-Herts Area Transport Plan.

TABLE 3.5 FREIGHT OBJECTIVE

Hertfordshire Local Transport Plan	Mid-Herts Area Transport Plan	St Albans Urban Transport Plan
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	Develop a sustainable system of freight distribution	FB1: Minimise negative impacts of freight accessing the city centre through improved management

Indicators and Targets

- 3.9 Table 3.6 below lists the Local Transport Plan indicators and targets. Targets that are relevant to St Albans have been included and will be used to measure success of the Urban Transport Plan.

Monitoring

- 3.10 There are no specific costs for plan monitoring because the data collected centrally by the County Council will normally provide sufficient information relevant to the plan area

TABLE 3.6 HERTFORDSHIRE LOCAL TRANSPORT PLAN INDICATORS AND TARGETS RELEVANT TO ST ALBANS

ID	LTP Indicator	Baseline (2003/04)	Progress 2007/08	Target (2010/11)
CONGESTION AND ACCESSIBILITY				
CA1	Changes in Peak Period traffic flows	St Albans/Hatfield 16415	St Albans/Hatfield 15,598	St Albans/Hatfield 17289
CA2	Change in Area-Wide Traffic Mileage	20.7 million	19.9 million (2006/07)	22.4 million
CA3	Congestion	To be established	To be established	To be set
CA4	Cycling Trips	2397 trips per day (2004/05)	2539 trips per day (2006/07)	2658 (11% increase)
CA5	Mode Share of Journeys to School	Age 5-10: 49% Age 11-16: 64%	Age 5-10: 57% Age 11-16: 76% (2006/07)	Age 5-10: 51.5% Age 11-16: 66.5% sustainable modes
CA6	School Travel Plan	14% (2003/04)	70%	83%
CA7	Public Transport Patronage	31 million journeys per year	33.1 million	31 million journeys per year
CA8	Bus Service, User Satisfaction	55%	54%	60%
CA9	Bus Punctuality	80% (2004/05)	86.4%	85%
CA10	Passenger Transport Information, User Satisfaction	39%	44% (2006/07)	50%
CA11	% of people who find it difficult to travel to a local hospital	29%	28%	24%
ROAD SAFETY				
S1	Killed and Seriously Injured	1084 (1994-98)	550	No more than 600
S2	Children Killed and Seriously Injured	113 (1994-98)	42	No more than 56
S3	Total Slight Casualties	5509	4578	No more than 5509
S4	Speed Limit Compliance	56% (2004/05)	57% (2006/07)	60%
OTHER				
O1	% of Footpaths and Other Rights of Way (easy to use)	61% (2004/5)	67%	80%
O2	Abbey Line Patronage	375,000	456,258	562,500
O3	Principal Road Condition	8% (2004/05)	4%	8%
O4	Non-principal road condition	19.44% (2004/05)	7%	12%
O5	Unclassified road condition	19.29% (2004/05)	12%	12%
O6	Footway condition	52%	27%	33%

4. STRATEGY DEVELOPMENT

Formulating options – the ‘Long List’

Method

- 4.1 The number and combination of potential measures and schemes to address the issues and problems experienced in St Albans are infinite.
- 4.2 A “long-list” of potential measures and schemes was developed, building on the opportunities identified earlier in the study, to address the issues and problems as well as the objectives of the plan. The list was developed in conjunction with the Member and Officer Steering Groups as well as transport industry experts from Steer Davies Gleave.
- 4.3 Schemes were arranged and grouped into measures to make them of a comparable scale and magnitude. The types of measures included bus priority, travel planning and community transport improvements, amongst many more.

Appraisal

Method

- 4.4 Measures were put through an objective-led appraisal scheme. Measures were appraised against all objectives to determine their overall contribution to the plan. Schemes with a high positive benefit were carried forward. Schemes were also appraised against their deliverability. Where measures were deemed highly undeliverable they were removed. Deliverability considered:
 - Feasibility – cost, timescale, ease of implementation
 - Policy and Funding - fit with wider objectives and policy and likely ability to secure funding
 - Acceptability – public and political acceptability.
- 4.5 The third aspect of the appraisal process was to fill gaps where objectives were not being best met. Measures were added to the final list to achieve these objectives, as long as they had no negative effect on achieving other objectives.

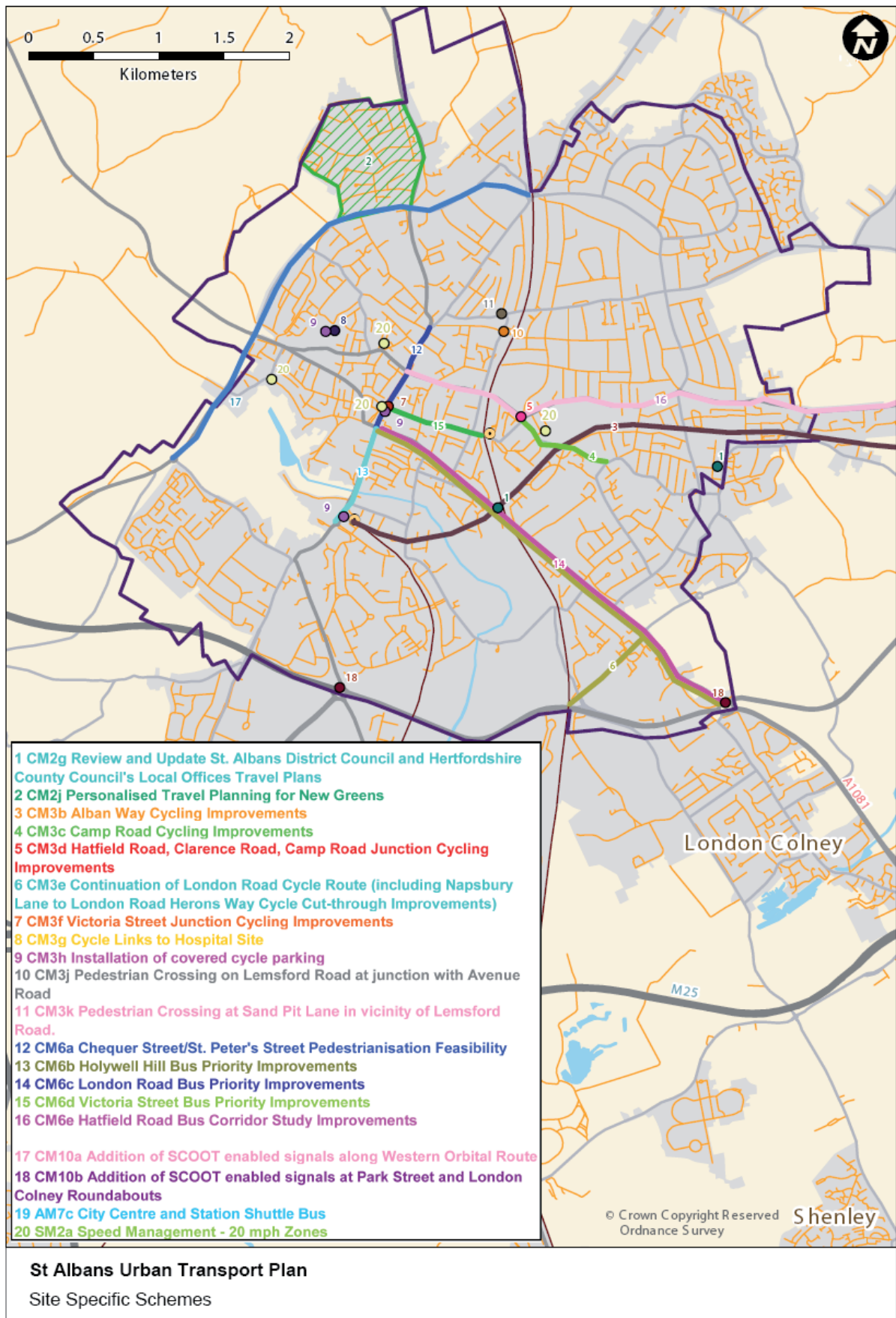
Results

- 4.6 The “successful” measures can be viewed in the following strategy sections. The measures that were not successful were:
 - Road-user charging – the public and political acceptability of this intervention was viewed to be extremely low. The costs of implementing such a “large” scheme on a relatively “small” area and population also render such a scheme unfeasible.
 - High-occupancy vehicle lanes - seen as unfeasible on a narrow and constrained city centre road network.
 - Road building or widening – politically and publicly unpopular, this scheme would require construction on the green belt. Facilitating car trips into a city centre where there are no possibilities for highway expansion due to a constrained, historic road network would be untenable. It was noted, however, that orbital construction might be necessary in the longer term, to accommodate the high growth forecasts and divert traffic away from the city centre.

Strategy

- 4.7 The St Albans Urban Transport plan is grouped into four strategies:
- Congestion
 - Accessibility
 - Safety
 - Freight
- 4.8 The structure used reflects the problems, issues, objectives and targets of the plan, as well as the shared priorities for local transport. The Implementation Plan can be found in the Appendix.
- 4.9 Schemes have also been mapped, see Figure 4.1. However, some schemes that have been suggested may extend in geographical area beyond the study area boundary and on occasion beyond the five-year remit of the plan and beyond the responsibility of Hertfordshire County Council to integrate with other policy and planning documents.

FIGURE 4.1 MAP SHOWING ALL UTP SPECIFIC SITE SCHEMES



5. CONGESTION STRATEGY

Overview

- 5.1 The majority of problems identified in the research stage of the study were congestion related and hence the majority of the schemes identified in the plan are focussed on tackling the problems of congestion. The East of England Plan requires that an additional 7,200 dwellings in the City and District of St Albans need to be built between 2001 and 2021 to meet housing needs, with approximately half of these dwellings estimated to be distributed in and around the city itself. Additional housing near Hatfield and Hemel Hempstead on the boundary of the district and close to St Albans city is probable in addition to the 7,200 dwellings. There is an estimated increase in jobs of 5,900 across the district. If the plans are realised, they will exacerbate existing congestion problems.
- 5.2 The Congestion Strategy comprises mainly sustainable transport improvements and “smarter choices” travel planning. There is also a recommendation for St Albans City & District Council to develop a parking strategy to compliment the St Albans Urban Transport Plan Congestion Strategy. There is a clear need to update and develop the evidence base for making transport planning decisions and increase the modelling capacity for St Albans.

Congestion Measure 1 – Data and Modelling

- 5.3 A number of the schemes that are being developed for the St Albans Urban Transport Plan will require traffic modelling to ensure that the schemes meet their objectives and that the impacts of the schemes are acceptable on both the immediate and wider transport networks.
- 5.4 Two traffic models have already been built of St Albans:
- a model covering the wider St Albans area (a SATURN model), and
 - a model of the city centre (a Paramics model).
- 5.5 The St Albans Urban Transport Plan recommends updates of the existing models plus the development of a public transport model (using a TransCAD model).

CM1a - SATURN Model Update

- 5.6 The current base year for the model is 2002. To update the model to a 2008/2009 base year, the collection of extensive origin-destination data from roadside interviews and on-board bus surveys would be required. Future year models would then be developed from the updated base year to enable the impact of the schemes that are being considered to be assessed.

CM1b – TransCAD Public Transport Model Development

- 5.7 A public transport model is required to work alongside the SATURN highway model, assisting in determining bus journey time impacts of recommended schemes. With the aid of a simple spreadsheet model, mode choice can be calculated. Extensive on-board surveys to collect origin-destination and journey purpose data will be required.

CM1c – Paramics Model Update

- 5.8 Paramics allows modelling to occur at a disaggregated (individual vehicle) level. The model would be appropriate for the more detailed examination of the traffic impacts for schemes such as the potential closure of St. Peter's Street where the detailed operations of individual junctions will have a bearing on the success or otherwise of the scheme. Similar to the update of the SATURN model, extensive data collection is required.

Congestion Measure 2 – Travel Planning (Smarter Choices)

- 5.9 **School Travel Planning:** School travel planning assists pupils and their parents to make informed decisions about their travel options to schools. In essence, safer journeys to school and encouraging the use of sustainable modes of transport are central to travel planning. At present the take up of school travel plans in St Albans is high. 32 out of the 41 schools in the Urban Transport Plan area have School Travel Plans already developed. Five further schools are developing School Travel Plans at present. Three state schools have not initiated school travel plan activity. The target for Hertfordshire is to have 83% of schools with School Travel Plans by 2010 and in the Urban Transport Plan area this target will be exceeded with 92% of schools with a School Travel Plan in place, assuming those five schools developing plans at present complete the Travel Plan process.
- 5.10 **Workplace Travel Planning:** Preliminary work was undertaken on a city centre employee Travel Plan in 2005, led by the Local Strategic Partnership and University of Hertfordshire research staff. St Albans City and District Council does have a Travel Plan in place for its employees and offices, last updated in 2007. In terms of Travel Plans linked with new business development, a guidance document is available online and gives criteria for when a Travel Plan will be required^{9 10}.

Other Initiatives: A number of other initiatives have been set up in Hertfordshire including:

- Car sharing: Shareacar is Hertfordshire's online car sharing database. This scheme is available to for individuals to join independently.
http://www.shareacar.com/hertfordshire_carshare_index.php;
- Business TravelWise: this is currently the main support for Workplace Travel Planning across Hertfordshire.
- Intalink¹¹: The Intalink Partnership is a unique collaboration between local authorities and bus and train operators in Hertfordshire. The partnership seeks to achieve improvements in integration of services and information for public transport in Hertfordshire
- 'The way we work': an initiative within the County Council aimed at introducing new working styles embracing new technology to allow smarter working practices, and an associated reduction in the need to travel.

9 www.hertsdirect.org/envroads/roadstrans/transplan/hdc/greentravelplans

10 http://www.stalbans.gov.uk/transport/green_travel.htm. St Albans District Council is also registered with Liftshare: www.stalbanstravel.com

11 www.intalink.org.uk

CM2a - Encourage remaining schools to develop Travel Plans where appropriate

- 5.11 Each primary school with an approved travel plan is entitled to £3750 plus £5 per pupil in the form of a direct government grant. This funding is available direct to the school from the County Council. In addition to this, Safer Routes to School funding is available from the County Council for engineering measures which will assist in the promotion of sustainable travel to school.

CM2b - Implement School Travel Plan Measures

- 5.12 Support should be provided to those schools developing travel plans and encouragement provided to those remaining schools that have not begun the School Travel Plan Process but may wish to do so in the future. Support should be provided through the Safer Routes to School budget to enable engineering measures to be implemented.

CM2c - Review of School Travel Plans

- 5.13 School Travel Plans already produced in St Albans will require a review to ensure that monitoring is being carried out, targets are being met and measures are being implemented. Travel Plans should not be seen as a static document, and be reviewed over time. A structured review process will facilitate this.

CM2d - Workplace Travel Planning Strategy Development

- 5.14 The workplace travel planning intervention would encourage all firms, particularly larger employers to develop and implement Travel Plans. Hertfordshire County Council has appointed a new member of staff to develop the County Council's strategy for promoting workplace travel plans across Hertfordshire including in St Albans. This strategy should aim to enable this resource to be used with greatest efficiency. This strategy should aim to support both those large organisations already established in the Urban Transport Plan area, but also any new businesses required to develop a Travel Plan.

CM2e - Area Wide Travel Plan Development

- 5.15 The Local Strategic Partnership and Hertfordshire University began work on a local area Travel Plan approximately two years ago; however, progress with this initiative has been slow and requires re-invigoration. Developing an Area Wide Travel Plan and Area Wide Travel Forum for St Albans city centre could involve the key employers.

CM2f - Travel Forum

- 5.16 A Travel Plan Forum will provide a sustainable method of support for organisations developing and more importantly implementing Travel Plans in the longer term. Organisations which are members of the forum will share best practice both in terms of developing their approach to Travel Planning, implementing measures and also potentially establishing partnerships to tackle travel issues. The Travel Forum will complement the Area Wide Travel Plan.

CM2g - Review and Update St Albans City and District Council and Hertfordshire County Council's Travel Plan

- 5.17 The County Council and District Council wish to continue to support the policy. The District Council's present document requires review and an update in the Urban Transport Plan period. Hertfordshire County Council, as one of the largest employers in the county, will continue to develop and maintain Travel Plans.

CM2h – Develop Travel Plans for Key Employers

- 5.18 Key employers in the city centre will require support and encouragement to develop their own Travel Plans. These will potentially be complemented by an area wide Travel Plan encompassing all employers in the city centre. Employers should be targeted in the first instance and encouraged to develop their own organisation specific Travel Plans.

CM2i – Develop and Promote Business TravelWise Network

- 5.19 Business TravelWise currently supports Workplace Travel Planning across Hertfordshire and is the primary means through which travel planning is brought to the attention of businesses in the area. At present, this scheme offers employers the opportunity to obtain promotional posters for display within their organisation, for example to tie into national awareness raising initiatives. However, further support could be provided in the form of:
- Development of better online support and guidance for organisations wishing to develop workplace travel plans in St Albans;
 - Improved integration between Business TravelWise and Intalink; and
 - Provide a package of assistance to employers wishing to develop travel plans in St Albans (for example contribution to cycle shelters).

CM2j – Personalised Travel Planning

- 5.20 Personalised Travel Planning (travel planning for individual households) is currently being piloted in Watford through external funding. St Albans provides a good opportunity to build on this project. Taking lessons learned from the study in Watford, plus best practice examples delivered elsewhere in the United Kingdom, a Personalised Travel Planning project is recommended for implementation in the St Albans Urban Transport Plan area. This Personalised Travel Planning approach would contribute to tackling the pressing issues in the area both in terms of congestion but also in terms of air quality and road safety.
- 5.21 Considering these issues it would be advised that the target population for Personalised Travel Planning in St Albans would be residents living on corridors with good public transport, walking and cycling links, high car ownership levels and where families are resident. Additionally, experience from the sustainable travel towns work such as that undertaken in Darlington has highlighted that Personalised Travel Planning can be effective in highlighting improved cycling and public transport infrastructure investment. Thus Personalised Travel Planning could be undertaken on corridors where these improvements have been recently implemented or undertaken following development of a new route.
- 5.22 Areas that should not be considered for Personalised Travel Planning include areas with large numbers of elderly residents, areas where transport options are seen as poor, or where there is low car ownership.
- 5.23 Considering the above criteria, the St Albans Urban Transport Plan recommends the New Greens area of northern St Albans to be a pilot area and would look to consult with SADC to confirm the suitability of the area and to identify further suitable areas.

CM2k – Residential Travel Planning

- 5.24 Residential Travel Planning (travel planning in new residential developments) is something that is felt to be of increasing significance in Hertfordshire. However, a guidance document is unavailable, and will require development.

- 5.25 Though discussion with the Hertfordshire County Council development control team, Residential Travel Planning could be linked to social and affordable housing with funding from developer contributions. The St Albans Urban Transport Plan recommends the development of a guidance document and tries to use residential travel planning for as much of the anticipated new development as possible.

Congestion Measure 3 – Pedestrian and Cycling Priority, Routes and Infrastructure

CM3a – Development of Walking and Cycling Priority Feasibility Study

- 5.26 A strategy looking at pedestrians and cyclists should be formulated that covers the following issues:
- specific desire lines of pedestrians and cyclists identified in detail for main trip attractors such as schools, offices, town centre and tourist destinations;
 - corridor and area wide strategies can be developed for pedestrians and cyclists in the same way that they are for traffic management measures;
 - consideration of accessibility issues along desire lines;
 - consideration of safety and security issues;
 - clearly defined entry and exit points to the routes;
 - appropriate design and surfacing;
 - consideration of on-road and off-road facilities for cyclists in terms of convenience and overall safety;
 - review of collision data to determine recurrent problems;
 - review of overall streetscape in city centre including coordination of signage across the city centre;
 - priority at signalled junctions and additional crossing time needs to be included in the signal timings to ensure safe crossing by all types of users;
 - new pedestrian links across the railway line;
 - linkages between the bus and rail station and car parks are easily accessible and direct between each interchange point and with the city centre; and
 - review the Hertfordshire County Council Rights of Way Improvement Plan.
- 5.27 If the overall aim is to improve accessibility to the town centre for pedestrians and cyclists then enhancing the existing provision of road crossing points will be key to this. In line with guidance in “Inclusive Mobility”¹² pedestrians require minimum standards of footway widths and these standards need to be achieved. All recommended schemes are subject to feasibility testing.

CM3b – Alban Way Improvements

- 5.28 Work here would involve:
- crossing improvements at intersection with Hill End Lane/Sutton Road
 - crossing improvements at intersection with Sutton Road and installation of a Toucan crossing.

CM3c - Camp Road Route Improvements

5.29 Work here would involve:

- investigation of potential for using alleyways as alternative to Camp Road (e.g. behind St Alban and St Stephen Catholic Junior School, across Vanda Crescent linking to Breakspear Avenue);
- installation of build outs at entrances to alleyways to ensure parked cars do not block access;
- signage to provide continuous directions to the city centre and railway station; and
- pedestrian crossing at junction with Dellfield.

CM3d - Hatfield Road, Clarence Road, Camp Road Junction Improvements

5.30 Work here would involve:

- in the short term, installation of advanced stop lines at the four main junction arms (not possible to do this on the Camp Road arm); and
- in the longer term, reconfiguration of the junction to reduce the width of junction mouths and alter the curvature to reduce speed and enhance the safety of the walking and cycling environment. This reconfiguration should include cycle bypass lanes to allow left turning cycles to proceed when signals are red.

CM3e – Continuation of London Road Cycling Route (including Napsbury Lane to London Road Herons Way Cut-through Improvements)

5.31 Work to include an additional cycling route to continue the existing London Road cycle route towards St Albans city centre.

5.32 Work on Herons Way would include:

- widening to two metre width, shared-use paved provision where possible;
- construction of build-outs and raised surface where route crosses New House Park; and
- upgrade of lighting along route.

CM3f - Victoria Street Junction Improvements

5.33 Victoria Street is the planned extension of the Camp Road cycle route into the city. Work here would involve provision of Advanced Stop Lines at main junctions (suggested 3m reservoir). Provision of adequate lead-in lanes may be difficult and would require further investigation.

CM3g - Cycle Links to St Albans City Hospital site

5.34 Links to St Albans City Hospital site from the south and southwest should be formalised and improved as this would offer considerable journey time savings to people walking or cycling to the hospital from these areas. This should include the installation of a paved, shared use path along the south of the recreation ground.

CM3h - Installation of covered cycle parking

5.35 Covered cycle parking should be installed at the following locations:

- Westminster Lodge and other key leisure facilities;
- St Albans City Hospital;
- City centre locations where appropriate;

CM3i - Installation of non-covered stands

5.36 Non-covered cycle stands should be installed at local shops such as those located on Cell Barnes Lane and the quadrant at Marshallswick.

CM3j - Pedestrian Crossing on Lemsford Road at junction with Avenue Road

5.37 Provision of a pedestrian crossing at the junction of Lemsford Road and Avenue Road.

CM3k - Pedestrian Crossing at Sandpit Lane in vicinity of Lemsford Road

5.38 Provision of a pedestrian crossing at the junction of Sandpit Lane near Lemsford Road.

CM3l - Pedestrian Access Routes

5.39 Implement accessibility audits improvements from the Walking and Cycling Priority Feasibility Study.

CM3m - Consolidating the Network

- 5.40 A vital component of a transport system is that it is seen to function as a coherent network. To have an impact on Local Transport Plan indicators, the network should appeal to commuters in order to bring about the mode shift for the journey to work. Various cycle maps are already available from the County Council's website (hertsdirect.org), and the District Council's site (stalbans.gov.uk). These already improve network use, however, in the future, this could be accompanied by an online route planning application and interactive map.
- 5.41 To consolidate the network and raise awareness, the provision of signage on the ground is necessary in order to define clearly routes to users. Signs should be obvious to cyclists and display distance and estimated travel time to major destinations, such as the city centre or the city's railway stations.

Congestion Measure 4 – Travel Information Strategy

- 5.42 Information given below provides a high-level Travel Information Strategy for St Albans. Further work is required in order to implement the recommendations and detail is set out in the resulting seven schemes.
- 5.43 The framework for the provision of information to public transport users in Hertfordshire is set by three key documents:
- Bus Strategy 2006/7 – 2010/11
 - Bus and Intalink Strategy 2007 - 2011
 - Rail Strategy 2006/7 – 2010/11

- 5.44 The Bus Strategy sets very clear objectives concerning the user experience as part of their commitment to deliver safety, congestion management, accessibility and quality of life improvements:
- Provide an effective and efficient network of bus services as a travel mode *which passengers will choose to use*.
 - Continue to improve vehicle quality and associated infrastructure at bus stops and interchanges *to increase access to the network by those with impaired mobility*.
 - Raise awareness and encourage the use of bus services through *improved information, marketing and branding*.
- 5.45 Within this context, it is very important to recall the first principle of the Intalink Strategy, which endeavours to define a '*base specification for information provision which all operators in the county will be expected to follow*'.

CM4a – Branding and Promotion

- 5.46 There is considerable scope to consolidate and improve the production of general marketing and publicity materials to promote public transport use in the city. Campaigns can cover improved service offer, ticketing promotions, local events, staff travel planning, and so-forth. The Intalink brand offers a good opportunity of presenting a unified visual language for all the marketing materials promoting public transport. In this way these campaigns should be intended as general transport promotions and are not operator specific. Products could include leaflets, posters, bus vinyls (i.e. stickers inside or stuck to the outside of buses providing information provision, promotional information or branding) and need to include local radio and media and promotional offers in collaboration with local events. It is important to link the promotion of public transport to campaigns to encourage sustainable travel on alternative modes such as walking and cycling. Work through a quality network Partnership could help to develop strategies to develop these ideas effectively.

CM4b – Interchange Signing

- 5.47 Interchanges are critical points in the network where the provision of information can mitigate the uncertainty and improve the confidence of travellers. This usually results in improved efficiency of the services because of better pedestrian flows and generally a more effective use of the network.
- 5.48 A combination of traditional publishing media and electronic systems such as real-time information displays (i.e. live information provision) and integrated smart card ticketing can play an important role in contributing to providing timely and effective information at interchanges.

CM4c – Website Development

- 5.49 www.intalink.org.uk is being promoted as a central resource for independent public transport information in Hertfordshire, including local maps and timetables. The website has a link to the Traveline South East journey planner.
- 5.50 The way the information is presented is slightly disconnected, resulting in a fragmentary user experience and difficult browsing of the various sections of the site. There is an opportunity to consolidate the existing website by integrating the different parts more closely, delivering clearly branded outputs and providing information relevant to each user. The possibility of providing an Intalink branded interface on the Traveline South East journey planner website should be investigated, as well as providing more dynamic mapping of the County.

- 5.51 The website should be used to link various sources of information such as:
- car parks;
 - shopping centres, business and commercial centres; and
 - websites with local information.
- 5.52 Following a trend that many local authorities have already started, and that the Department for Transport is also supporting, the journey planner should also integrate walking and cycling. There are some very good examples of sites using leveraging on the Traveline public transport data to provide integrated journey planners (see www.journeyon.co.uk which uses Traveline South East)

CM4d - Interactive Mapping System of the area

- 5.53 Dynamic mapping would provide high quality and easy to understand mapping information to passengers and once developed would be incorporated into the online Journey Planner and Interactive Kiosk (i.e. public information points providing real-time information and journey planning).

CM4e - Integrated Journey Planner for Walking Cycling and Public Transport

- 5.54 Hertfordshire is part of the South East Traveline region, and as such has an excellent journey planner available. There should be an aspiration to build on the existing software and to extend it into an integrated system of on street information kiosks, departure displays, Internet and WAP sites.
- 5.55 The system should incorporate high quality street level mapping of Hertfordshire County allowing users to plan journeys directly through the mapping as well as access supporting information on points of interest, bus stops and bus departures.
- 5.56 There is an opportunity to develop a countywide real-time information system. This could bring benefits in both town and rural areas. To get the maximum value from such system, the real-time information should be available directly through the kiosks, web site, interactive map and SMS service.

CM4f - Automatic at-stop information displays

- 5.57 There is an opportunity to develop a countywide real-time information system. This could bring benefits in both town and rural areas.
- 5.58 Real-time information presents good benefits for travellers and operators giving instantaneous information to public transport users. Additionally the fleet management information allows future planning of ever more reliable and punctual bus services as well as providing bus priority at traffic signals for late running buses.
- 5.59 Real-time information could be provided through a number of different channels, from electronic displays at stop and on the buses, to WAP / SMS and the internet (see www.dundetravelinfo.com where real-time information is accessible directly from the interactive map).

CM4g - Interactive Kiosks

- 5.60 Interactive Kiosks provide easy access to transport information. These Kiosks should be located at key public transport interchanges and stops. The kiosk would provide a full range of travel information including online mapping, journey planning for public transport, walking and cycling trips as well as locations of key facilities including public transport interchanges.

Congestion Measure 5 – Public Transport (Bus Partnerships)

- 5.61 Congestion management is a work focus for Hertfordshire County Council. The Council intends to develop its congestion monitoring across the highway network and to intervene through traffic management and intelligent transport systems to reduce journey time variability for road users. Managing the growth in traffic and the development of more sustainable transport solutions are also important objectives.
- 5.62 BusPlus is a very successful transport scheme, operating from St Albans City Station. It enables unlimited travel on most of the buses within St Albans and its surroundings, with a train ticket. For further information, see www.plusbus.info.
- 5.63 The Council is also committed through its bus strategy to:
- bus partnership working through its nationally acclaimed Intalink business partnership with the operators and other stakeholders to improve vehicle quality and associated infrastructure at bus stops and interchanges, improving bus punctuality through commercial partnerships and better management of traffic on the highway network; and
 - using express coach services to fill in the lower level demand gaps in the rail service network, often on an east-west alignment across the county.
- 5.64 Action on traffic congestion levels is seen to be a pre-requisite to meeting the target to improve bus patronage levels. In addition there are policies to do more to improve public transport infrastructure more generally and passenger facilities, information systems, and to provide more local bus priority measures. These actions, consistent with national policy to improve public transport alternatives to car use and bus services in particular, are intended to grow the bus market. They take further forward the progressive local transport policies applied in earlier years in Hertfordshire.
- 5.65 Bus partnership working in Hertfordshire is defined by the strategic overview that has been carried out of the need for bus service development in over one hundred corridors in the county. There are several of these corridors of direct relevance, one of which, the improvements in the Harlow – Heathrow limited stop coach service, via Hatfield, St Albans and Watford, is seen already to have been particularly successful in growing the market for its use.
- 5.66 Aside from the delivery of improvements to services operating within the city of St Albans there is also the interurban bus network of services linking the city with many other local places and the local interchanges such as St Albans station, offering not only links into the rail network but also bus to bus interchange to access a wider range of destinations. The ambition to grow the market for bus use more generally, if achieved, is one that offers the development of services over time and increased frequencies so as to improve the overall accessibility of facilities and services for public transport users in the county.
- 5.67 The Local Transport Act heralds the possibility of more influence for the County Council in bus network design and planning and bus partnership working. While the legislation includes the easier application of Quality Contracts, the process seems likely to be long winded and difficult to achieve and so partnerships of one form or another are probably the more likely approach for councils to adopt.

- 5.68 Establishing voluntary and/or statutory bus partnerships that comprise multi-operator agreements and allow the Council influence over frequency and fares will extend the opportunity for the Council to develop a strategic plan for buses (say a twenty year vision), pursuing improvements of the sort already begun in Hertfordshire through the corridor reviews. This will help it plan the introduction of statutory partnerships which in turn should encourage bus companies voluntarily to participate in schemes to improve bus services.

CM5a - Commercial partnerships with operators

- 5.69 Commercial partnerships with operators, such as currently in place with the 724 service, involve the improvement of infrastructure, information provision, punctuality and the introduction of measure promoting changes in travel behaviour (known as smarter choices initiatives) aimed at increasing patronage on the services. In this vein, it will be important to establish a dynamic Bus Punctuality Improvement Initiative with a process for a scheme of arrangement for the area, involving effective monitoring, partnership working of key stakeholders and supportive measures, including a traffic demand management strategy, to minimise delays and variability in journey times and improve bus reliability over time.
- 5.70 In addition:
- Make longer term ambitions for network development clearer in longer term, twenty year, bus partnership vision. Linking this to land use development plans and to the local transport strategy.
 - Assert the willingness of the Council to employ the opportunities afforded by the Act to improve local bus service provision. Determine the way forward and begin to pursue it through partnerships and/or quality contracts as appropriate.
 - Select the best improvement bus partnership corridor opportunity in the St Albans area and develop a far reaching development plan making best use of the new opportunity. If park and ride is to become a part of the local transport strategy then integrate any proposals with the bus improvement partnership for the area.
 - Establish monitoring, consultation and public affairs regimes in support of the ambition locally to develop local patronage and public transport service improvements, including a programme of smarter choices interventions to promote the quest for more sustainable alternatives to car use for local trips.

Congestion Measure 6 – Public Transport (Bus Priority)

Existing and Planned Schemes

- 5.71 Bus services in St Albans city centre are frequently disrupted by congestion due to the nature of the highway network. As a result it is difficult to provide extensive bus priority measures. Most buses serving St Albans city centre stop on St. Peter's Street. The numerous, high-quality stops are set within lay-bys so that stopping buses do not delay following traffic (including buses).
- 5.72 All recommended schemes are subject to feasibility testing and in the Implementation Plan (Section 9) costing is given for the testing, and an indicative cost per corridor for implementation.

CM6a – Chequer Street / St Peter's Street Improvements

5.73 Schemes for further feasibility testing include:

- Review signal coordination and re-phase signals.
- Add SCOOT signals where possible.
- Investigate the feasibility of removing cars (also consider Market Place to promote walking and cycling).

CM6b - Holywell Hill Improvements

5.74 Schemes for further feasibility testing include:

- Review signal coordination and re-phase signals where appropriate and beneficial.
- Remove pay and display bays – where appropriate and beneficial.

CM6c - London Road Improvements

5.75 Schemes for further feasibility testing include:

- Review signal coordination and re-phase signals appropriate and beneficial.
- Review waiting and loading restrictions next to The Maltings Shopping Centre.
- Review possibilities to use central hatching and turning pockets to reduce congestion caused by right-turning traffic.
- Selective vehicle detection at all signals.

CM6d - Victoria Street Improvements

5.76 Schemes for further feasibility testing include:

- Review signal co-ordination and re-phase signals, review and increase waiting loading restrictions.
- Relocating eastbound bus stop nearest St Peter's Street further away from the junction.

CM6e – Hatfield Road Bus Corridor Study Improvements

5.77 The St Albans Urban Transport Plan supports the findings of the Hatfield Road Bus Corridor Study and recommends further feasibility testing of the options contained within it.

CM6f - Bus Stop Accessibility

5.78 Due to the difficulties in obtaining information regarding bus stop boarding information, evidence from bus drivers was used. The quality of bus stops varies significantly throughout the city centre and surrounding area. In line with Disability Discrimination Act 2005 (DDA 2005). Current work under the Quality Bus Stop Initiative is supported by the St Albans Urban Transport Plan.

Congestion Measure 7 – Park & Ride and East West Parkways Feasibility Study

- 5.79 The general policy context as set out in the Local Transport Plan and the Mid-Hertfordshire Area Transport Plan is consistent with the development of park and ride to serve St Albans and also as part of a more strategic parkways (i.e. out-of-town bus interchange sites with parking and waiting facilities for passengers) initiative to improve east-west public transport provision across the county. The Mid-Hertfordshire Area Transport Plan has a specific objective to:
- Improve passenger transport connections, particularly east-west links.
- 5.80 There is potential for introduction of a Park & Ride system to ease car-borne access to urban centres. Were this to form a part of local transport strategies for the different settlements in the corridor, then the systems would involve additional regular bus services which would, in turn, add to the benefit to be secured from improved local bus priorities so adding to the justification for their introduction.
- 5.81 The wider sub-regional transport strategy identifies the lack of east-west public transport links across the county and in earlier years there was investigation of the scope for a light rapid transit system linking Hatfield and Watford via St Albans. In the absence of such a scheme, progressive improvement of bus and coach services operating within the corridor should be undertaken. This could take the form of a limited stop coach-type shuttle service stopping at parkways.

CM7a - Comprehensive Area Wide Scoping Study

- 5.82 Before a Park & Ride scheme linked to East-West Parkways could be progressed a comprehensive area wide scoping study would be required to establish the case for park and ride and to develop the remit for a more detailed investigation. This would entail:
- Initial site identification and long-listing,
 - Outline modelling of demand using origin and destination data, traffic count data and parking data,
 - Site prioritisation taking into account landownership, planning, environmental issues, access, suitability of transit links, outline costs,
 - Development of outline business case to ensure that capital, revenue and operating costs can be covered,
 - Consideration of the approach by members.

CM7b – Feasibility, Design and Business Case

- 5.83 If the scoping study supports the development of Park & Ride and East-West Parkways, it is important that the Local Development Framework adopts the schemes as formal proposals. To inform the Local Development Framework and progress scheme detail, the next stage would be a more detailed feasibility study of a preferred site (or sites). This would entail:
- Enquiries to utilities,
 - Further development of land acquisition strategy,
 - Initial environmental surveys,
 - Liaison with the Environment Agency,

- Detailed transport assessment,
- Development of a planning strategy for change of land allocation,
- Bus service planning,
- Identification of complementary bus priority and cycling improvements,
- Design development of the site layouts, taking account of best practice and APOC ParkMark standards,
- Refinement of cost estimates, capital and operating,
- Further development of the patronage / revenue model with cost benefit analysis for a robust business case, analysis of procurement and delivery options, examining funding sources and mechanisms.

Congestion Measure 8 – Signing and Routing

5.84 Hertfordshire County Council has completed a draft Intelligent Transport Systems and a St Albans Signage Study at time-of-print. Two significant recommendations from the reports are for:

- Clear signage directing commercial vehicles a key destinations (e.g. business parks); and
- an inner cordon of variable messaging signs directing non-commercial vehicles to parking.

5.85 Funding has been earmarked for the above recommendations to be implemented.

CM8a – Expansion of Signage Study to Non-Commercial Destinations

5.86 The St Albans Urban Transport Plan recommends the expansion of the signage review to include non-commercial destinations (e.g. hospitals, stations, shopping areas and encouraging commercial satellite navigation system operators to update GIS databases.

CM8b – Outer Cordon of Variable Messaging Signs

5.87 The St Albans Urban Transport Plan recommends an outer cordon of variable message signing to divert all traffic away from or around St Albans in time of severe congestion.

Congestion Measure 9 – Parking Strategy

5.88 Parking in St Albans is primarily the responsibility of St Albans City & District Council. Therefore, Hertfordshire County Council would look to consult with St Albans City & District Council to confirm the suitability of the area and to identify further suitable areas.

5.89 St Albans City & District Council entered into a 10-year PPP contract with NCP in 2004 for management and enforcement of parking in the district. City centre parking charges have increased by approximately 70% per hour in four years.

5.90 At a County Council level, the Passenger Transport Unit is currently conducting a review of parking at bus stops. The County Council is proposing to review its policies in relation to parking provision and standards supported by the cross-county planning officers group (HCTOA). Furthermore the County Council's Passenger Transport Unit is currently reviewing parking at bus stops.

CM9a – St Albans City Parking Strategy

5.91 The strategy should consider the following tasks and factors:

- Undertaking a study to collect journey purpose data, origin-destination data, and socio-demographic data from those parking in St Albans to ensure wherever possible consistency of approach with neighbouring authorities.
- On-street:
 - The provision and location of parking for key services should be reviewed.
 - Uniformity of on-street parking charges and hours should be encouraged.
 - The possibilities for greater levels of enforcement and removal of dangerously parked vehicles should be explored in sensitive areas like main roads and key junctions.
 - Parking on verges should be prohibited and enforced.
- Off-Street (Public):
 - In order to discourage long stay parking in the city centre, optimum levels of provision and charging of short term and long term parking in the city centre need to be developed.
 - The levels of parking within walking distance of key destinations need to be reviewed.
- Off-Street (Private):
 - Standards for new developments in relation to national guidelines need to be reviewed.
- Workplace:
 - Workplace parking strategies need to be linked with workplace travel planning to ensure an integrated approach to managing demand for single occupancy car use on the journey to work.
 - Parking standards and charging regimes for new developments and relocating firms need to be developed in such a way as to promote accessibility to the site for car-borne traffic, whilst simultaneously deterring those able to conveniently use alternatives from using parking facilities.
- Park & Ride:
 - The development of a park and ride scheme for St Albans would present the opportunity for removal of long term city centre parking to the park and ride site.
- Freight:
 - The provision, location, operating hours of facilities for freight operations should be reviewed. Opportunities for sharing these facilities with other users should be identified to ensure efficient land use.

Congestion Measure 10 – Highway Capacity

5.92 The St Albans Urban Transport Plan has promoted sustainable mode (walking, cycling and bus) priority above that of car and freight. However, opportunities have been identified in St Albans for SCOOT enabled junctions and re-phasing of signals to increase capacity by responding to heavy and differential flows of traffic in peak times whilst having to balance the needs of pedestrians and vulnerable road users. The resulting benefit would be to reduce congestion and the amount of diversion into residential areas and the city centre.

CM10a – Addition of SCOOT enabled signals along Western Orbital Route

CM10b – Addition of SCOOT enabled signals at Park Street and London Colney Roundabouts on M10 / A414

6. ACCESSIBILITY STRATEGY

Overview

- 6.1 Hertfordshire's Full Accessibility Strategy was submitted in July 2006 as part of its second Local Transport Plan. The strategy gives no specific attention to St Albans, but does set an indicator for access to hospitals through seeking to decrease the percentage of people who find it difficult to travel to a local hospital from 29% to 24%.
- 6.2 Within a narrow definition of accessibility, there are few problems accessing key services in St Albans due to the urban and compact nature of the city, with the single exception of acute and other medical services now destined to be concentrated at Watford General Hospital. However, opportunity for improved accessibility for individuals exists through improving public transport, community transport and improving accessibility along the main desire lines of pedestrians and mobility and sensorial impaired users.
- 6.3 A thorough and comprehensive study has been undertaken of physical accessibility throughout the city centre as part of a joint research project with UCL known as AuntSue (Accessibility and User Needs in Transport for Sustainable Urban Environments). The results from this are being analysed and will inform the need for specific measures including those identified below.
- 6.4 Measures for improving accessibility recommended by the St Albans Urban Transport Plan are listed below. These consist of public transport improvements and promoting the walking and cycling priorities of residents and visitors. All recommended improvements to sustainable transport also incorporate better provision of information and the promotion of that information. These measures are fully detailed in the Congestion Strategy (Section 5):
- Accessibility Measure 1: Data and Modelling (CM1)
 - Accessibility Measure 2: Pedestrian and Cycling Priority, Routes and Infrastructure (CM3)
 - Accessibility Measure 3: Travel Information Strategy (CM4)
 - Accessibility Measure 4: Public Transport – Bus Partnership (CM5)
 - Accessibility Measure 5: Public Transport – Bus Priority (CM6)
 - Accessibility Measure 6: Public Transport – Park & Ride and East-West Parkways (CM7)
 - Accessibility Measure 7: Community Transport
- 6.5 Access to healthcare across the study area is varied. Accessibility to GPs and pharmacies by public transport is generally good; accessing hospitals and accident and emergency services directly by passenger transport is difficult due to the majority of services operating between town centres. It is often necessary to transfer to local bus services at either end. Inter town services are however relatively frequent with four services operating either hourly or half hourly connecting to Watford, Hemel Hempstead, Luton and Welwyn Garden City where the nearest hospitals are located.
- 6.6 Access to the St Albans City Hospital is better from within the study area; however the number of hospital facilities is much lower than the number provided at, for example, Watford General Hospital. Access is most difficult from eastern areas (The Camp, Fleetville and Marshalswick) due to a lack of direct public transport services to the other side of the city centre.

- 6.7 The need to change bus services has greatest impact on those with impaired mobility, who may have difficulty in boarding and alighting. The dispersed arrangement of bus stops in the city centre may also pose difficulties to those with limited mobility.
- 6.8 Community transport may be provided by local authorities, health care trusts and voluntary organisations. Services are door-to-door and primarily serve areas where public transport provision is low or people who are unable to use conventional transport. Community transport is an opportunity for local authorities to enhance levels of social inclusion.
- 6.9 Bus services in St Albans combine inter-urban and urban services. Inter-urban services run across the city, linking surrounding towns. Urban services use the city centre as a hub with several services linking to the main (First Capital Connect) station.
- 6.10 Existing community transport is provided by charitable organisations, the primary care trusts, the District Council and the County Council. A summary of these activities is provided below.

TABLE 6.1 SUMMARY OF COMMUNITY TRANSPORT PROVIDERS

Name	Organisation Type	Description
Age Concern	Charity	Age Concern St Albans (ACSA) is a separate charity of the national Age Concern Federation. The primary function of ACSA is the delivery of a meals-on-wheels service in the St Albans City and District area (Monday to Friday only). ACSA also have a 12-seat minibus available for elderly people's groups to hire.
British Red Cross	Charity	The Red Cross provides door-to-door transport services for people with limited mobility. The community car driver scheme mainly relies on volunteers who use their own vehicles to transport patients to hospital appointments. Patients who qualify for free NHS transport can also use the Red Cross service
St Albans Good Neighbour Scheme	Charity	The Good Neighbour Scheme can arrange transport for elderly and disabled people and mothers with young children wishing to access hospital, GPs surgeries or shopping facilities.
Hertfordshire Action on Disability (HAD)	Charity	HAD provides a 24 hour wheelchair accessible transport service using 7 adapted vehicles. Self-drive vehicles are also available for hire. The service can be used to GP appointments and shopping.
West Herts PCT	PCT	Non-emergency patient transport services to the City hospital are provided by West Hertfordshire Primary Care Trust (PCT). The provision of this service is contracted out to a third party. Transport between hospitals for patients and visitors (e.g. St Albans City Hospital to Watford General Hospital) is also provided by the PCT.

Name	Organisation Type	Description
St Albans District Shopmobility	District Council	Shopmobility provides electric scooters and manual and electric wheelchairs to elderly people or people with a disability. This scheme is available free of charge to people with limited mobility in the city centre.
Hertfordshire Dial a Ride	County Council	The Dial a Ride service offers door to door transportation for the elderly, disabled or mobility impaired who are unable to use passenger transport services. Before the scheme can be used membership must be obtained; eligibility is based either on a person's age, whether they have a permanent disability or receive mobility allowance.
Community Volunteer Service	District and County	This service offers for 40 pence per mile a travel by car for elderly and disabled people to the hospital, doctor or dentist.

AM7a – Information on Services Available

- 6.11 Increase level of information available regarding community transport provision, in particular a single point of call for all services, irrespective of provider. Information on local transport services are already available on the Intalink (<http://www.intalink.org.uk/>) and Travelink (<http://www.hertslink.org/travellink>) websites. Intalink gives information on service changes, fares and routes, but further improvements can be made.
- 6.12 It is important that this information not only focuses on what is available but that this central resource eases concerns people may have about using the services (some voluntary car-share schemes cause concern among potential users because of issues over the training that drivers may or may not have). The resource should also detail the criteria for eligibility and be clear on the costs to users.

AM7b – Partnership Working

- 6.13 Accessing the hospitals and GP surgeries in St Albans by public transport could be enhanced through improvements to the existing level of information and an increase in direct bus services. In particular, accessing Watford General Hospital provides considerable challenges to those without cars (and is challenging even for those who have them). There needs to be a major increase in direct bus services and improved signage for drivers.
- 6.14 Hertfordshire County Council could work in partnership with the Primary Care Trust to ensure that information is available online and 'on the ground' in waiting rooms at hospitals and surgeries. For example, the existing public transport information available on the Primary Care Trust website could be enhanced. This could extend to a travel planning service being offered by the Council.
- 6.15 The voluntary sector is responsible for much of the community transport provision in the area. The County Council works closely with voluntary sector groups providing community transport in the study area and currently funds a co-ordinator who works for St Albans Community Voluntary Services.

AM7c – City Centre and Station Shuttle Bus

- 6.16 West Hertfordshire Primary Care Trust runs shuttle busses between its three hospital sites – Watford General; St Albans City and Hemel Hempstead General. Provision of a once-hourly service linking Watford General Hospital to St Albans city centre, St Albans City station and St Albans Abbey station would improve the ease with which people could access the hospital by public transport. This service could be provided by rerouting the existing minibus shuttle service or by encouraging commercial operators to reroute.

AM7d – Introduce Taxi-bus Service

- 6.17 Taxi-bus is a form of demand responsive transport that has been implemented in other parts of the UK by both local authorities and the private sector. Taxibus services are generally available to anyone but in most cases users must register before using the service. Taxibus vehicles are generally low floor and wheel chair accessible, allowing people with mobility impairment to make use of the services to access healthcare and shopping. Provision of a door-to-door shuttle service similar to that operated in the north and east Herts could be considered.
- 6.18 There are potentially three models for operating taxibus demand responsive transport. The first is on a solely commercial basis, where all aspects of the service are run by a private company. The second is on a publicly funded basis, where the local authority is responsible for operations. The third model involves a hybrid approach whereby a commercial operation receives subsidy from the local authority – providing a community or social transport service with public monies to improve commercial viability.
- 6.19 The services can be purely demand responsive (that is, without a fixed routing) but in reality most taxibus operations are based on a fixed start and end point with a demand responsive region between these points. To facilitate access to healthcare the taxibus service would be more valuable if it were not run on radial routes.

7. SAFETY STRATEGY

Overview

- 7.1 Hertfordshire County Council has many operational safety schemes at a county level and working in St Albans; and is guided at a strategic level by the following policy documents:
- Local Transport Plan 2006/7 – 2010/11
 - Road Safety Plan 2006 – 2010
 - Speed Management Strategy.
- 7.2 Safety information for cyclists, horse riders, drivers is provided via the County Council website; as well as collision monitoring information. There is considerable ongoing work with schools in the city to create school travel plans, provide school crossing patrols, and for providing road safety education.
- 7.3 Collision figures show a general decline in collision levels in the past three years. However areas of high collision levels are visible once locations are mapped (see Section 2). It is also recommended that consideration be given to establishing other indicators that would allow a wider understanding of safety to be gained, such as “near miss” data, which can be obtained through public surveys, and public perceptions of safety. However this will not necessarily enable funding to be secured through the LTP.

Safety Measure 1 (SM1) – Partnership

SM1a – Partnership

- 7.4 Wider partnership is important for delivering on road safety and linked issues. The St Albans Urban Transport Plan recommends the formation of a Community Safety Partnership with links to the emergency services, Primary Care Trust, and Local Education Authority, using the Local Strategic Partnership.

Safety Measure 2 (SM2) – Speed Management

SM2a – Speed Management

- 7.5 A 2007 Audit Commission review of road safety showed there was often no link between expenditure and performance in improving safety. It also showed that evidence was often not collected on soft interventions and the benefit often not evaluated. There is a general theme that driver behaviour is the reason why motor vehicle collisions happen, but a disproportionate effort is put into correcting the locations where collisions happen. There is, therefore, a diminishing rate of return attached to locality based engineering and consequently more resources should be focused on speed management and behaviour based interventions.
- 7.6 Within the criteria set within the Speed Limit Framework of the Speed Management Strategy, consideration could be given to the following streets for 20mph speed limits:
- Cathedral area
 - Church Street, Bernard Street, Grange Street and Dalton Street
 - Spencer Street and Market Place
 - Albion Road, Cecil Road and Cavendish Road.

- 7.7 Nevertheless, 20 mile per hour zones are not without difficulty: they require considerable signage and potential engineering measures, which may be inappropriate in the conservation area; they could, if poorly planned encourage rat-running; and are difficult to enforce by the police who have limited resources. Ideally, therefore, 20 mph zones should be 'self-enforcing' but this would mean the introduction of traffic-calming measures, which may prove unpopular to those living resident in the affected streets. That said, there is great public interest in such measures and it would be beneficial to pilot 20 mph zones in suitable areas.

Safety Measure 3 (SM3) – Pedestrian and Cycling Priority, Routes and Infrastructure

- 7.8 In the Congestion Strategy (see Section 5) improving pedestrian and cycling priority measures was given precedence over raising bus, and car and freight priority. An objective of this measure is to provide a safer built urban environment in which to travel and reduce collision levels. For full scheme detail see Congestion Measure CM3.

Safety Measure 4 (SM4) – Monitoring

SM4a - Monitoring

- 7.9 Hertfordshire County Council currently collects data, prioritising performance indicators of collision levels and speed. "Near miss" data from pedestrians and cyclists can also be useful, as well as measuring wider safety criteria. Wider safety criteria relating to fear of crime and public perceptions of safety, especially from community safety partners (such as perceived safety walking in the area and perceived safety waiting at bus stops) will also give evidence of suppressed demand (such as low pedestrian or cycling numbers or low bus patronage). Such data needs to be collected in a measurable format and investigated when considering any traffic scheme.

8. FREIGHT STRATEGY

Overview

- 8.1 The key driver behind freight activity is the commercial need to move goods through supply chains from the point of production to the point of consumption. The location and scale of freight flows is a result of supply chain structures that are designed to ensure that customers are provided with their goods and services in as cost-effective a way as possible. Further analysis of St Albans freight has been undertaken and is outlined in appendix C.
- 8.2 Nevertheless, these commercial decisions are not taken in a vacuum. Government policy influences the context in which freight operations are planned, and therefore it is necessary to understand the current policy (at all levels of Government). Additionally, as the urban transport plan is developed, potential solutions to the freight issues highlighted in this document will be assessed, and they should be aligned with the policy objectives outlined below.
- 8.3 The key transport policy covering the Hertfordshire area is the county-wide Local Transport Plan for 2006/7 – 2010/11. The eight objectives of this are detailed elsewhere in this report; however, the key priorities of Safety, Congestion, Accessibility and Air Quality can all be affected to some degree by freight activity. Additionally, the recently published Mid-Hertfordshire Area Transport Plan expects to produce a Freight Strategy as one of its supporting documents.

Freight Measure 1 – Freight Quality Partnerships

FM1a – Freight Quality Partnership Set-up and Study

- 8.4 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 Freight Quality Partnerships 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.
- 8.5 In reality, the Freight Quality Partnership 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, and should play a central role in delivering the measures set out in the Freight Strategy of the Urban Transport Plan. However, should a more pressing issue be highlighted by the Freight Quality Partnership, then that should become part of the Freight Quality Partnership's action plan.
- 8.6 The partnership should be a relatively small group, and needs to be carefully managed to ensure it does not become a bipartisan split between businesses and residents. Members will include:
- Council Members
 - Council Officers
 - Highways Authority
 - Police
 - Regeneration and Town Centres Manager
 - Operators regularly visiting St Albans city centre
 - Retailers including shopping centre managers
 - Business representatives (e.g. Chamber of Commerce, Federation of Small Businesses).

- 8.7 One recommended objective of the Freight Quality Partnership should be to research the opportunities for sharing off-street goods yards and other freight parking. This involves creating partnerships between businesses to share existing off-street goods yards. This will have a number of benefits:
- For operators, this offers increased security and safety for drivers and vehicles whilst undertaking deliveries, as well as limiting the prevalence of Penalty Charge Notices associated with on-street deliveries.
 - For other road users, any reduction in on-street deliveries reduces one of the causes of congestion, as well as the use of public pavements to undertake deliveries.
 - For businesses, the shared use of facilities may lead to less direct benefits such as increased collaboration with neighbours, potentially leading to mutual efficiency benefits.
- 8.8 The rationale for this scheme is clearly focused upon the city centre itself, where the road network is such that any on-street deliveries are liable to disrupt traffic, and many of the business premises are in buildings that were not designed with modern delivery practices in mind. Sharing of purpose-built facilities is commonplace in the newer out-of-town industrial and retail parks, therefore the scope of this intervention should be limited to where it is required.
- 8.9 In the first instance, this should be a stand-alone study to identify:
- The location of off-street goods yards;
 - The capacity and use of off-street goods yards; and
 - Businesses currently receiving on-street deliveries, the extent and timing of these deliveries.
- 8.10 This will be in the form of a property-by-property survey, and it may make use of bodies such as the Chamber of Commerce or the Freight Quality Partnership as a means of introduction. The study will conclude by highlighting where opportunities to undertake sharing exist, and the businesses involved. The subsequent stage is to open and facilitate negotiations with the relevant parties, and, where necessary, to pilot shared operations to test the viability of this activity.

Freight Measure 2 – Planning

FM2a – Compulsory Freight Planning in New Developments

- 8.11 Compulsory consideration of access arrangements for deliveries for new developments should be given. All new developments in the area of a certain size and nature are required through the Local Plan to be subject of 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.

- 8.12 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 what mode; and
 - what range of traffic;
 - types of vehicles likely to access the site;
 - adequate loading/unloading arrangements;
 - adequate access for servicing and waste collection; and
 - adequate access for emergency vehicles.
- 8.13 This will enable the development control officers 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. As with existing transport assessments, any infrastructure requirements to the local transport network to manage additional freight traffic impacts can be set as a planning condition and a request for developer funding contributions (i.e. Section 106 agreements).

Freight Measure 3 – Signing and Routing

FM3a – Review of St Albans Signing Strategy for Commercial Vehicles and weight limit zone

- 8.14 Hertfordshire County Council have developed a St Albans City Centre Area Wide Signage Strategy including the signing of industrial areas , Similarly, St Albans City and District Council have conducted preliminary work on suggested routes to industrial estates and business parks.
- 8.15 Successful application of these pieces of work will, where possible, minimise the time that commercial vehicles spend in the city centre by providing the best information to drivers at key decision points on the strategic road network. This is to reflect the fact that the most direct route to St Albans may not be the most appropriate for the required destination, and that once the driver has left the strategic network, the choice of approach to St Albans has been made.
- 8.16 Work to consider how to route freight traffic to and from the strategic road network from each zone needs to be undertaken, so as to minimise the overall levels of congestion on the strategic roads, on key access routes, and within the city centre.
- 8.17 It is necessary to ensure that drivers, businesses and operators are provided with the information required to choose the appropriate route before and during their journey. There are three distinct measures that should be developed:
- Road Signage
 - Route Maps for Commercial Vehicles
 - Feeding preferred routes into Navigation Systems

- 8.18 The road signage should be put and must be clear that it refers specifically to commercial vehicles, and be located at decision points both on entry to the city centre, and in choosing the most appropriate route to leave the city. Key destinations, such as the St Albans Retail Park and Drovers Way, could be specifically highlighted.
- 8.19 Many towns and cities across the UK have developed freight route maps, indicating preferred HGV routes, loading bays and height and weight restrictions. Unfortunately, there is no consistent approach or format to these maps, and there are question marks over how useful these are for operators and drivers, especially how this information is disseminated to those who may need it most – the infrequent visitor to the city. In relation to St Albans, there is particular value in producing such a map.
- 8.20 Involving the Freight Quality Partnership (should it exist) in the development of the route map will provide an opportunity to ensure that the final product has been developed with the involvement of those who will make use of it most, and provide a useful opportunity to test its functionality. Dissemination of maps via electronic channels should also be considered, especially should a regular update be produced.
- 8.21 One opportunity of disseminating information on preferred routes, especially to those unfamiliar with the area, is by incorporating them into the routing and scheduling or telematics systems, this will influence the route choices made. Many companies use scheduling software of this nature to optimise their daily rosters, and increasingly, in-cab Satellite Navigation technology is used to assist in decision making on the move. Clearly, there is not a single product on the market, and to maximise the coverage of this intervention it will be necessary to ensure that links are made with as many product suppliers as possible. However, there are understood to be a limited number of GIS databases that are used by numerous products, therefore targeting these would be the appropriate starting point.

Freight Measure 4 – Enforcement

- 8.22 There are a number of existing Traffic Regulation Orders in place within St Albans which specifically relate to commercial vehicles. This includes loading and waiting restrictions as well as regulations limiting access to vehicles of certain dimensions. These are in place to ensure that the circulation of traffic is not affected by inappropriate vehicles using unsuitable roads or blocking traffic. However, to maximise the effectiveness of the Traffic Regulation Orders, and to achieve the benefits they set out to deliver, it is necessary to ensure that these are appropriate and enforceable.

FM4a - Enforcement

- 8.23 To ensure that enforcement is taking place on a consistent and frequent basis, parking enforcement officers should be provided with guidelines on acceptable activities whilst loading and unloading. These guidelines should be available to all, and if necessary, revised on the basis of feedback from operators and local businesses.
- 8.24 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 limits and 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, but may use the Freight Quality Partnership proposed elsewhere as a mechanism for achieving this dialogue.

APPENDIX A

Strategic Audit and
Implementation Plan

Strategic Audit and Implementation Plan

- 8.25 The following appendix contains a strategic audit of the schemes and outlines the suggested Implementation Plan for the St Albans Urban Transport Plan. The full descriptions of the schemes can be found in the main report. Here, the schemes are linked to the problems, issues and opportunities to which they relate to, as well as the objectives they meet and targets against which they will be measured (see Section 3 of the main report). This information is contained in Table 10.1 and 10.2. The Implementation Plan, which contains information on costs, timescale, staffing requirements, location and responsibility for implementation, is contained within Table 10.3.
- 8.26 The coding used within the tables is explained here:
- Issue, problems and opportunities - these can be cross-referenced with Section 2 for further details:
 - CI1 - Congestion Issue 1
 - SP2 - Safety Problem 2
 - A05 - Accessibility Opportunity 5
 - Objectives are given coding in the following format and can be cross-referenced with Section 3 of the main report:
 - CB3 - Congestion Objective 3
 - SB2 - Safety Objective 2
 - FB1 - Freight Objective 1
 - Targets (cross-reference with Section 3) are referenced thus:
 - S4 - Safety Target 4
 - CA1 - Congestion Target 1
 - O2 - Other Target 2
 - Targets may also have zero, one or two asterisks after the reference code:
 - Zero asterisks - minor contribution towards target locally
 - One asterisk - contribution towards target locally
 - Two asterisks - major contribution towards target locally
- 8.27 Staffing estimates are indicative and based on the amount of one full time employee's time (N.B. Obviously, the majority of schemes will require the input of more than one member of staff). The codes are:
- "x" - ← 20 days (less than one month)
 - "xx" - 20 – 60 days (one month – three months)
 - "xxx" - 60 – 120 days (three months – six months)
 - "xxxx" - 120 – 240 days (six months – one year)

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TABLE 8.1 ADDRESSING ISSUES, PROBLEMS AND OPPORTUNITIES WITH SCHEMES

Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
CI1	High overall levels of car ownership	CM2a, CM2b, CM2c, CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM2j, CM2k, CM3a, CM3m, CM7a, CM7b, CM8a, CM8b, CM9a, CM10a, CM10b
CI2	Lack of continuous ring road	CM8a, CM8b, CM10a, CM10b
CI3	Constrained, historic, city centre network	CM6a, CM8a, CM8b
CI4	Lack of parking signage	CM8a, CM8b, CM9a
CI5	Lack of suitable short-stay, on-street parking in the city centre	CM7a, CM7b, CM9a
CI6	Lack of suitable short-stay parking away from the city centre	CM9a
CI7	Lack of long-stay, residential parking	CM9a
CP1	High car dependency	CM2a, CM2b, CM2c, CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM2j, CM2k, CM3a, CM3l, CM3m, CM4a, CM4c, CM4d, CM4e, CM4f, CM4g, CM6a, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b, CM9a
CP2	Traffic diverting from the strategic road network into the city centre	CM6a, CM7a, CM7b, CM8a, CM8b, CM10a, CM10b, FM1a, FM2a, FM3a, FM4a
CP3	Arterial route and city centre congestion	CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM2j, CM2k, CM7a, CM7b, CM8a, CM8b, CM9a, FM1a, FM2a, FM3a, FM4a
CP4	Traffic diverting onto residential roads	CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM8a, CM8b, CM9a, FM1a, FM2a, FM3a, FM4a
CP5	High expected growth in traffic	CM1a, CM1b, CM2a, CM2b, CM2c, CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM2j, CM2k, CM3a, CM3m, CM6a, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b, CM8a, CM8b, CM9a, CM10a, CM10b, FM1a, FM2a, FM3a, FM4a
CP6	Illegal parking obstructing the carriageway	CM9a, FM1a, FM4a
CP7	Traffic circulating looking for suitable parking	CM7a, CM7b, CM8a, CM8b, CM9a, FM1a, FM2a, FM3a

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Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
CP8	On-street parking reducing the width of the highway	CM6a, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b, CM9a, FM1a
C01	Mode shift potential from car to sustainable transport modes	CM2a, CM2b, CM2c, CM2d, CM2e, CM2f, CM2g, CM2h, CM2i, CM2j, CM4d, CM4c, CM4a, CM3l, CM3a, CM2k, CM4e, CM4f, CM4g, CM6a, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b, CM9a
C02	Remove car traffic from St Peter's Street to reduce bus journey times and increase bus reliability	CM1, CM1b, CM1c, CM3a, CM6a
C03	Signal improvements to increase highway capacity on western orbital road network	CM1c, CM10a, CM10b
C04	Strategic road network widening to increase highway capacity and reduce levels of diverting through traffic	CM1c
C05	Highway construction to increase capacity on western orbital road network and reduce levels of through traffic	CM1a, CM1b
C06	A St Albans City parking strategy	CM9a
C07	Passing loop on Abbey rail line	No proposed scheme within the 5-years of this strategy and implementation plan, but the strategy supports the construction of a passing loop.
C08	Improved information provision and promotion	CM4a, CM4b, CM4c, CM4d, CM4e, CM4f, CM4g, CM6f, AM7a
C09	Bus priority measures on arterial routes	CM1a, CM1b, CM1b, CM1c, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b
C010	Quality Bus Partnerships	CM5a
C011	Improve East-West bus and coach links	CM7a, CM7b
C012	Improve walking and cycling conditions	CM1c, CM3a, CM3b, CM3c, CM3d, CM3e, CM3f, CM3g, CM3h, CM3i, CM3j, CM3k, CM3l, CM3m, CM6a
C013	Build on the strong position of St Albans for school travel planning	CM2a, CM2b, CM2c

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Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
C014	Engage more with the business community	CM2d, CM2e, CM2f, CM2h, CM2i
C015	Introduce personalised travel planning	CM2j
C016	Incorporate residential travel planning into the planning process for new developments	CM2k
C017	Introduce car clubs and car sharing	Car clubs and car sharing are funded and promoted by HCC.
C018	Real-time information provision for bus users	CM4b, CM4f
C019	Signal improvements to increase highway capacity	CM6c, CM6e, CM10a, CM10b
AI1	Areas of “financially constrained” households in Cunningham, Sopwell and Batchwood	Not an issue this strategy can directly and effectively address.
AI2	Areas of low car ownership households in Cunningham, Sopwell and Batchwood	Low car ownership is an issue with respect to accessibility, but raising car ownership levels is not promoted by this strategy.
AP1	High cost of city centre parking	CM9a
AP2	Lack of city centre parking for mobility impaired users	CM9a
AP3	Low bus frequencies	CM5a
AP4	Poor bus reliability	CM5a, CM6b, CM6c, CM6d, CM6e
AP5	Poor bus information provision and promotion	CM4a, CM4b, CM4c, CM4d, CM4e, CM4f, CM4g, CM6f, AM7a
AP6	Narrow and uneven pavements	
AP7	Lack of street lighting, well-lit public cycle parking and CCTV	CM3a, CM3h, CM3i, CM3l
AP8	Poor access to primary health care	AM7a, AM7b, AM7d
A01	Remove traffic from St Peter’s Street to reduce bus journey times and increase bus reliability	CM1a, CM1b, CM1c, CM3a, CM6a
A02	Accessibility improvements at St Albans Abbey station	CM3b, AM7c

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Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
A03	Passing loop on Abbey rail line	No proposed scheme within the 5-years of this strategy and implementation plan, but the strategy supports the construction of a passing loop.
A04	Improved information provision and promotion	CM4a, CM4b, CM4c, CM4d, CM4e, CM4f, CM4g, CM6f, AM7a
A05	Bus priority measures on arterial routes	CM1a, CM1b, A05, CM6b, CM6c, CM6d, CM6e, CM7a, CM7b
A06	Quality Bus Partnerships	CM5a
A07	Improve East-West bus and coach links	CM7a, CM7b
A08	Improve walking and cycling conditions	CM3a, CM3b, CM3c, CM3d, CM3e, CM3f, CM3g, CM3h, CM3i, CM3j, CM3k, CM3l, CM3m
A09	Real-time information provision for bus users	CM4b, CM4f
A010	Improve community transport particularly to the more deprived areas of the city	AM7a, AM7b, AM7c, AM7d
A011	Improve accessibility along key pedestrian and wheel chair desire lines	CM3a, CM3b, CM3c, CM3d, CM3e, CM3f, CM3j, CM3k, CM3l, CM9a
SI1	Illegal parking obstructing the carriageway	CM9a, SM1a, FM4a
SI2	Perceived lack of safe and secure parking in the city centre	CM9a, SM1a, SM4a
SI3	(Perceived) vulnerability at bus stops	CM6f, SM1a, SM4a
SI4	Lack of (continuous) cycle lanes	CM3a, CM3c, CM3d, CM3f, CM3g, CM3m, SM1a
SI5	Lack of road and junction crossings	CM3a, CM3b, CM3c, CM3d, CM3e, CM3f, CM3j, CM3k, CM3l, SM1a
SI6	Lack of secure cycle parking, changing and showering facilities in workplaces	CM3a, SM1a, SM4a
SI7	Narrow and uneven pavements	CM3e, SM1a, SM4a
SI8	Lack of street lighting, well lit public cycle parking and CCTV	CM3a, CM3e, CM3h, CM3i, SM1a, SM4a

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Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
SI9	Speeding and dangerous driving	SM1a, SM2a, SM4a
SI10	Traffic calming measures, such as central islands, that force cars into cyclist road space	CM3a, CM3L
SP1	Accident hotspots in the city centre, on arterial routes, orbital routes, major junctions and roundabouts	SM1a, SM2a, SM4a, FM1a, FM2a, FM3a, FM4a
S01	Increase use of speed management	SM2a
S02	Increase level of road safety education for children and cyclists and training for drivers	CM2a, CM2b, CM2c, SM1a, SM2a
S03	Road safety campaigns targeted at particular user groups and problem areas	SM1a, SM2a
FP1	Planning – lack of available data; poor links between council planners and businesses; no one council planner responsible for freight	FM1a, FM2a
FP2	Access and routing – AM peak congestion; congestion on single carriageway roads in the city centre; through traffic	CM8, FM1a, FM2a, FM3a
FP3	Circulation – congestion; restrictions on stopping and movement	FM1a, FM2a, FM3a, FM4a
FP4	Facilities – poor on-street loading facilities; poor signage; lack of longer-term parking; distance from parking facilities to delivery / pick-up points	FM1a, FM2a, FM3a
FP5	Information – poor signage; difficult to access information regarding diversions	CM8b, FM1a, FM2a, FM3a
FP6	Safety and security – several accident hotspots on arterial ring roads	FM1a, FM2a, FM3a, FM4a

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Issues, Problems and Opportunity ID	Issues, Problems and Opportunities	Scheme IDs
FP7	Environment – air and noise pollution of freight vehicles, especially when caught in congested traffic at peak times	FM1a, FM2a
F01	Planning – thorough and regular data; joint working by Hertfordshire County Council and St Albans City and District Council regarding freight and related issues	FM1a, FM2a
F02	Access and routing – more appropriate local access routes; identification and management of pinch-points	CM8b, FM1a, FM2a, FM3a
F03	Circulation – reduction of congestion; rationalisation of traffic restrictions	FM1a, FM2a, FM3a, FM4a
F04	Facilities – more on-street loading bays; better guidance on appropriate use of on- and off- street parking	FM1a, FM2a
F05	Information – better signage; Intelligent Transport Systems	CM8b, FM1a, FM2a, FM3a
F06	Safety and security – identify and manage traffic hotspots	FM1a, FM2a, FM3a, FM4a
F07	Environment – consider freight in the development of and environmental plans	FM1a, FM2a

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TABLE 8.2 SCHEME RELATION TO ISSUES, PROBLEMS, OPPORTUNITIES, OBJECTIVES AND TARGETS

Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
CM1a	SATURN Model Update	CP5, C02 / A01, C05, C09 / A05	CB1, CB2, CB4, CB7, AB5	CA3
CM1b	TransCAD Public Transport Model / Spreadsheet Mode Choice Model	CP5, C02 / A01, C05, C09 / A05	CB1, CB2, CB4, CB7, AB5	CA3
CM1c	Paramics Model Update	C02 / A01, C03, C04, C09 / A05, C012	CB1, CB2, CB4, AB5, SB1, SB2, SB3	CA3, CA9, S1, S2, S3
CM2a	Encourage remaining schools to complete School Travel Plans	CI1, CP1, CP5, C01, C013, S02	CB2, CB3, CB7, AB3, SB1, SB2, EB1, EB5	CA1*, CA2*, CA3*, CA4*, CA5**, CA6**, CA7, S1, S2*, S3,
CM2b	Implement School Travel Plan measures	CI1, CP1, CP5, C01, C013, S02	CB2, CB3, CB7, AB3, SB1, SB2, EB1, EB5	CA1*, CA2*, CA3*, CA4*, CA5**, CA6**, CA7, S1, S2*, S3,
CM2c	Ongoing review of School Travel Plans	CI1, CP1, CP5, C01, C013, S02	CB2, CB3, CB7, AB3, SB1, SB2, EB1, EB5	CA1*, CA2*, CA3*, CA4*, CA5**, CA6**, CA7, S1, S2*, S3,
CM2d	Workplace Travel Planning Strategy	CI1, CP1, CP3, CP4, CP5, C01, C014	CB2, CB3, CB7, AB2, AB5, EB1, EB5	CA1, CA2, CA3, CA4, CA7,
CM2e	Area Wide Travel Plan	CI1, CP1, CP3, CP4, CP5, C01, C014	CB2, CB3, CB7, AB2, AB5, EB1, EB5	CA1, CA2, CA3, CA4, CA7,
CM2f	Travel Forum	CI1, CP1, CP3, CP4, CP5, C01, C014	CB2, CB3, CB7, AB2, AB5, EB1, EB5	CA1, CA2, CA3, CA4, CA7
CM2g	Review and Update St. Albans District Council and Hertfordshire County Council's Office Travel Plans	CI1, CP1, CP3, CP4, CP5, C01	CB2, CB3, CB7, AB2, AB5, EB1, EB5	CA1, CA2, CA3, CA4, CA7,,O2
CM2h	Develop Travel Plans for Key Employers	CI1, CP1, CP3, CP4, CP5, C01, C014	CB2, CB3, CB4, CB7, AB2, AB5, EB1, EB5	CA1*, CA2*, CA3*, CA4*, CA7*, O2
CM2j	Personalised Travel Planning	CI1, CP1, CP3, CP5, C01, C015	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, AB5, EB1, EB5	CA1**, CA2**, CA3**, CA4*, CA7**

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Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
CM2k	Residential Travel Planning	CI1, CP1, CP3, CP5, CO1, CO16	CB2, CB3, CB4, CB5, CB7, AB1, AB2, AB3, AB4, AB5, EB1, EB5	CA1**, CA2**, CA3**, CA4*, CA7**,
CM3a	Develop Walking and Cycling Priority Feasibility Study	CI1, CP1, CP5, CO1, CO2 / A01, CO12 / A08, AP6, AP7, A011, SI4, SI5, SI6, SI7, SI8, SI10	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4, CA11, S1, S2, S3, S4, O1,
CM3b	Alban Way Improvements	CO12 / A08, A02, A011, SI5	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4**, S1, S2, S3, O1, O5
CM3c	Camp Road Improvements	CO12 / A08, A011, SI4, SI5	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4*, S1*, S2*, S3*, O1, O5
CM3d	Hatfield Road, Clarence Road, Camp Road Junction Improvements	CO12 / A08, A011, SI4, SI5	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4*, S1*, S2*, S3*, S4, O1, O3
CM3e	Continuation of London Road Cycle Route (including Napsbury Lane to London Road Herons Way Cut-through Improvements)	CO12 / A08, AP6, A011, SI5, SI7, SI8	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4*, S1*, S2*, S3*, O1
CM3f	Victoria Street Junction Improvements	CO12 / A08, A011, SI4, SI5	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4*, S1*, S2*, S3*, O3
CM3g	Cycle Links to Hospital Site	CO12 / A08, SI4	CB3, CB7, AB1, AB2, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4*, CA11*, S1, S2, S3
CM3h	Installation of covered cycle parking	CO12 / A08, AP7, SI8	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, EB1, EB5	CA1, CA2, CA3, CA4*
CM3i	Installation of non-covered stands	CO12 / A08, AP7, SI8	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, EB1, EB5	CA1, CA2, CA3, CA4*

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Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
CM3j	Pedestrian Crossing on Lemsford Road at junction with Avenue Road	C012 / A08, A011, SI5	CB3, CB5, CB7, AB2, AB3, AB4, SB1, SB2, SB3, EB3, EB5	CA1, CA2, CA3, S1*, S2*, S3*, O6
CM3k	Pedestrian Crossing at Sand Pit Lane in vicinity of Lemsford Road.	C012 / A08, A011, SI5	CB3, CB5, CB7, AB2, AB3, AB4, SB1, SB2, SB3, EB3, EB5	CA1, CA2, CA3, S1*, S2*, S3*, O6
CM3l	Pedestrian Access Routes	CP1, C01, C012 / A08, AP6, AP7, A011, SI5, SI10	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1*, CA2*, CA3*, CA4**, CA11*, S1*, S2*, S3*, S4*, O1*, O6
CM3m	Consolidating the Network	CI1, CP1, CP5, C012 / A08, SI4	CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3, EB5	CA1, CA2, CA3, CA4**, CA11*, O1,
CM4a	Branding and Promotion	CP1, C01, C08 / A04, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1*, CA2*, CA3*, CA4, CA7*, CA8, CA10*, CA11,
CM4b	Interchange Signing	C08 / A04, C018 / A09, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*,
CM4c	Website Development	CP1, C01, C08 / A04, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*, O2
CM4d	Interactive Mapping System of the area	CP1, C01, C08 / A04, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*, O2
CM4e	Integrated Journey Planner for Walking, Cycling and Public Transport	CP1, C01, C08 / A04, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*, O2
CM4f	Automatic at-stop information display	CP1, C01, C08 / A04, C018 / A09, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*
CM4g	Interactive kiosks	CP1, C01, C08 / A04, AP5	CB2, CB3, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA4, CA7*, CA8, CA10, CA11*

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Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
CM5a	Commercial partnerships with operators	CO10 / A06, AP3, AP4	CB3, CB4, CB5, CB7, AB1, AB2, AB3, AB4, EB1	CA1, CA2, CA3, CA7*, CA8*, CA9*, CA10, CA11
CM6a	Chequer Street / St. Peter's Street Feasibility Study	CI3, CP1, CP2, CP5, CP8, CO1, CO2 / A01, CO12,	CB1, CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3	CA1, CA2, CA3, CA4*, CA7*, CA8*, CA9*, CA11*, S1*, S2*, S3*
CM6b	Holywell Hill Improvements	CP1, CP5, CP8, CO1, CO9 / A05, AP4	CB1, CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3	CA1, CA2, CA3*, CA7*, CA8*, CA9**, CA10, CA11
CM6c	London Road Improvements	CP1, CP5, CP8, CO1, CO9 / A05, AP4, CO19	CB1, CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3	CA1, CA2, CA3*, CA7*, CA8*, CA9**, CA10, CA11, O5
CM6d	Victoria Street Improvements	CP1, CP5, CP8, CO1, CO9 / A05, AP4	CB1, CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3	CA1, CA2, CA3*, CA7*, CA8*, CA9**, CA10, CA11, O4
CM6e	Hatfield Road Bus Corridor Study Improvements	CP1, CP5, CP8, CO1, CO9 / A05, AP4, CO19	CB1, CB3, CB5, CB7, AB1, AB2, AB3, AB4, SB1, SB2, SB3, EB1, EB3	CA1, CA2, CA3*, CA7*, CA8*, CA9**, CA10, CA11,
CM6f	Bus Stop Accessibility	CO8 / A04, AP5, SI3	CB3, CB7, AB4	CA8*, CA11*
CM7a	Comprehensive Area Wide Scoping Study for Park & Ride / East-West Parkways	CI1, CI5, CP1, CP2, CP3, CP5, CP7, CP8, CO1, CO9 / A05, CO11 / A07	CB1, CB3, CB4, CB5, CB6, CB7, AB1, AB2, AB3, AB4, AB5, AB6, SB3	CA1, CA2, CA3, CA7, CA8, CA9, CA11
CM7b	Feasibility, Design and Business Case for Park & Ride / East-West Parkways	CI1, CI5, CP1, CP2, CP3, CP5, CP7, CP8, CO1, CO9 / A05, CO11 / A07	CB1, CB3, CB4, CB5, CB6, CB7, AB1, AB2, AB3, AB4, AB5, AB6, SB3	CA1, CA2, CA3, CA7, CA8, CA9, CA11
CM8a	Expansion of Signage Study to Non-commercial Destinations	CI1, CI2, CI3, CI4, CP2, CP3, CP4, CP5, CP7	CB1, CB2, CB5, CB7, EB1	CA3**, S1, S2, S3,

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Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
CM8b	Outer Cordon of Variable Messaging Signs	CI1, CI2, CI3, CI4, CP2, CP3, CP4, CP5, CP7, FP2, FP5, F02, F05	CB1, CB2, CB5, CB7, EB1, FB1	CA3**, S1, S2, S3,
CM9a	St. Albans City Parking Strategy	CI1, CI4, CI5, CI6, CI7, CP1, CP3, CP4, CP5, CP6, CP7, CP8, CO1, CO6, AP1, AP2, A011, SI1, SI2	CB3, CB4, CB5, CB6, CB7, AB5, SB1, SB2, SB3, FB1	CA1, CA2, CA3*, CA7, S1, S2, S3,
CM10a	Addition of SCOOT enabled signals along Western Orbital Route	CI1, CI2, CP2, CP5, CO3, CO19	CB2	CA3
CM10b	Addition of SCOOT enabled signals at Park Street and London Colney Roundabouts on M10 / A414	CI1, CI2, CP2, CP5, CO3, CO19	CB2	CA3*
AM7a	Information on CT Services Available	CO8 / A04, AP5, AP8, A010	CB2, AB1, AB2, AB3, AB4	CA11**
AM7b	CT Partnership Working	AP8, A010	CB2, AB1, AB2, AB3, AB4	CA11**
AM7c	City Centre and Station Shuttle Bus	A02, A010	CB2, AB1, AB2, AB3, AB4	CA11**
AM7d	Introduce Taxi-bus Service	AP8, A010	CB2, AB1, AB2, AB3, AB4	CA11**
SM1a	Safety Partnership	SI1, SI2, SI3, SI4, SI5, SI6, SI7, SI8, SI9, SP1, SO2, SO3	SB1, SB2, SB3	S1*, S2*, S3*, S4*
SM2a	Speed Management	SI9, SP1, SO1, SO2, SO3	SB1, SB2, SB3	S1**, S2**, S3**, S4**
SM4a	Improved Performance Monitoring	SI2, SI3, SI6, SI7, SI8, SI9, SP1	SB1, SB2, SB3	S1*, S2*, S3*, S4*

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Scheme ID	Scheme	Issues, Problems and Opportunities	Objectives	Targets
FM1a	Freight Quality Partnership set-up and study	CP2, CP3, CP4, CP5, CP6, CP7, CP8, SP1, FP1, FP2, FP3, FP4, FP5, FP6, FP7, F01, F02, F03, F04, F05, F06, F07	CB1, CB4, CB5, CB6, SB1, SB2, SB3, EB1, FB1	CA1, CA3, S1, S2, S3
FM2a	Compulsory Freight Planning in New Developments	CP2, CP3, CP4, CP5, CP7, SP1, FP1, FP2, FP3, FP4, FP5, FP6, FP7, F01, F02, F03, F04, F05, F06, F07	CB1, CB4, CB5, CB6, SB1, SB2, SB3, EB1, FB1	S1, S2, S3
FM3a	Review of St. Albans Signing Strategy for Commercial Vehicles and weight limit zone	CP2, CP3, CP4, CP5, CP7, SP1, FP2, FP3, FP4, FP5, FP6, F02, F03, F05, F06	CB1, CB5, EB1, FB1	CA3, S1, S2, S3, O2
FM4a	Enforcement	CP2, CP4, CP5, CP6, SI1, SP1, FP3, FP6, F03, F06	CB1, CB4, CB6, SB1, SB2, SB3, EB1, FB1	CA1, CA3, S1, S2, S3, O2

TABLE 8.3 COST, FUNDING, TIMESCALE, STAFFING REQUIREMENTS, LOCATION AND RESPONSIBILITY FOR IMPLEMENTATION

Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM1a	SATURN Model Update	£50,000				
CM1b	TransCAD Public Transport Model / Spreadsheet Mode Choice Model	£80,000				
CM1c	Paramics Model Update	£50,000				
CM2a	Encourage remaining schools to complete School Travel Plans	£5,000	£5,000			
CM2b	Implement School Travel Plan measures		£5,000	£5,000		

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£50,000	Yes	HCC	xxxx	Link modelling to Walking, Cycling, Bus Priority and Highway Capacity Schemes for LTP Capital Funding	HCC	St Albans Wide
£80,000	Yes	HCC	xxx	Link modelling to Walking, Cycling, Bus Priority and Highway Capacity Schemes for LTP Capital Funding	HCC	St Albans Wide
£50,000	Yes	HCC	xxxx	Link modelling to Walking, Cycling, Bus Priority and Highway Capacity Schemes for LTP Capital Funding	HCC	City Centre
£10,000	Yes	HCC	xx		HCC	Site Specific
£10,000		HCC	xx		HCC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM2c	Ongoing review of School Travel Plans			£10,000	£10,000	£10,000
CM2d	Workplace Travel Planning Strategy	£0				
CM2e	Area Wide Travel Plan	£0				
CM2f	Travel Forum	£0				
CM2g	Review and m St. Albans District Council and Hertfordshire County Council's Office Travel Plans	£0	£0			
CM2h	Develop Travel Plans for Key Employers	£0	£0			

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£30,000		HCC	xx		HCC	St Albans Wide
£0	Yes	HCC	xxx	Staff time only	HCC	City Centre
£0	Yes	HCC	xxx	Staff time only	HCC	City Centre
£0		HCC	xx	Staff time only	HCC/SADC	City Centre
£0		SACDC/ HCC	xx	Staff time only	SACDC/ HCC	Site Specific / City Centre
£0		HCC/ employer	xxxx	Staff time only	HCC/SACDC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM2i	Develop and Promote Business Travelwise Network	£5,000	£5,000	£5,000	£5,000	£5,000
CM2j	Personalised Travel Planning		£20,000	£10,000		
CM3a	Develop Walking and Cycling Priority Feasibility Study	£40,000				
CM3b	Alban Way Improvements			£60,000		
CM3c	Camp Road Improvements				£40,000	
CM3d	Hatfield Road, Clarence Road, Camp Road Junction Improvements			£100,000		

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£25,000		HCC	xxx		HCC	St Albans Wide
£30,000	(could be brought forwards)	HCC	xxx	CIF	HCC	New Greens
£40,000		SACDC/ HCC	xxx		SACDC/HCC	St Albans Wide
£60,000		SACDC/ HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	SACDC/HCC	Site Specific
£40,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£100,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM3e	Continuation of London Road Cycle Route including Napsbury Lane to London Road Herons Way Cut-through Improvements		£50,000			
CM3f	Victoria Street Junction Improvements		£20,000			
CM3g	Cycle Links to Hospital Site					£30,000
CM3h	Installation of covered cycle parking	£10,000	£10,000			
CM3i	Installation of non-covered stands	£5,000	£10,000	£5,000		
CM3j	Pedestrian Crossing on Lemsford Road at junction with Avenue Road		£40,000			

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£50,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£20,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£30,000		SACDC/ HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	SACDC/HCC	Site Specific
£20,000	Yes	HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£20,000	Yes	HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£40,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific

St Albans Urban Transport Plan - Appendix A

Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM3k	Pedestrian Crossing at Sand Pit Lane in vicinity of Lemsford Road		£40,000			
CM3l	Pedestrian Access Routes		£35,000	£35,000	£25,000	£25,000
CM3m	Consolidating the Network					£20,000
CM4a	Branding and Promotion	£15,000				
CM4b	Interchange Signing	£10,000				
CM4c	Website Development		£0			

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£40,000		HCC	x	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£130,000		HCC	xx	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	Site Specific
£20,000		HCC	xxx	Look for Developer Contributions/ DfT Cycle Demonstration Town / Cycle England funding where possible	HCC	St Albans Wide
£15,000	Yes	HCC	xxx	Look for Developer Contributions where possible	HCC	St Albans Wide
£10,000		HCC	xx	Look for Developer Contributions where possible	HCC	St Albans Wide
£0		HCC	xx	Look for Developer Contributions where possible	HCC	St Albans Wide

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM4d	Interactive Mapping System of the area		£10,000			
CM4e	Integrated Journey Planner for Walking, Cycling and Public Transport		£10,000			
CM4f	Automatic at-stop information display			£500,000		
CM4g	Interactive kiosks			£20,000		
CM5a	Commercial partnerships with operators	£0	£0	£0	£0	£0
CM6a	Chequer Street / St. Peter's Street , Market Palce Feasibility Study	£25,000		200,000		

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£10,000		HCC	xxx	Look for Developer Contributions where possible	HCC	St Albans Wide
£10,000		HCC	xxx	Look for Developer Contributions where possible	HCC	St Albans Wide
£500,000		HCC	xxx	Look for Developer Contributions where possible	HCC	Site Specific
£20,000		HCC	xx	Look for Developer Contributions where possible	HCC	Site Specific / City Centre
£0	Yes	HCC	xxx	Look for Bus Operator funding if possible and necessary	HCC	St Albans Wide
£225,000		HCC	xx	Years and sums indicative only- Subject to extensive consultation	HCC/SADC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM6b	Holywell Hill Improvements		£10,000			
CM6c	London Road Improvements			£10,000		
CM6d	Victoria St Improvements		£150,000			
CM6e	Hatfield Road Bus Corridor Study Improvements				£100,000	
CM6f	Bus Stop Accessibility	£30,000	£30,000			
CM7a	Comprehensive Area Wide Scoping Study for Park & Ride / East-West Parkways Comprehensive Area Wide Scoping Study				£40,000	

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£10,000		HCC	xx		HCC	City Centre
£100,000		HCC	xx		HCC	City Centre / Site Specific
£150,000		HCC	xx		HCC	City Centre
£100,000		HCC	xx		HCC	City Centre / Site Specific
£60,000	Yes	HCC	xx		HCC	Site Specific
£40,000	Yes (could be brought forwards)	HCC	xx	Look for Developer Contributions where possible	HCC/SADC	St Albans Wide

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
CM7b	Feasibility, Design and Business Case for Park & Ride / East-West Parkways					£150,000
CM8a	Expansion of Signage Study to Non-commercial Destinations	£50,000				
CM8b	Outer Cordon of Variable Messaging Signs		£500,000			
CM9a	St. Albans City Parking Strategy	£0				
CM10a	Addition of SCOOT enabled signals along Western Orbital Route				£100,000	
CM10b	Addition of SCOOT enabled signals at Park Street and London Colney Roundabouts on M10 / A414				£100,000	

St Albans Urban Transport Plan - Appendix A

Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£150,000	Yes (could be brought forwards)	HCC	xx	Look for Developer Contributions where possible	HCC/SADC	St Albans Wide
£50,000	Yes	HCC	xx		HCC	St Albans Wide
£500,000		HCC	xx		HCC	St Albans Wide
£0	Yes	SACDC	xxx		SACDC	City Centre
£100,000		HCC	x	Look for Developer Contributions where possible	HCC	Site Specific
£100,000		HCC	x	Look for Developer Contributions where possible	HCC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
AM7a	Information on Services Available	£10,000				
AM7b	Partnership Working	£1,000	£1,000	£1,000	£1,000	£1,000
AM7c	City Centre and Station Shuttle Bus	£40,000	£40,000	£40,000	£40,000	£40,000
AM7d	Introduce Taxi-bus Service	£20,000	£20,000	£20,000	£20,000	£20,000
SM1a	Partnership	£0	£0	£0	£0	£0
SM2a	Speed Management		£10,000	£10,000		

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Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£10,000	Yes	HCC	x		HCC	St Albans Wide
£5,000	Yes	HCC	x		HCC	St Albans Wide
£200,000		HCC	xx	Use existing vehicle fleet / PCT funding where possible, S106	HCC	City Centre
£100,000		SACDC/ HCC	xx	Use existing vehicle fleet	SACDC/HCC	St Albans Wide
£0	Yes	HCC	xx		HCC	St Albans Wide
£20,000	Yes	HCC	xx	Look for Developer Contributions where possible	HCC	Site Specific

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Scheme ID	Scheme	YEAR 1 (Indicative)	YEAR 2 (Indicative)	YEAR 3 (Indicative)	YEAR 4 (Indicative)	YEAR 5 (Indicative)
SM4a	Monitoring	£5,000	£5,000	£5,000	£5,000	£5,000
FM1a	Freight Quality Partnership set-up and study	£5,000	£0	£0	£0	£0
FM2a	Compulsory Freight Planning in New Developments		£5,000	£5,000	£5,000	£5,000
FM3a	Review of St. Albans Signing Strategy for Commercial Vehicles and weight limit zone	£100,000		100,000		
FM4a	Enforcement		£5,000	£5,000	£5,000	£5,000
TOTAL COST		£511,000	£791,000	£781,000	£541,000	£236,000

St Albans Urban Transport Plan - Appendix A

Total Cost (Indicative)	Ready to Implement?	Funding	Staff	Comments	Responsibility	Location
£25,000	Yes	HCC	xx	Look for Police Service funding where possible	HCC	St Albans Wide
£5,000	Yes	SACDC/ HCC	xx		SACDC/HCC	St Albans Wide
£20,000		SACDC/ HCC	xx		SACDC/HCC	St Albans Wide
£200,000	Yes	HCC	x		HCC/SADC	St Albans Wide
£20,000		HCC / SACDC	x		HCC/SADC/ Herts Police	St Albans Wide

APPENDIX B

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.
- A1.47 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.

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

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.

Revisions to regional planning allocations and policy

- 1.1 The East of England Plan (EEP)¹, 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 2006). 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.
- A1.68 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.
- A1.69 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.

¹ This document can be found on the Government Office of the East of England's website: www.gos.gov.uk/goee/docs/193657/193668/ProposedChanges.pdf

A1.70 The importance of improving east-west links in the area is also emphasised in the recent proposed changes.

Summary

A1.71 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.
- There are considerable numbers of dwellings allocated to the area in the draft East of England Plan.

APPENDIX C

Freight Review

1. INTRODUCTION

This Document

- 1.1 The purpose of this document is to feed into the Introductory Report for the St Albans Urban Transport Plan. This document provides information on the Freight and Sustainable Distribution activity in the study area and an initial overview of the key issues that have been highlighted during previous consultation and research and throughout the duration of this initial phase of plan development.
- 1.2 We have developed a framework that has begun to fill the knowledge gaps, but also highlights where there remains data collection to be undertaken or additional consultation would be beneficial.
- 1.3 This document is structured as follows:
 - Section 2 sets out the Freight & Sustainable Distribution policy background
 - Section 3 contains a review of current freight activity in St Albans and how this may change in the future
 - Section 4 highlights a variety of freight-related issues and an initial consideration of how the Urban Transport Plan may address these.

2. POLICY BACKGROUND

Introduction

- 2.1 The key driver behind freight activity is the commercial need to move goods through supply chains from the point of production to the point of consumption. The location and scale of freight flows is a result of supply chain structures that are designed to ensure that customers are provided with their goods and services in as cost-effective a way as possible.
- 2.2 Nevertheless, these commercial decisions are not taken in a vacuum. Government policy influences the context in which freight operations are planned, and therefore it is necessary to understand the current policy (at all levels of Government). Additionally, as the urban transport plan is developed, potential solutions to the freight issues highlighted in this document will be assessed, and they should be aligned with the policy objectives outlined below.

National Policy: Sustainable Distribution

- 2.3 Sustainable Distribution: A Strategy sets out the Government's position on freight transport, introducing targets and actions associated with logistics and distribution. Sustainable Distribution is a daughter document to the Transport White Paper "A New Deal for Transport", and is intended to ensure that the development of the distribution industry does not compromise the future needs of the society, economy and environment. In summary, there are seven objectives that this strategy seeks to achieve:
- Improve the efficiency of distribution
 - Minimise congestion
 - Make better use of transport infrastructure
 - Minimise pollution and reduce greenhouse gas emissions
 - Manage development pressures on the landscape - both natural and man-made
 - Reduce noise and disturbance from freight movements
 - Reduce the number of accidents, injuries and cases of ill-health associated with freight movement.
- 2.4 Subsequent developments in Central Government transport policy have underlined the relevance of these principles in freight planning, and also the intention to work with the industry to find solutions that are acceptable to all parties. In particular, The Future of Transport White Paper published in 2004 indicated that the Government are continuing to build upon the Sustainable Distribution approach.

- 2.5 Of particular interest to this study, the Sustainable Distribution strategy document has a section dedicated to the promotion of the sustainable distribution of goods in urban areas. The strategy recognises that efficient access for lorry and vans is a key factor in supporting the vitality of urban areas, but also that growth in road traffic causes increases in congestion, pollution and accidents. As well as continuing to review the need for research/projects on urban freight management, the Department for Transport suggested three specific proposals on this topic:
- to promote 'Quality Partnerships' between local authorities, the freight industry, business communities, residents and environmental groups as a planning and delivery mechanism;
 - to research the potential for freight consolidation systems to improve urban distribution; and
 - to research the impact of urban distribution outside of peak hours.

East of England Regional Policy

- 2.6 For the East of England Region, the organisation taking the lead on freight and distribution issues is the East of England Development Agency. It is understood that East of England Development Agency are in the process of developing a Regional Freight Strategy, and that a scoping study was produced in late 2005. This scoping study provides data on the freight activity, transport infrastructure and warehousing stock in the region, but does not set out any specific objectives or policies.

- 2.7 However, the Regional Freight Strategy will sit alongside the existing Regional Transport Strategy, the objectives of which are set out in Policy T1:

"In seeking to meet the overall vision and objectives of the Regional Spatial Strategy's transport policy will seek to meet the following objectives in no particular order:

- *Improve opportunities for all to access jobs, services and leisure/tourist facilities*
- *Enable infrastructure programmes and transport service provision to support both existing development (addressing problems of congestion) and that proposed in the spatial strategy (economic regeneration needs and further housing growth)*
- *Reduce the need to travel*
- *Reduce the transport intensity of economic activity, including freight*
- *Minimise the environmental impact of transport provision and travel, protecting and enhancing the natural, built and historic environment*
- *Improve safety and security.*

To achieve these objectives the Regional Transport Strategy seeks to:

- *Promote the carriage of freight by rail and water and encourage environmentally sensitive distribution*
- *Stimulate efficient use of the existing transport infrastructure, efficiently maintaining and managing existing road, rail, port and airport infrastructure."*

- 2.8 Geographically, St Albans is located in the south west of the region, and therefore relatively close to the 'border' with Greater London. The policies and plans for freight transport put forward by Transport for London also have the potential to impact upon St Albans and the potential for interaction should therefore be given due consideration during the development of the Urban Transport Plan.

Hertfordshire County Policy

- 2.9 The key Transport Policy covering the Hertfordshire area is the Hertfordshire Local Transport Plan for 2006/7-2010/11. The key priorities of Safety, Congestion, Accessibility, Air Quality and Quality of Life can all be affected to some degree by freight activity. Additionally, the recently published Mid-Hertfordshire Area Transport Plan expects to produce a Freight Strategy as one of its supporting documents.

St Albans District Policy

- 2.10 Locally, St Albans District Council support the aims of the Hertfordshire Local Transport Plan 2006/7-2010/11 and highlights its own commitments to deliver the following transport priorities:
- 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.
- 2.11 To do this, the District Council are in the process of producing several Development Plan Documents, which will be adopted in 2009. Until they are adopted, the District Local Plan Review (1994) remains the key planning document for the area.

3. FREIGHT ACTIVITY IN ST ALBANS

Freight & Servicing

- 3.1 For the purposes of this assessment, the transport activity being considered is all freight and servicing. This covers all vehicle movements (of whatever mode) that are not for the purpose of transporting people.

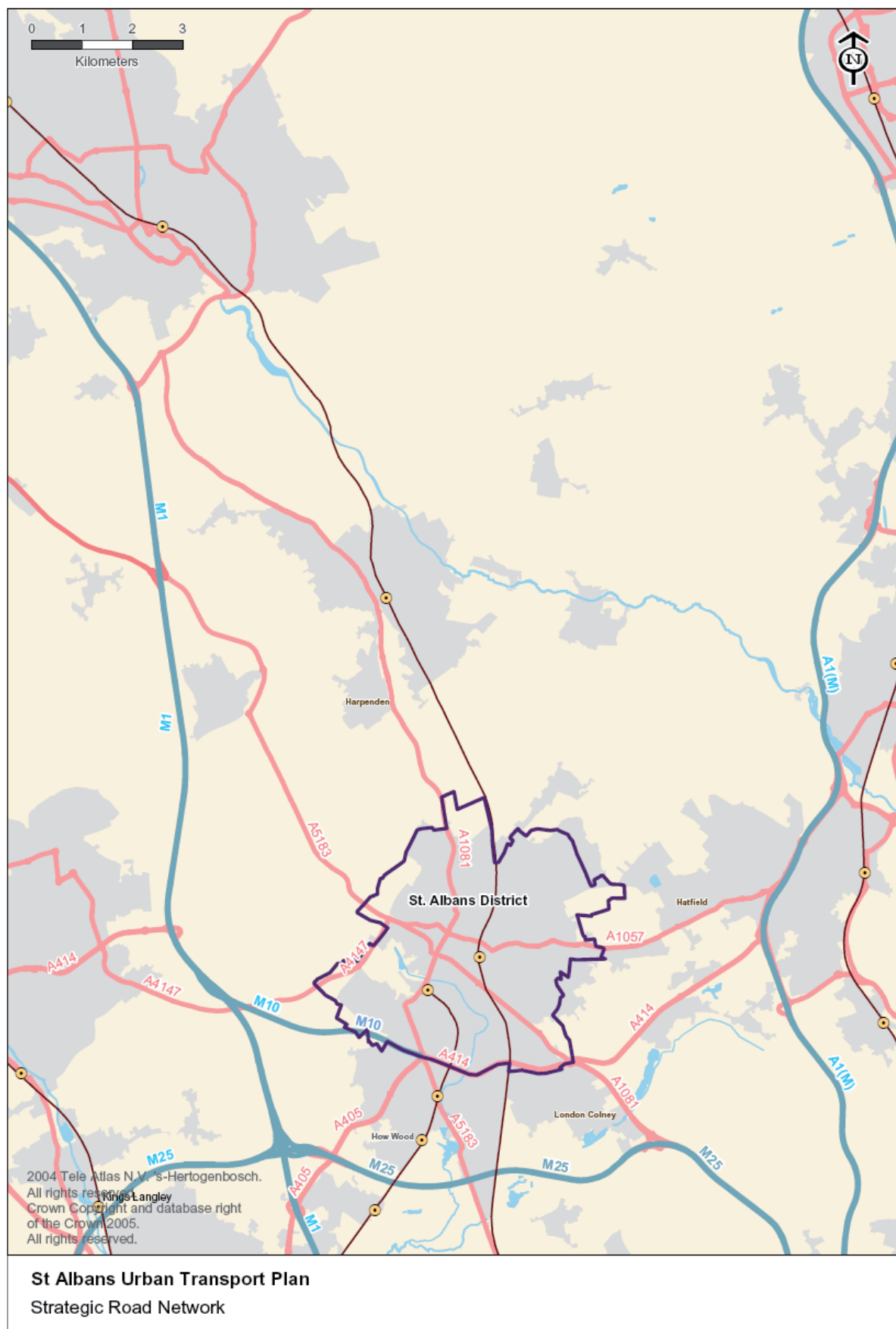
Current Activity

- 3.2 Other than through-traffic, there are no active flows of freight into or out of the study area by rail. Therefore, the focus of this assessment on freight activity is on the use of road for the movement of goods to and from St Albans.

Road Networks

- 3.3 The road networks used by freight traffic are shared with other forms of private and public transport, and as such have been introduced elsewhere in the plan. Nevertheless, the following paragraphs provide a brief overview in order to provide context to the subsequent presentation of issues.
- 3.4 The map in Figure 3.1 shows the key strategic routes in and around St Albans, with the study area boundary marked.
- 3.5 One of the key features of St Albans is its positioning in relation to the major motorway networks, with the M1, M25 and A1(M) all passing close by to the city. In one sense, this means that St Albans is extremely well connected and could be seen as a favourable location from which to base distribution operations. It also means that the majority of strategic road freight traffic (in particularly north-south flows) will follow the major route network and avoid the urban areas.
- 3.6 Therefore, the majority of freight traffic within our study area is of a local nature, with either an origin or destination in or around St Albans. The one exception to this is the M10/A414 east-west route to the south of the study area. This dual carriageway route links the A1(M) and M1 avoiding the M25, as well as its role as a distributor road for local traffic.
- 3.7 St Albans does not have a ring road; however in the south and the west of the city, the A414, A4147 / Hemel Hempstead Road are routes which perform a similar purpose, enabling traffic for local destinations to avoid local roads until absolutely necessary. There is no such road configuration in the north or west of the study area.

FIGURE 3.1 STRATEGIC ROAD NETWORK AROUND ST ALBANS



- 3.8 In terms of freight, there are numerous origins and destinations across the study area; however the most notable conglomeration of businesses and retailers is within the city centre. It is therefore important to consider the road access and road configuration in the central area in particular detail.
- 3.9 Figure 3.2 shows the local road network in this area, with key routes highlighted, as well as Drovers Way – a notable destination for retail related freight movements.
- 3.10 Six routes, each of which ultimately link back to junctions with the strategic motorway network, can be used to access the city centre. These are:
- A1081 Harpenden Road/St Peters Street
 - A1057 Hatfield Road
 - A1081 London Road
 - A5183 Holywell Hill
 - A5183 Verulam Road
 - A4147 Folly Lane/Catherine Street
- 3.11 St Peters Street/Chequer Street/Holywell Hill can also be seen as the main street for retail in the city centre. The other roads in the city centre generally feed from or onto one of these six routes, and can be mainly characterised as single carriageway or single track routes. To some degree, the road networks reflect the historic nature of St Albans, and the co-location of significant residential areas in the central area also reflects the design of the local access roads.
- 3.12 Other notable freight destinations in the study area, away from the city centre also tend to be primarily accessed from one of these six routes. Although these are described in more detail in later sections, a number of key destinations have been highlighted here:
- St Albans Retail Park – Access from the A5183 Holywell Hill
 - North Orbital Commercial Park – Access from the A414
 - Ashley Road Industrial Site – Access from Ashley Road via A1057 Hatfield Road
 - Valley Road Industrial Estate – Access from Valley Road via A1081 Harpenden Road or St Albans Road
 - St Albans City Hospital – Can be accessed via Batchwood Drive or via Folly Lane

FIGURE 3.2 ST ALBANS CITY CENTRE ROAD NETWORK

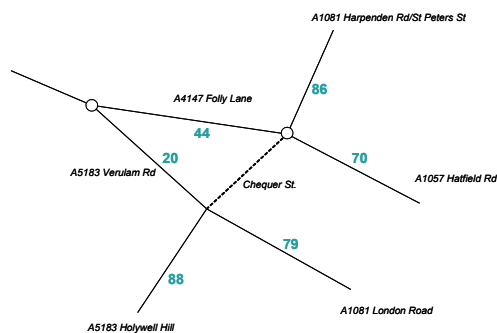


Traffic Levels

- 3.13 Hertfordshire Highways has provided the study team with a number of traffic counts for St Albans between 2004 and 2006. It is important to note that no specific surveys were undertaken as part of this study, and therefore any conclusions that have been made are based upon the existing data, and should be interpreted in this light.
- 3.14 As indicated above, there are six principal routes that can be used to access the city centre. As may be expected, there have been a series of traffic surveys on these routes, and we have used this information to develop a picture of the numbers of goods vehicles accessing and departing the city centre by different routes. This is shown schematically in Figure 3.3 and Figure 3.4 below.

FIGURE 3.3 INBOUND/OUTBOUND HEAVY GOODS VEHICLE FLOWS BY ROUTE 07:00 - 19:00

Inbound:



Outbound:

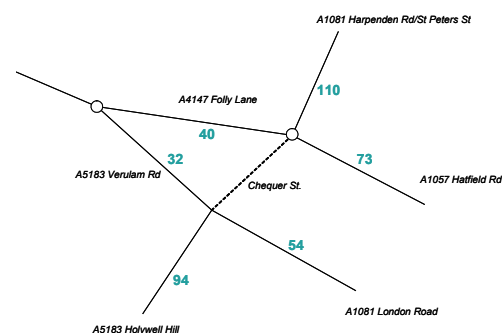
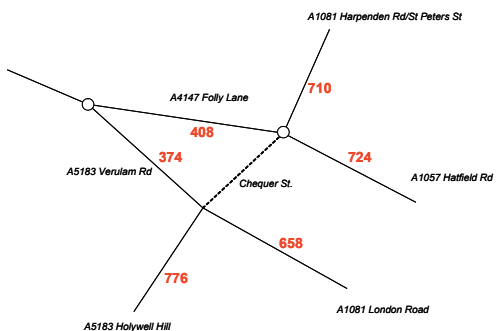
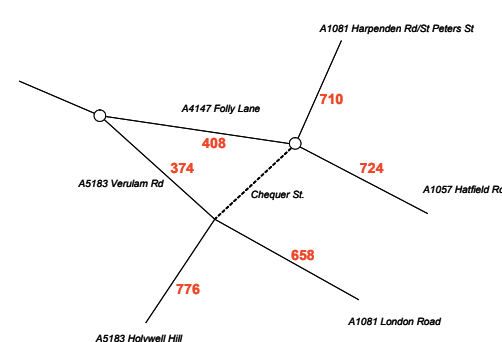


FIGURE 3.4 INBOUND/OUTBOUND LIGHT GOODS VEHICLE FLOWS BY ROUTE 07:00 - 19:00

Inbound:



Outbound:



- 3.15 These analyses show that there are Heavy Goods Vehicle and Light Goods Vehicle flows on all six routes both in and out of the city centre, and that there is a relatively even spread across each of the access routes. For Heavy Goods Vehicles, inbound and outbound flows appear relatively equal on all six routes, however, for Light Goods Vehicles Hatfield Road has significantly higher outbound flows than inbound. Note that the counts did not all take place at the junctions adjacent to Chequer Street, therefore there may be other origins/destinations accessed by a proportion of these vehicles. To identify how these patterns relate to the general traffic levels on these routes, Figure 3.5 and Figure 3.6 contain an indication of Heavy Goods Vehicle and Light Goods Vehicle numbers as a proportion of total traffic.

FIGURE 3.5 INBOUND GOODS VEHICLES AS A PROPORTION OF TOTAL TRAFFIC BY ROUTE 07:00 - 19:00

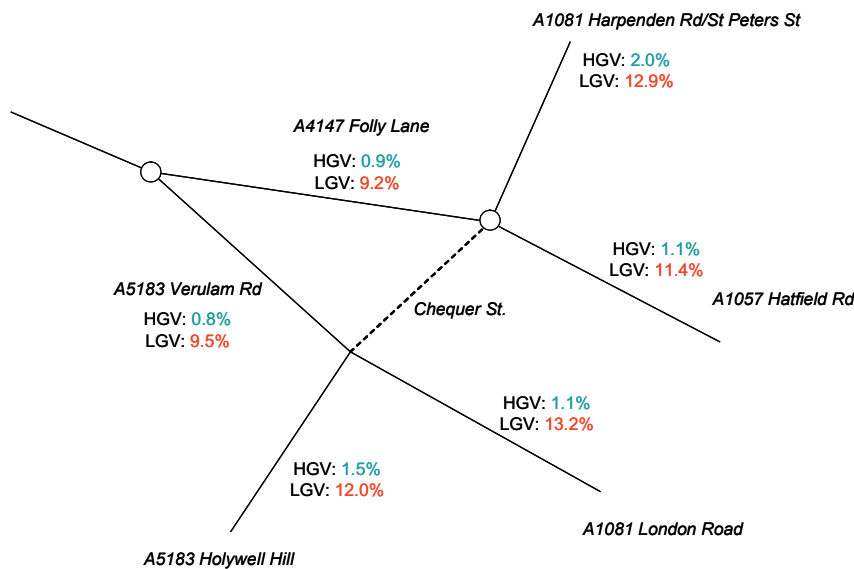
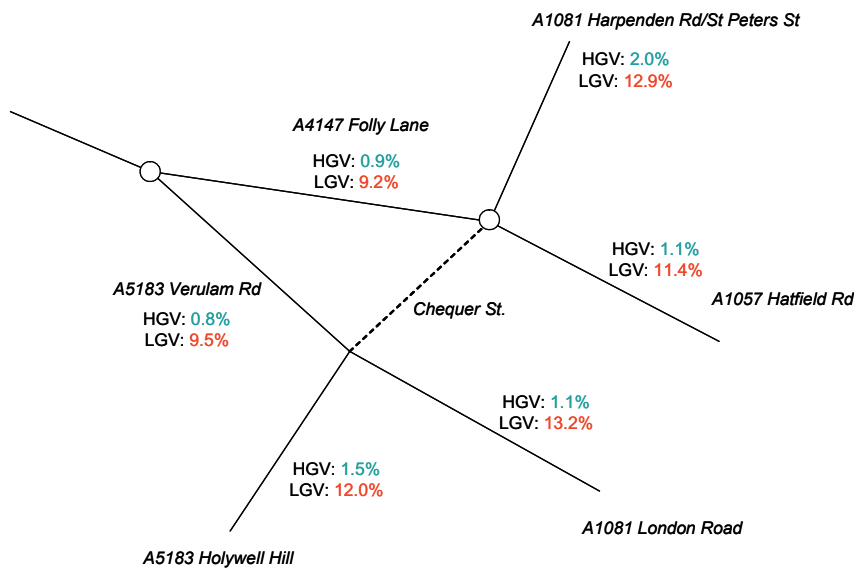


FIGURE 3.6 OUTBOUND GOODS VEHICLES AS A PROPORTION OF TOTAL TRAFFIC BY ROUTE 07:00 - 19:00

- 3.16 As this indicates, Heavy Goods Vehicles account for between 1-2% of the total traffic on these main access routes, with Light Goods Vehicles making up 9-15%. Note that these figures represent weekday traffic, and the proportions will be significantly different at weekends, and may also not take into account deliveries to retail outlets taking place overnight or very early in the morning.
- 3.17 To provide an indication of how goods vehicle activity in the city centre varies across the day, a traffic count of Chequer Street has been broken down on an hourly basis, for each direction of travel. Figure 3.7 shows goods vehicles travelling northbound, with the equivalent numbers for the southbound carriageway in Figure 3.8.

FIGURE 3.7 HOURLY BREAKDOWN OF GOODS VEHICLE TRAFFIC, CHEQUER STREET NORTHBOUND

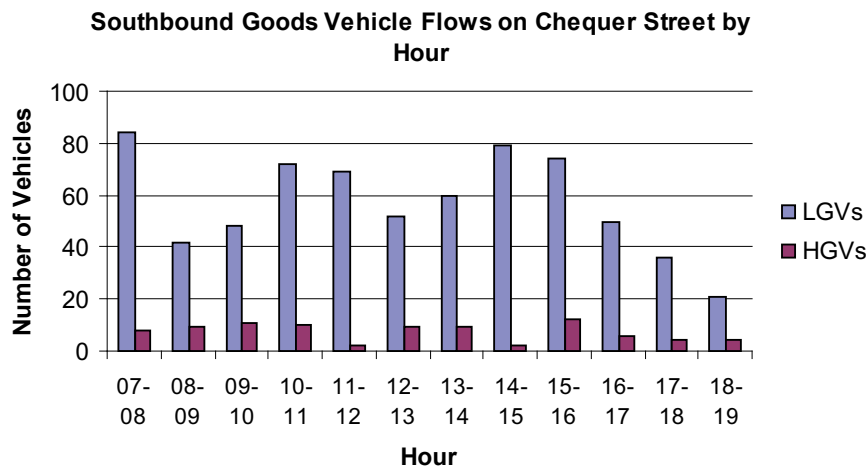
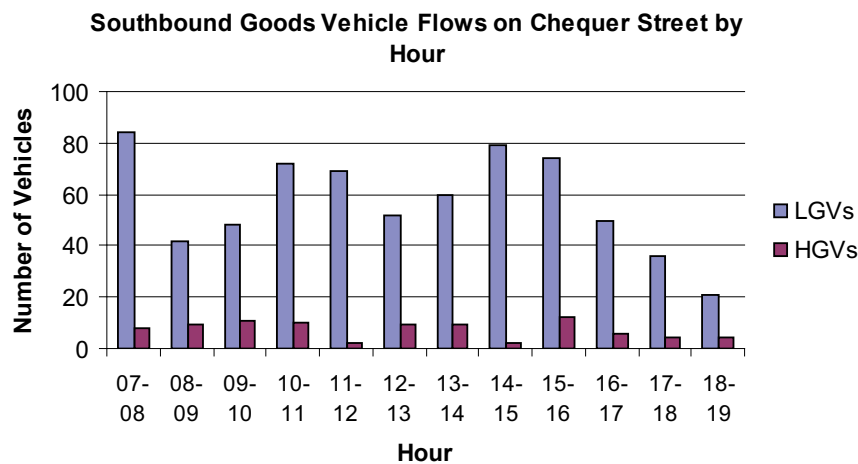


FIGURE 3.8 HOURLY BREAKDOWN OF GOODS VEHICLE TRAFFIC, CHEQUER STREET SOUTHBOUND



- 3.18 In total, vehicle numbers for all vehicle types are similar for both directions, with marginally higher numbers travelling northwards. In terms of patterns of activity for Heavy Goods Vehicles, there are a small number of movements in both directions across the day. For Light Goods Vehicles, there are peaks in the early morning, mid-morning and mid-afternoon (more pronounced in the southbound). The early evening peak for total traffic occurs between 5:00pm and 6:00pm, by which time the Light Goods Vehicle numbers are at approximately half of their maximum hourly level. It should be borne in mind that the nature of the road layout is such that there are a number of options into and out of the city centre that do not require vehicles to pass through Chequer Street, however hourly breakdowns were not available for all. The extrapolation of these trends as representative of St Albans city centre as a whole would not be valid.
- 3.19 There are several other traffic surveys that have been undertaken at various locations that could be analysed for the purposes of understanding the freight activity in the study area, however, what does exist is not sufficient to provide a full picture, neither geographically nor temporally. It is suggested that to achieve this fuller understanding, a bespoke survey should take place, potentially as part of a wider data collection/ research exercise.

Types of Vehicles

- 3.20 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 United Kingdom that particularly in urban areas, Light Goods Vehicles and cars have an important role to play. However, for St Albans specifically, there is no data available to inform us about the mix of vehicles carrying goods to and from premises in the study area. A large-scale traffic survey or survey of businesses in the city would be required to achieve this understanding.
- 3.21 Most notably, local businesses and smaller retailers tend to receive a high proportion of deliveries in smaller vehicles, and given the nature of the retailing offer in St Albans city centre this is likely to be an important factor in determining the vehicle mix. Businesses of this nature may also have a vehicle or fleet of vehicles based at the premises, which they use to collect and pick up provisions or to make deliveries – these tend to be either cars or small vans. These vehicles will require parking or storage whilst not in use, and some degree of this will be on-street.
- 3.22 Conversely, major out of town retail and industrial sites, as well as outlets of major household retailers (with United Kingdom wide distribution networks) are likely to have regular delivery patterns characterised by fully loaded Heavy Goods Vehicles. This is particularly the case where the premises benefit from an off-road goods handling area, such as those serving the Maltings Shopping Centre or the major retailers located in the St Albans retail park.

Origins and Destinations

- 3.23 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 is not robust enough at such a localised level, and is only intended as an indicator of goods moved by Heavy Goods Vehicles. 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.
- 3.24 For the purposes of this study, the indications of traffic levels on the main access routes described above can be seen as a proxy for identifying origins and destinations outside of the study area, and a qualitative description of some of the most notable freight generators in the study area is set out in the following sections.
- 3.25 One of the features of goods activity in urban areas is that multiple premises may receive deliveries/pick-ups from a single source on the same day. The operator making these deliveries will seek to undertake all these deliveries/pick-ups in as few vehicle journeys and as efficient a manner as possible, and therefore these vehicles will be making several movements and stops in the urban area in a single visit. Notable examples of companies undertaking these activities are the Royal Mail and other Express Logistics companies, such as UPS and DHL. Organisations delivering to restaurants and pubs also tend to operate in this manner.

Land Use in the Study Area

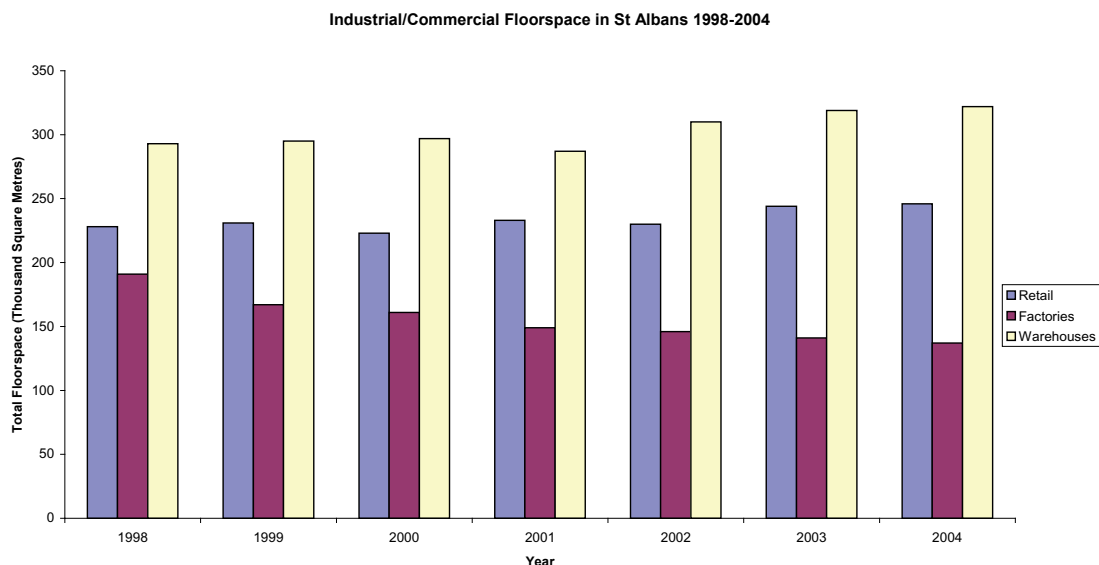
- 3.26 St Albans is an urban area with a substantial mix of land uses, all of which contribute in some degree to the movement of freight to, from and within the study area. The following selection provides an overview of some of the key features of commercial land use within St Albans, and a description of some of the main generators of goods traffic flows.
- 3.27 The Valuation Office Agency 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 St Albans, and how this has changed over the past six years. Table 3.1 summaries the number of properties of each classification in 1998 and 2004, and Figure 3.9 is a graphical representation of the floorspace within each classification during this period. Please note that this data covers the whole of the City of St Albans and District and therefore this is more than the area covered by the Urban Transport Plan.

TABLE 3.1 NUMBER OF COMMERCIAL/INDUSTRIAL PROPERTIES IN ST ALBANS - 1998/2004 (SOURCE: VALUATION OFFICE AGENCY)

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%

- 3.28 Information is also provided on the total floorspace accounted for by this commercial and industrial activity. Figure 3.9 shows the trends in land take of these types of usage over the six year period.

FIGURE 3.9 COMMERCIAL/INDUSTRIAL FLOORSPACE IN ST ALBANS 1998-2004 (SOURCE: VOA)



- 3.29 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.
- 3.30 There are a number of clusters of industrial developments both within and just outside of the study area. These industrial estates will act as important nodes of employment in the city, as well as generating frequent flows of inbound and outbound goods movements. It is worth noting that none of the Industrial Estates marked on Figure 3.10 can be classified as Distribution Parks with large-scale logistics operations serving a regional or national geographical area.

FIGURE 3.10 ST ALBANS INDUSTRIAL ESTATES



City Centre Market

- 3.31 The market takes place in the city centre on Wednesdays, Saturdays and in the run up to Christmas. The market is made up of approximately 170 stalls, selling a range of goods including food and clothing. Given the location of the market, it is used during the rest of the week as a location for loading and unloading of goods for businesses permanently based on these roads. Therefore, there is an impact upon conditions for freight on these days. This is also reflected in the on-street parking regulations on neighbouring streets such as Spencer Street.
- 3.32 Specific rules apply for vehicles of market traders, as quoted below:
- “Vehicles shall be removed from the Market area immediately after unloading is completed but in any case before 9.30 a.m. No vehicle shall enter the market area for reloading before 4.30 p.m. unless specifically authorised by the Markets Manager. Except on occasions specifically authorised by the Council, the Market will close at 5.30 p.m. Traders must clear their site promptly.”*
- 3.33 Traders' vehicles are parked in an area allocated by the District Council, and traders are provided with the appropriate permit upon allocation of a stall.

Waste Collection and Disposal

- 3.34 Household refuse collection is undertaken by MRS (St Albans) Ltd, which provides a weekly collection from all 55,000 plus 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 by MRS 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.
- 3.35 In addition, a household waste disposal site is located just to the north of the study area, off the junction between Marshalswick Lane, Beech Road and St Albans Road.
- 3.36 There is no County Council or District Council provision for the collection of commercial waste and businesses are therefore required to organise their own contractual arrangements to cover this.

Construction Activity

- 3.37 There are a number of small developments taking place in the study area that create freight activity for their duration, either in the form of spoil or demolition material or inbound movements of building materials, equipment and scaffolding. Clearly, although these activities are only temporary, there is the potential to impact upon traffic conditions, particularly in the local vicinity.

Potential Future Activity

- 3.38 In terms of future land use developments that may affect the levels and patterns of freight traffic in St Albans, initial discussions with representatives of the District Council have revealed a number of significant proposals. Within the study area, it is understood that Tesco are currently undertaking negotiations with the District Council to locate a supermarket on the A1081 London Road. The negotiations have been ongoing for some time; therefore it is not clear when or if the development will take place. However, if it does take place then the implications for road traffic in the vicinity will see a notable

change. The supermarket has the potential to generate significant volumes of freight traffic, however, Tesco are known for operating a highly efficient logistics network, therefore the biggest impact is likely to result from additional car traffic as a result of the development.

- 3.39 There are two significant proposals for development to the south of the study area, which nevertheless will have implications for the strategic routes serving the City of St Albans. These are the major residential developments planned for the former Harperbury Hospital site, and a planning application has been refused by the secretary of State following an enquiry for a rail connected freight interchange on the former Radlett Aerodrome site. These are both covered in greater detail in the London Colney Urban Transport Plan. Nevertheless, the main road access to/from the freight interchange is planned to be onto the A414, at the south of the study area. Given the scale of the plans, the Heavy Goods Vehicle traffic using this route to access the M1/M25/A1(M) will increase significantly, and proposed improvements to the junctions with the A1081 and A5183 form part of the application.
- 3.40 Site visits also indicated that there are several smaller locations across the city that are in the process of being re-developed, specifically into higher density residential or expansion of existing business parks/retail areas. In considering the impacts of this development from a freight perspective, there will be a localised issue associated with construction traffic and, once the development is up and running, new freight flows will be generated – particularly if the land use is of a higher density than previously. To limit the potential negative impacts upon the roads and the local environment, the planning process should be used to ensure that construction management and travel plans are put in place that make use of best practice traffic/delivery management techniques.

4. ISSUES AND OPPORTUNITIES

Background

- 4.1 This section of the report provides an overview of the key issues associated with freight as identified during the initial phase of the study. This has been drawn from a combination of site visits by the study team, consultation and a review of existing data and studies. Given the number and scope of issues raised, the findings of this assessment have been split out into a series of categories. A consideration of the opportunities for the Urban Transport Plan to influence these issues is also broken down in this way. The categories are:

- Planning for Freight
- Access & Routing
- Circulation
- Facilities
- Information
- Safety & Security
- Environment

Planning for Freight

Issues

- 4.2 One of the reasons why Freight and Sustainable Distribution has been identified as a 'Priority Issue' in the development of the St Albans Urban Transport Plan is that it was considered to be a specific knowledge gap. The development of this section of the report has underlined that there is a fundamental lack of information on freight activity available to assist transport planners. In addition, what data is available on traffic levels, facilities and restrictions is not easily accessible, with some held by the County Council and the remainder held by the District Council.
- 4.3 As well as a lack of information on actual activity, there appears to be no link between the planning authorities and those businesses that rely on efficient movement of freight for their economic well-being (N.B. This is all businesses and not just retailers). This link is essential in order to identify what are the key freight-related problems they are facing, and for the County and District Councils to consult with as schemes are planned and implemented. This is equally true from the perspective of those organisations regularly delivering goods and services to/from St Albans – for the planning authority to be able to incorporate freight issues into their plans there is a need for a better understanding of how the market operates and what makes them act the way that they do when in St Albans.
- 4.4 During the course of this study it was discovered that there is no specific individual within the District Council who assesses the freight and servicing implications of planning applications received. Applications are assessed on a geographical basis by the appropriate District Manager. Whilst there is no direct evidence that any recent permissions have been granted without due consideration of the accessibility from a freight perspective, the way in which the process is currently undertaken may lead to inconsistencies across the county or an opportunity missed to share experience or best practice.

Opportunities

- 4.5 To enable the planning authority to fully incorporate freight and sustainable distribution issues into future transport plans for the St Albans area, there needs to be much better understanding of levels of activity and key issues. This requires:
- A thorough data collection exercise, regularly updated to identify trends
 - A defined point of contact between the County and District Councils, local businesses and freight operators for identification of problems and development of solutions
- 4.6 In addition, Hertfordshire Highways has published 'Roads in Hertfordshire – A guide for new developments'. There is the potential to build on this work to cover freight and servicing issues. Best practice from outside Hertfordshire can also be drawn upon.

Access & Routing

Issues

- 4.7 The access routes between the study area and the strategic road network have been described in some detail in earlier sections of this report. There are a number of different routes that can be used to access the city from the M25, M1 and A1(M), providing road users with a considerable degree of choice. Therefore, from the point of view of operators for whom St Albans is one node on their distribution network there are very few issues associated with accessing the city from whichever direction they approach.
- 4.8 Nevertheless, as with most of the routes in this area, there are some notable times of day at which congestion occurs on these approaches. Of particular concern is the pre-10:00am peak period, especially as this is the preferred time for many retailers to receive deliveries. Anecdotal evidence suggests that the Park Street Roundabout is a particular pinch point.
- 4.9 Closer to the city centre, the six access routes are all bi-directional single carriageway roads which pass through residential areas, at least in part. On-street car parking is in evidence on all approaches, limiting the width of the carriageway when in use making it difficult for larger vehicles to pass easily and safely. Also, the topography of the city centre at the top of a hill means that some approaches (Holywell Hill) are relatively difficult for fully laden Heavy Goods Vehicles. Mini-roundabouts on the A1057 Hatfield Road can also have this affect.
- 4.10 However, the traffic counts that are available suggest that Heavy Goods Vehicles only represent 1-2% of the vehicle activity on these routes, whereas over 10% are Light Goods Vehicles. It appears that all six routes are relatively equally used, therefore this needs to be borne in mind when developing freight traffic management strategies.
- 4.11 In terms of access to other destinations in the study area, such as the Industrial Estates and out-of-town retailers, this is one of the key problem areas. Unless the vehicle is already travelling on the appropriate access route for the given location, then in most instances the driver would travel into and back out of the city centre to reach their destination. This is also the case when a vehicle is performing multiple 'drops' one of which is St Albans – at some point in their journey they will pass through the city centre. Many of the avoidance routes are equally inappropriate. This clearly has impacts upon the circulation of traffic in the study area, issues which are picked up in the following section.

Opportunities

- 4.12 There is little influence the County and District Councils can have upon the routing and scheduling of freight operations at a strategic level, as this is influenced by the location of the points of supply and demand. Nevertheless, at a more localised level there may be opportunities to manage the traffic towards the appropriate access route and therefore avoid using the congested city centre as a through-route.
- 4.13 Identification of pinch points and optimisation of the road network at these locations is also within the scope of the authority's powers.

Circulation

Issues

- 4.14 It has already been identified that there are particular issues with circulation in the city centre, resulting in busy conditions at most times and high levels of congestion during the morning and evening peaks. Figure 4.1 shows road conditions on a typical weekday morning on St Peter's Street at 8:30 am.

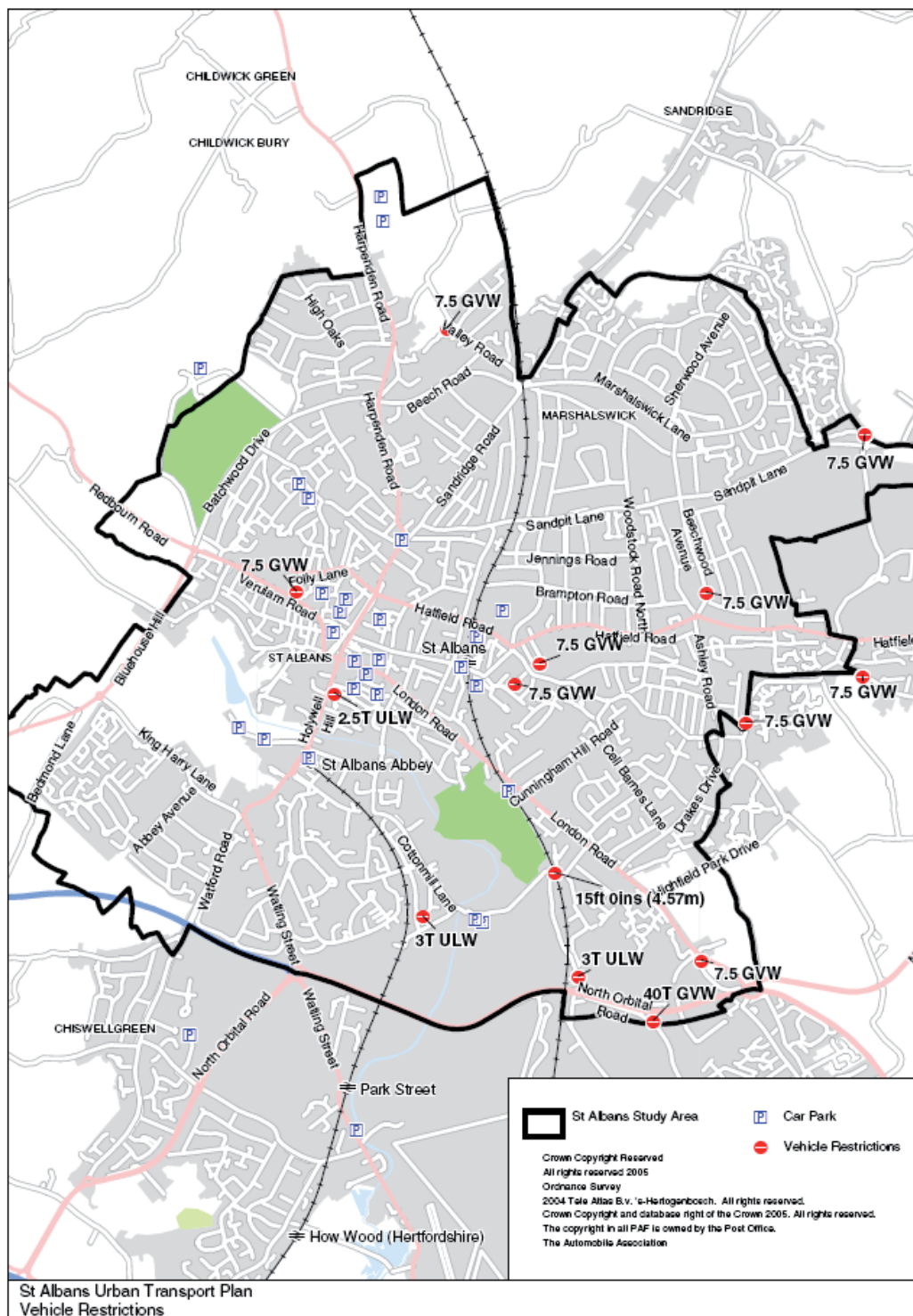
FIGURE 4.1 MORNING PEAK TRAFFIC CONDITIONS: ST PETER'S STREET



- 4.15 It is worth highlighting that one of the key problems from the point of view of freight operators delivering to or collecting from the urban centre is the amount of private car traffic using the roads. If this could be reduced, freight vehicles would spend much less time in the city and operate much more efficiently. This not only has benefits for the operator, but also the businesses in the city who would benefit from more reliable levels of service, and potentially reduced delivery costs. The environmental benefits would also be substantial.

- 4.16 Restrictions on movement and stopping within the study area also affect the circulation of freight vehicles. This is in terms of access restrictions (i.e. height and weight restrictions) and the existence of time restrictions at which vehicles can load or unload at the side of the street.
- 4.17 Access restrictions tend to be put in place to limit large vehicles from using inappropriate roads. Weight and height restrictions for the whole county are posted on the Hertfordshire Highways website. The restrictions in place in the study area are shown in Figure 4.2.

FIGURE 4.2 VEHICLE HEIGHT AND WEIGHT RESTRICTIONS IN ST ALBANS



- 4.18 It is important to note that weight restrictions tend not to be absolute, and access is permitted for loading/unloading purposes. This needs to be borne in mind when dealing with complaints from local residents or businesses of Heavy Goods Vehicles using local roads, as operators of large vehicles do not tend to use these roads unless absolutely necessary. For example, the signage in Catherine Street shown in Figure 4.3 prohibits Heavy Goods Vehicle access to the city centre via this route, except for loading.

FIGURE 4.3 GOODS VEHICLE RESTRICTIONS ON CATHERINE STREET



- 4.19 Particularly within the central areas there are examples of on-street loading/unloading restrictions. Where they are specifically highlighted, they tend to either be restricted at all times or during the morning and afternoon peak periods on all days except for Sundays. An example of on-street loading restrictions on Catherine Street is also shown on Figure 4.3 above.

Opportunities

- 4.20 As mentioned above, the most significant way in which to benefit freight vehicles is to reduce the levels of other traffic on the roads. However, the impacts of any potential congestion reduction measures on the efficiency of freight movements in St Albans should be considered and consulted upon.
- 4.21 Rationalisation of traffic restrictions are within the remit of this study, however further evidence on the current impacts of these restrictions is required.

- 4.22 Specific circulation issues associated with major retail and industrial sites could also be assessed.

Facilities

Issues

- 4.23 Goods vehicle movements with an origin or destination in the study area will be making at least one stop to drop-off or pick-up goods. In some instances, specific facilities will be made available to do this, and in other locations the loading and unloading takes place on the public highway. The previous section outlined the on-street loading restrictions, and the impact that they have on the circulation of traffic in the centre. This section considers the availability of and issues associated with loading facilities.
- 4.24 There are very few defined on-street Loading Bays in the city centre itself. It has not been possible to collate all of the relevant Traffic Regulation Orders during the timescale for this study, therefore this list has been collated during site visits and should not be viewed as definitive:
- Chequer Street – Eastern side, north of the Peahen Junction
 - London Road – Northern side, west of junction with Marlborough Road
 - London Road – Southern side, west of junction with Old London Road
 - Holywell Hill – Eastern side, south of junction with Belmont Hill
- 4.25 Signposting relating to the use of these loading bays was only provided in one example from the above list (Holywell Hill), whereby vehicles were allowed to unload for a period of twenty minutes. More pertinently, the incidence of cars parked in or using these bays was noted to be quite high. Further evidence would be required to ascertain the proportion of loading/unloading activity in St Albans being undertaken by cars, and whether or not the lack of capacity in certain locations as a result of car users is impacting upon the efficiency of other delivery vehicles. Figure 4.4 is an image of the Loading Bay on the northern side of London Road.

FIGURE 4.4 ON-STREET LOADING BAY ON LONDON ROAD



- 4.26 In addition, on St Peter's Street, the area taken up by the market on Wednesdays and Saturdays can be used by vehicles for loading and unloading on other days. This area is signposted as a pedestrian zone except for loading and unloading on Sundays – Tuesdays and Thursdays to Fridays. Many of the retailers in this area are serviced from the rear via Drovers Way, however as a proportion of these buildings are historic in nature, deliveries are made via the front door and therefore from St Peter's Street. Figure 4.5 below is an example of this type of activity.

FIGURE 4.5 RETAIL DELIVERY TO ST PETER'S STREET



- 4.27 Some goods and servicing vehicles require longer-term parking in the city centre. This is particularly relevant for the market traders and for tradesmen undertaking servicing activity within premises. The availability of parking in the study area are highlighted elsewhere in the transport plan, although it is noted in the city centre that the on-street is governed by a voucher scheme and therefore irregular visitors must find alternative options. This can create conflicts with other road users, including pedestrians.
- 4.28 A significant proportion of premises in the study area have access to private or shared goods handling yards. Premises within the industrial estates highlighted above are designed in such a way as provide this service, although it was noted that in both the North Orbital and Ashley Road Industrial Estates, there were constraints for the movement of the largest goods vehicles, not only due to the configuration of the sites, but also the amount of cars parked on the roads within the site. The major retailers based in the St Albans Retail Park all have their own individual goods yards which are tailored to handle the largest of delivery vehicles. However, a similar issue with cars parked on either side of the main distributor road constrains movements of vehicles to and from these yards.
- 4.29 In the central area, both the Maltings and Christopher Place shopping centres have shared goods handling facilities, operated and secured by the respective shopping centre management. As mentioned above, a number of major retailers trading out of St Peter's Street and Spencer Street have dedicated goods-in areas which are accessed via Drovers Way. However, there is also a considerable amount of car parking in this area, including a multi-storey car park, affecting the circulation in this area

(particularly for the larger Heavy Goods Vehicles that typically serve these stores), and leading to conflicts between goods flows and shoppers walking between the car parks and the central shopping area. Figure 4.6 indicates this issue. A specific conflict which in this frequently occurs in this location when blue badge holders park on double yellow lines without considering the size of the vehicles using the streets.

FIGURE 4.6 BHS GOODS ENTRANCE - DROVERS WAY



- 4.30 The unloading of goods from delivery vehicles is not the final leg of the supply chain. In particular, where the delivery vehicle is parked away from the premises to which the goods are being delivered, there is still the need to move the goods between the vehicle and its final destination. This is known in the industry as 'the final 50 yards'. The implications of this from the perspective of urban freight management are two-fold. Firstly, these movements will predominantly be carried out by hand or hand-truck and may make use of the pavement network, or may have to cross roads. This can create issues, particular when the pavements are crowded or upon difficult terrain (e.g. Holywell Hill). Secondly, where the driver is physically making the delivery to a business premises, the vehicle may have to be locked for security purposes. Therefore this vehicle may appear to be parked on the street even though it is legitimately undertaking loading or unloading, and as such receive a penalty charge even though there is no way of avoiding this situation. Again, it would be necessary to consult with businesses and hauliers to understand the extent of this activity in St Albans and whether or not there are particular problem locations; however London Road and Holywell Hill appear to generate this type of issue.

Opportunities

- 4.31 The County and District Councils are in a position to provide additional on-street loading bays where they are required, and to provide guidance on how best their appropriate use should be enforced.

- 4.32 In terms of use of off-street goods yards, the role of the County and District Council is more to provide appropriate information about how best to access these facilities, or to work with businesses to ensure that they are better used.

Information

Issues

- 4.33 The wider issues around signage are picked up elsewhere in the Problems and Opportunities report, however it is important to bear in mind that the issues raised there are equally applicable to freight traffic as to other road users.
- 4.34 With regards to specific freight signage, there are a number of examples within the study area. On the A414, the major east-west corridor, there is lorry signposting directing vehicles to industrial areas avoiding residential areas where appropriate. There is less evidence of this type of information being signposted for the industrial sites within the study area, most notably the Ashley Road estate.
- 4.35 Within the city centre, there are a number of examples of goods vehicle signage providing direction to Drovers Way. This is in evidence from the A5183 Redbourn Road approach and the A5183 Holywell Hill approach. The suggested routes seem reasonable. However, the fact that this is the only destination highlighted with specific freight signage may lead to drivers unfamiliar with the area following this route even though their destination is somewhere other than Drovers Way. This can lead to unnecessary mileage in the city centre and congestion issues as the drivers seek their destination. One such example of this is at the junction between Folly Lane and Verulam Road, where the signage suggests that Drovers Way can be accessed via Folly Lane (see Figure 4.7). However, to deliver to retailers on the London Road, Holywell Hill and the Christopher Place Goods Yard, the most appropriate route would be via Verulam Road.

FIGURE 4.7 LORRY SIGNAGE AT FOLLY LANE/VERULAM ROAD JUNCTION



- 4.36 Also, there is a freight signage on London Road directing vehicles into the Maltings Shopping Centre Goods Yard. These signs are only at the entry point, and at no other location in the city centre, so it relies on the vehicles to reach London Road without further direction. It is not clear as to how suitable this signage is from the perspective of the driver or the businesses within the shopping centre.
- 4.37 As mentioned above, there are a series of loading/unloading restrictions of various types within the study area. The actual signage relating to these needs to be cross-checked against the actual Traffic Regulation Orders (see statement above about collation of this data), however it is evident that the signs with this information are relatively small. Additionally, the geographical coverage of the restrictions are not entirely clear from some of the signs alone.
- 4.38 There are occasions when the road network in the study area is not performing under usual conditions, either due to planned roadworks or unplanned interruptions (i.e. congestion or accidents). Freight operations are generally designed to take the most efficient (quickest/shortest) route between pick-up and delivery points and therefore, this optimum route may change if traffic conditions change. Information on traffic conditions is available from the Hertfordshire Highways website, however this relies on operators to access this data. A more targeted approach may be a more effective method of communication and enable vehicles to incorporate this information into their routing and scheduling procedures.

Opportunities

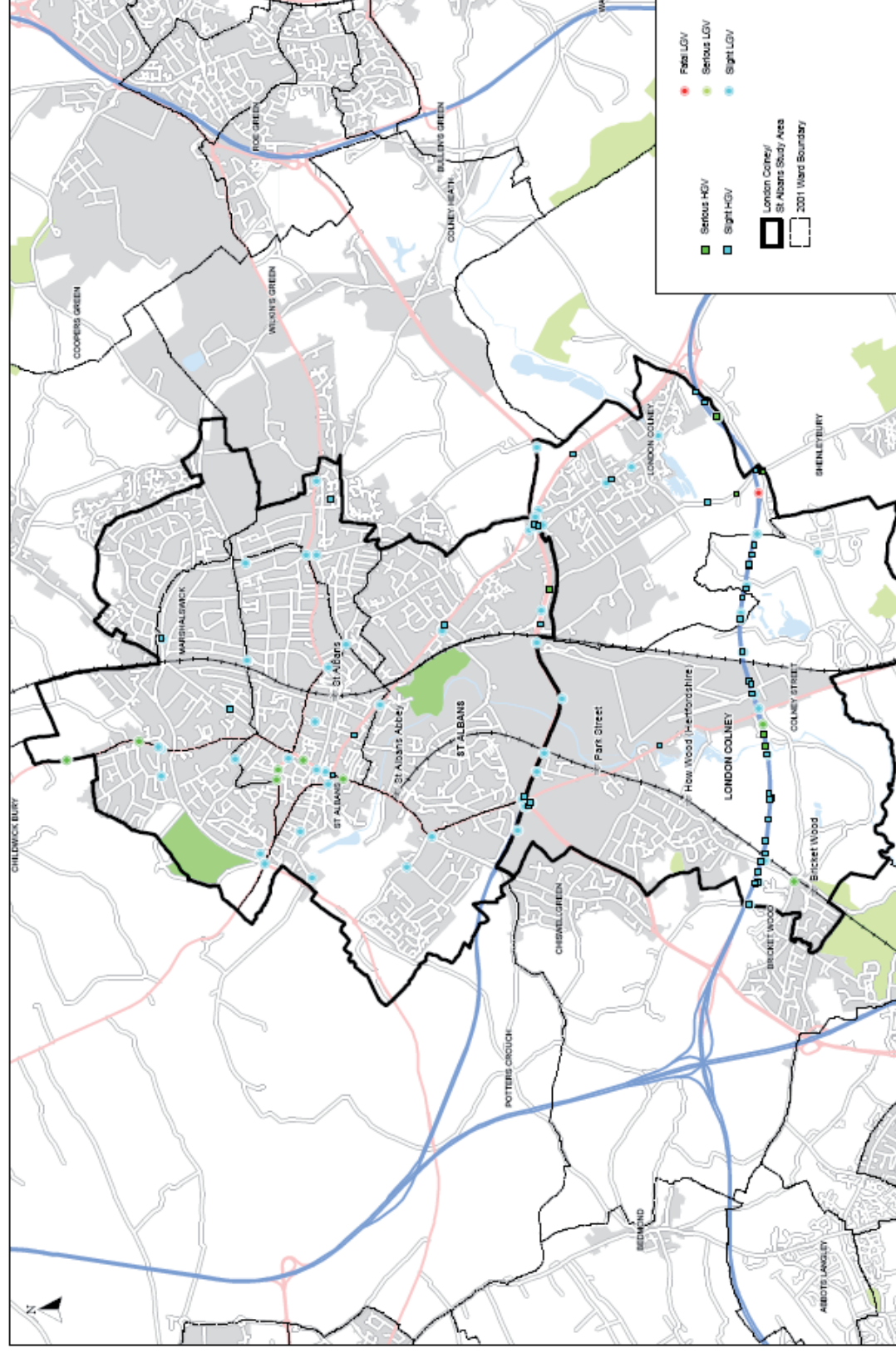
- 4.39 There are definite opportunities for Hertfordshire Highways to influence the coverage and effectiveness of the freight signage in the study area. Any signage strategy should be linked to any routing and circulation interventions.
- 4.40 Specific signage associated with the major retail, commercial and industrial sites should be considered.
- 4.41 Road freight operators are making increasing use of information systems (Telematics) to influence their journey planning, and there may be opportunities to use these tools as a means of communicating traffic information pro-actively.

Safety & Security

Issues

- 4.42 Figure 4.8 below shows the location and severity of road accidents involving goods vehicles in the study area between 2003 and 2006. This is derived from accident data held by Hertfordshire Highways.

FIGURE 4.8 ROAD ACCIDENTS IN ST ALBANS INVOLVING GOODS VEHICLES, 2003-2006



- 4.43 This reveals that although there have been accidents recorded across the study area, there are several 'hotspots' which have experienced a number of incidents over recent years. These are as follows:
- The junction between A414 and the A1081 (London Colney roundabout)
 - The junction between A414 and the A5183 (Park Street roundabout)
 - St Peters Street/Chequer Street between the junction with London Road/High Street and the junction with Catherine Street/Hatfield Road
- 4.44 In particular, a significant proportion of the Heavy Goods Vehicle related incidents take place in the city centre.
- 4.45 From the point of view of the businesses receiving and making deliveries, the security of the vehicles and goods whilst undertaking deliveries are a particular concern. There is no evidence that St Albans is a specific problem area, however, in general opportunistic criminality have led to an increase in awareness over security.
- 4.46 Also, from the point of view of health and safety, loading and unloading should be undertaken in a safe and controlled manner, and the road and loading facility conditions should not preclude this.

Opportunities

- 4.47 Accident hotspots can be identified and solutions put in place, with specific freight-related concerns built into the review process. Junction analysis along the A414 can be undertaken in co-ordination with the Highways Agency. Issues associated with accidents in the city centre may have been improved as a result of recent changes to the road network; however any further changes should specifically take account of conflicts between freight traffic and other road users (including pedestrians). The accident records can be re-visited to identify the actual cause of these accidents specifically.
- 4.48 If identified as a particular problem, the County and District Councils can put measures in place that improve the security of vehicles when delivering in the area.

Environment

Issues

- 4.49 In terms of air quality, noise and disturbance issues in the study area, road freight traffic are a contributor to the overall issues. Although recent trends in manufacturing have led to much quieter vehicles with much lower emissions, heavy goods vehicles have a greater environmental impact per vehicle than private cars or vans.
- 4.50 One specific concern is the timing of deliveries to retailers in the central area. To avoid the peak traffic conditions, there is an increased trend towards earlier and later deliveries, particularly by larger vehicles. As mentioned elsewhere, all of the main access routes pass through residential areas to some degree, and this has the potential to cause considerable disturbance. Greater details on the proportion and location of businesses receiving deliveries at these times could be provided by a business survey or targeted traffic analysis.

Opportunities

- 4.51 As the Transport Plan is developed, freight traffic should form an integral part of any environmental strategies that are developed.