

Transport Statement
on
The Spelthorne Development Plan
Strategy & Policies DPD
&
Allocations DPD
January 2007

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1. Introduction

- 1.1. The purpose of this Transport Statement is to provide a high level assessment of the proposals and policies within the emerging Developing Plan Documents (DPDs) being prepared by the Council as part of its Local Development Framework. The Statement will be used to assist in demonstrating the soundness of the DPDs. These DPDs are the Core Strategy and Policies DPD and the Allocations DPD.
- 1.2. It will look at whether the policies and proposals of the emerging DPDs will lead to an unacceptable adverse impact on the Trunk Road network in the Borough and whether there are likely to be any other unacceptable highway effects.
- 1.3. A brief for this statement was agreed by the Highways Agency (HA) and Surrey County Council (SCC) prior to its preparation. A copy of the agreed brief is set out at Appendix A.
- 1.4. In agreeing the brief both the HA and SCC advised that, in accordance with draft government guidance, a formal Transport Assessment was not required but rather a simplified form of evaluation in the form of a Transport Statement was appropriate.
- 1.5. It should be noted that the high level assessment of proposal sites set out in Appendix D of this document can not be taken as a substitute for a more detailed assessment of specific planning applications which come forward in due course.

2. National & Regional Transport Policy Content

- 2.1. National Planning policy on Transport is set out in Planning Policy Guidance Note No13 (PPG13). It identifies that:
 - a) Land use planning has a key role in delivering the Government's integrated transport strategy and, by shaping appropriately the pattern of future development, the need to travel can be reduced (para 3).
 - b) The objectives of PPG13 are: (para 4).
 - i. promote sustainable transport choice.
 - ii. promote accessibility to jobs, shopping, leisure and services by public transport, walking and cycling.
 - iii. reduce the need to travel, especially by car.
 - c) Regard should be had to the Regional Transport Strategy (RTS), which will look 15-20 years ahead (para 7).
 - d) Planning policies should first seek to use previously developed land and buildings within urban areas (para 14).
- 2.2. Draft Circular X/2006 'Planning and the Strategic Road Network' (August 2006) is to replace Circular 4/2001/ The draft explains:
 - a) The limited capacity of the strategic road network and how it should be managed to ensure its continued safety and efficiency.
 - b) It identifies the remit of the HA to enable the network to support the economic viability and sustainable growth of regions (para 4).
 - c) It explains that any strategic road capacity constraint on economic development should be identified at the Regional Spatial Strategy level and,

where appropriate, measures to overcome such constraints promoted through the Regional Transport Strategy (para 8).

- d) In assessing the interaction of DPDs with the strategic road network, attention should be paid to the advice set out in Chapter 5 'Guidance on Transport Assessment' (para 21).
- e) Where the HA consider a proposal in a DPD is not deliverable it will provide a full and reasoned case to the planning authority (para 22).

2.3. In addition to a draft Circular, draft 'Guidance on Transport Assessments' – August 2006 has also been published. It sets out the latest guidance in preparing Transport Assessments (TA) and Transport Statements. It deals with both proposals at the development plan stage and at the planning application stage. The following guidance from the document is relevant to this Transport Statement:

- a) In some cases the transportation issues arising from proposals may not require a full TA to adequately inform the process and identify suitable mitigation. In those instances it is common practice to produce a simplified report in the form of a Transport Statement (para 1.3).
- b) LPA may seek to use existing regional, sub-regional, or local transport models where available and/or undertake their own separate assessments of transport impacts (para 5.8).
- c) There is no requirement to follow any particular process. It is for authorities to decide whether transport modelling is most appropriate and useful in their area and, if so, what level of detail, having regard to the requirement for a robust and credible evidence base (para 5.9).
- d) It is important to make full use of existing information where available (para 5.10).
- e) It is important that cumulative impacts are considered at the LDF stage (para 5.12).
- f) When assessing individual sites trip generation estimates should, where possible, be derived using similar methodologies and assumptions applied at the planning application stage (para 5.15).
- g) Reports should provide an indication of the operational capabilities and deficiencies of the transport system (para 5.16).

2.4. The Regional Transport Plan was agreed in June 2004 and replaces the Transport chapter of the South East Plan (RPG 9). Much of the document deals with 'high level' issues which, where appropriate, are already reflected at the local level in Surrey County Council's Local Transport Plan.

2.5. The Regional Transport Plan does identify two proposals affecting Spelthorne:

- a) Widening of the M25 between J12 and J15 – which has now been completed.
- b) The Airtrack scheme.

3. Local Policy Context

a) Surrey Local Transport Plan

- 3.1. The Surrey Local Transport Plan (LTP2 2006/07 – 2010/11) was submitted to the Government in 2006. It has five objectives:
- a) Tackling congestion to limit delays.
 - b) Increasing accessibility to key services and facilities.
 - c) Improving road safety and security.
 - d) Enhancing the environment and quality of life
 - e) Improving management and maintenance of the transport network.
- 3.2. A series of targets are set out under each objective (table 6.1). There are two targets specific to Spelthorne and relate to:
- a) reducing concentration of NO₂ so as to improve air quality (target 4(a)).
 - b) increasing the percentage of Euro III compliant buses (target 4 (c)).

b) Spelthorne Community Plan 2005-2015.

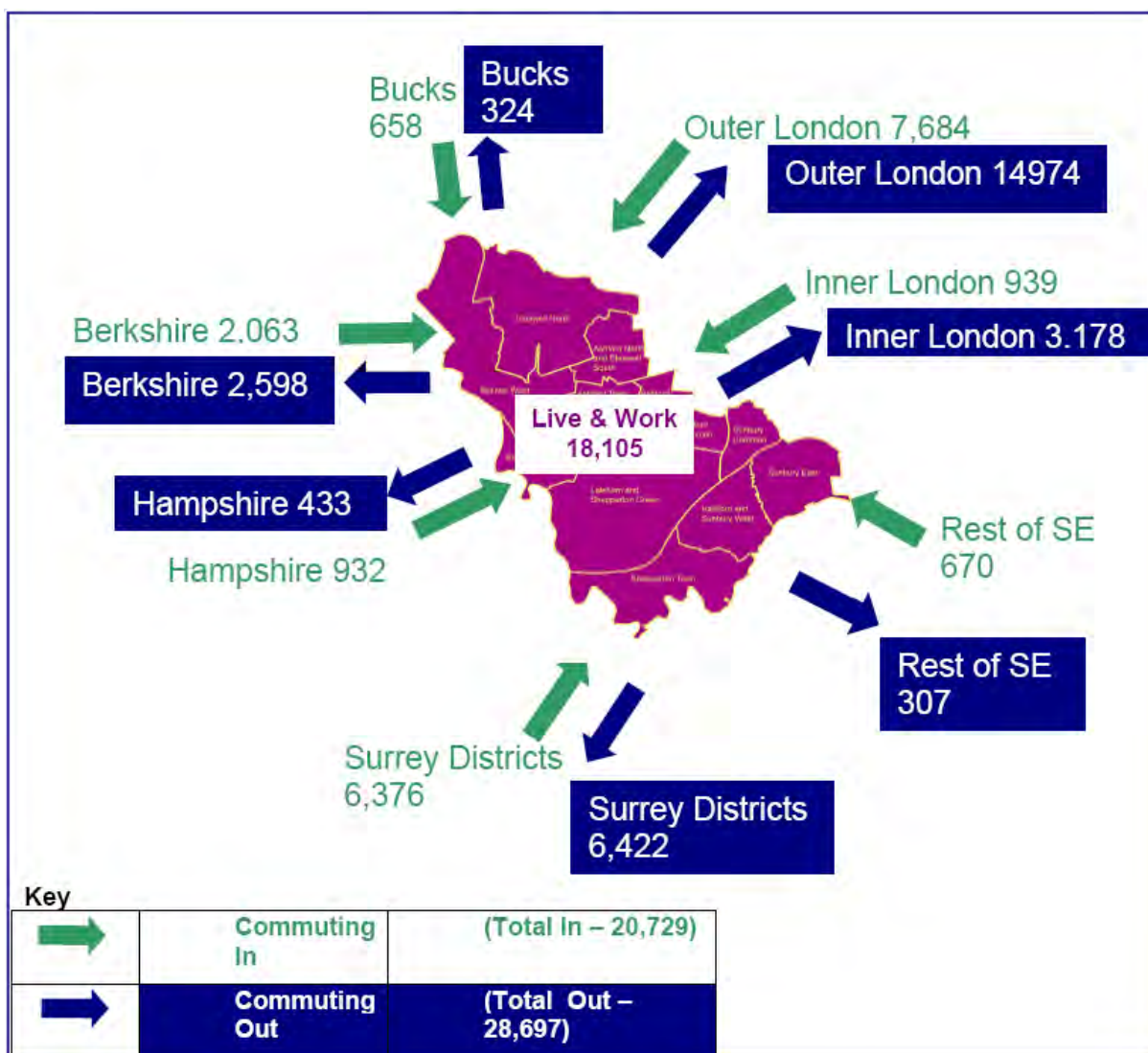
- 3.3. The Spelthorne Community Plan was adopted in 2005 by the Borough Council and is the product of joint work through the Local Spelthorne Partnership.
- 3.4. The Plan has six themes one of which is 'Getting Around Spelthorne'. Under this theme the plan identifies 10 key priorities which various agencies will be involved in implementing. Whilst Surrey County Council is the primary lead agency on this theme the document is important in identifying the role of others and thereby seeking to achieve more than individual bodies could secure when acting alone.
- 3.5. The specific priorities under this theme are as follows:
- a) Develop school travel plans.
 - b) Continue the safe routes to school programme.
 - c) Increase bus passenger satisfaction.
 - d) Increase number of bus passenger journeys.
 - e) Increase number of cycling trips.
 - f) Reduce number of deaths and serious injuries on the road.
 - g) Reduce number of children killed and seriously injured on the roads.
 - h) Reduce traffic.
 - i) Increase patronage of hospital hopper bus between Ashford and St Peter's Hospitals.
 - j) Increase 'no-car' visitors to Ashford hospital.
- 3.6. Most of these issues are also reflected in the LTP and as appropriate complemented by policies in the emerging LDF. The Community Plan and the partnership will therefore be assisting in implementing the policies in the LTP and LDF as they contribute to reducing car based transport.

4. Transport Context of Spelthorne

- 4.1. Spelthorne is a relatively small Borough of some 5,116 ha (6 miles long and up to 2.5 miles wide). It is the only Surrey District north of the River Thames and has a boundary with both Greater London and Berkshire.
- 4.2. Some 65% of the Borough is designated as Green Belt and the urban area occupies the remaining 35% much of which lies across the middle of the Borough.
- 4.3. A fuller general description of the Borough is set out in Section 2 of the Preferred Options draft of the Council's Strategy and Policies DPD.
- 4.4. Traffic movements across the Borough are constrained by:
 - a) The Borough's long southern boundary with the River Thames and existence of only four bridging points into the Borough at Staines Bridge, M3 Bridge at Chertsey, Chertsey Bridge and Walton Bridge.
 - b) The large area occupied by Heathrow Airport on its northern boundary.
- 4.5. Five trunk roads pass through the Borough:
 - a) M25 through the north west corner with junctions in or immediately adjoining the Borough at Wraysbury (Junction 13) and Poyle (Junction 14).
 - b) M3 across the south of the Borough with a junction at Sunbury Cross (Junction 1).
 - c) A316 which continues from Sunbury Cross into London and can only be accessed in Spelthorne at Sunbury Cross.
 - d) A30 which cuts across the northern part of the Borough from Junction 13 of the M25, via the Crooked Billet Roundabout at Staines, Bulldog Junction at Ashford and to the Clockhouse Lane Roundabout at Bedfont. There are a limited number of other roads with access to it (10 in total).
 - e) A3113 from M25 junction 14 to the Stanwell Moor Road (A3044) – Airport Way
- 4.6. The maps at Appendices B, C and D (supplied by the Highways Agency) show traffic volumes of the M3, A316 and A30 are at less critical levels than other sections of the wider trunk road network with some spare capacity at present. Flows on the M25 through Spelthorne are typically around 200,000 movements a day. Flows on the dual carriageway section of the A30 however are only around 26,000 movements a day. Projected traffic flows in 2026 show the M3, A316 and A30 remain at less than 85% capacity. In 2026 the section of the M25 and A3113 will be operating between 100% and 120% capacity.
- 4.7. Surrey has relatively high levels of usage on its road and there are particular congestion issues in many areas in North Surrey at the peak time.
- 4.8. There are significant volumes of traffic passing through the Borough. In part this is due to:
 - a) Heathrow Airport which employs nearly 70,000 on airport.
 - b) The pattern of some people choosing to live further out from London than their place of work, resulting in an inward drift of traffic in the am peak and outward drift in the PM peak.

- 4.9. There are also a fairly diverse pattern of movements alongside these two particular movement patterns.
- 4.10. In this context the movements of people travelling to work from and to Spelthorne are quite limited with a high number of movements either only within the borough or just across the Borough boundary into adjoining Boroughs. The following diagram (Figure 1) shows the 2001 Census travel to work patterns.

Figure 1 Commuting 'In' and 'Out' of Spelthorne



- 4.11. Of the 14,914 commuting to Outer London, most is to the immediately adjoining Boroughs with 5,674 going to Hillingdon (of which some 4,500 is to Heathrow) 5,561 to Hounslow and 1,732 to Richmond. Of the 2,598 going to Berkshire, 1,449 is to Slough with a significant part to the Poyle Trading Estate just west of Junction 14 of the M25. Of the 6,422 to Surrey, 3,777 go to Runnymede and 1,530 to Elmbridge.
- 4.12. The following table provides a more detailed breakdown of the figures in Figure 1. It shows that 39% of local residents live and work in the Borough. A further 42% work in the immediately adjoining Borough to Spelthorne of which 9.6% of the total employed working at Heathrow. Only 19% of people travel to work beyond the

immediately adjoining Borough and correspondingly 81% work in Spelthorne or the adjoining Borough. Of this 19% a third go to Inner London – with a significant proportion of these commuting by train. Some 7% of all journeys to work by Spelthorne residents are by train.

- 4.13. Some 20,729 people travel to the Borough to work with a third of this number coming from Surrey and nearly two-fifths from outer London.

Table 1 Spelthorne Travel to Work Patterns – out movements (2001 Census)

Origin	Total Spelthorne Employed	% of Total
Live and Work in Spelthorne	18,105	39%
Outer London		
Hillingdon	1174	2.5%
Hounslow	5561	11.8%
Heathrow	4500	9.6%
Richmond	1732	
Rest of Outer London	2007	
Inner London	3178	
Surrey		
Runnymede	3777	8.1%
Elmbridge	1530	3.3%
Rest of Surrey	1115	2.4%
Berks		
Slough	1449	3.1%
Rest of Berks	1149	2.4%
Hants	433	0.1%
Rest of South East	307	0.06%
Subtotal	28,697	61%
Total	46,802	

- 4.14. The Borough has several rail routes crossing it:
- a) Staines – Waterloo via Richmond or Hounslow
 - b) Staines – Reading via Virginia Water
 - c) Staines – Weybridge
 - d) Staines – Windsor
 - e) Shepperton – Waterloo via Kingston.
- 4.15. There are stations at Staines, Ashford, Shepperton, Upper Halliford, Sunbury and Kempton Park. Rail lines and the location of stations are shown in the Core Strategy Diagram of the Spelthorne Development Plan Strategy and Policies DPD and Appendix F Map 2 of this document.
- 4.16. There is a relatively extensive network of bus routes in comparison to most Surrey Districts. These are shown Map 1 of the Public Transport Accessibility Statement at Appendix F. Staines has a purpose built bus station which is a focal point for a number of services.

5. Development Context and Proposals

- 5.1. The Development Plan Documents in preparation by the Council look ahead generally to the timescale of the emerging South East Plan to 2026. PPS3 'Housing' requires authorities to identify at least 15 years housing supply from the date of adoption and therefore housing requirements for the period 2008 – 2023 have been assessed in this statement. Consideration has also been given of the impact of house building to 2026. The underlying strategy of the two DPDs is to focus new development on brownfield sites in the existing urban areas. The existing Local Plan Green Belt boundary will remain unchanged.

a) Population and Housing Change

- 5.2. The Borough has a requirement from the emerging South East Plan to build 151 dwellings a year from 2006 to 2026 (total 3020). This will overtake the Surrey Structure Plan requirement for the period 2001 – 2016, an average of 172 dwellings per annum. A greater proportion of the Structure Plan requirement was built in the period 2001 – 2006.
- 5.3. The existing housing stock is approximately 40,000 and the additional provision to 2023 amounts to 5.6%. There is a need for smaller dwellings and both current and proposed policies require some 80% of new dwellings to be one and two bedroom (on a one third / two third split). Of these 200 will need to be extra care sheltered accommodation in the period to 2016, and 400 in total in the period to 2026. The size of the dwellings limits the number of people who will occupy the additional stock and the likely vehicle trip rates.
- 5.4. Population projections have been undertaken (2004) to assess the impact of future house building. The projections were based on Structure Plan housing requirement to 2016 and, for modelling purposes only, assumed higher levels of building in the period from 2016 – 2026. Details of this work is provided in paragraphs 6.1 – 6.7 of the Council's LDF background document, "Population and Social Characteristics of Spelthorne". The population modelling assumed the additional stocks reflected the average size of the existing dwellings, however, given the policy requirement of smaller dwellings in future house building this in effect inflates the population figures and, combined with the modelled 2016 – 2026 house building figures which are some 30% higher than required in the South East Plan provides very much a worst case scenario. In effect this projects a greater growth in population, albeit slight, than is likely to occur in the period to 2026.
- 5.5. The following table includes the 2004 based population projections to 2026. In the period 2006-2026 it shows a fall in the 0-14 age group, the working age population staying broadly static and a continued growth in the 65+ age group with the most significant growth in relative terms in the 85+ age group.

Table 2 Spelthorne's Population Forecast

	1981 ¹	1991 ¹	2001 ¹	2006 ²	2011 ²	2016 ²	2021	2026
0-- 14	17,386	14,657	16,099	16,061	15,386	14,885	14,834	15,322
15-- 24	14,564	12,153	9,184	10,415	11,481	11,216	10,981	10,761
25-- 44	25,550	27,475	27,955	26,968	24,778	23,404	24,278	25,707
45-- 64	23,199	22,177	22,095	22,811	24,534	25,373	25,486	24,247
65-- 74	7,279	7,847	8,229	7,972	8,054	8,554	8,468	8,896
75-- 84	3,270	4,511	5,155	5,778	5,896	5,887	6,076	6,562
85 +	784	1,167	1,673	2,130	2,664	3,086	3,428	3,684
65+	11,333	13,525	15,057	15,880	16,614	17,527	17,792	19,142
Total Population	92,032	89,987	90,390	92,135	92,793	92,405	93,551	95,179

¹ 1981, 1991, 2001 Census Figures

² 2006, 2011, 2016 – Surrey County Council Interim 2001 (dwelling constrained) Population Forecast

- 5.6. These population forecast figures are significant in transport terms in that they suggest:
- a) Less children of school age to be transported to school by car.
 - b) A broadly static population of working age – that is those with the greatest propensity to be travelling at peak times.
 - c) Increase in the 85+ age group where the proportion giving up driving will be greatest.

b) Traffic impact of new house building

- 5.7. The following sub-section assesses the transport impact of proposed additional new house building. The draft South East Plan requirement for Spelthorne is 151 dwellings per annum between 2006 and 2026. For the 15 years from the adoption of the LDF in 2008 to 2023 the total requirement is 2265 dwellings.
- 5.8. In April 2005 the Council published 'The Spelthorne Housing Capacity Study'. This particular study looked at housing capacity to 2018. It did not identify all the housing land needed to meet the South East Plan requirement to 2026. An updated study will accompany the Council's submission LDF documents. However, the 2005 study is valuable in identifying the sources of housing supply that are likely to come forward in the Borough which, it is considered, will remain much the same in terms of type beyond 2018 and has been corroborated by comparison with findings from the latest capacity work.
- 5.9. The Spelthorne Housing Capacity Study – April 2005 (Table 8 page 22) shows the sources of supply of land to provide these dwellings as:
- a) former non-residential 60.4% of the total
 - b) residential redevelopment or infill 39.6% of the total
- 5.10. The Council therefore expects that the 2265 dwellings required in the period 2008-2023 to comprise

- a) non-residential sites (60.4%) – 1368 which will include the 624 dwellings on proposal sites assessed in Appendix D.
 - b) residential sites (39.6%) - 897
- 5.11. Of the non-residential sites, 624 dwellings will come from proposal sites. The transport impact of these is assessed in the Site Proposals Transport Statement at Appendix E. Non-residential windfall sites (those not specifically identified) are assumed to have the same traffic characteristics as the Proposal sites.
- 5.12. Residential infill and redevelopment sites amount to 897 dwellings. They result in additional development over and above the existing and therefore additional traffic. Their trip rate is taken to be 0.39 movements per dwelling in the am peak. This figure is based on survey findings set out in Appendix E of this document. The same figure is used in assessing the proposal sites.
- 5.13. The following table summarises the traffic impact of providing 2265 dwellings as described above. It shows a fall in traffic movements of 171 or to a level which is approximately 84% of existing flows across all the housing sites.

Table 3 Traffic Impact of House Building 2008 – 2023 in am peak

Source of Supply		Existing Traffic	Proposed Traffic
SE Plan Requirement	2256 (151 x 15 yrs)	-	-
Source of housing Sites			
Non residential (60.4%)	1368	-	-
Proposal Sites	624	419	226
Windfall Sites	7444	617	290
Residential infill/development	897	0	349
Total		1036	865
Net Reduction			171

- 5.14. A margin of tolerance of some 16% would be required in the figures/calculations to secure a break-even figure. The margin of difference and the extent of survey work therefore allows a predicted fall in traffic to be made with a relatively high degree of confidence.
- 5.15. If the housing provision is extended beyond the 15 years to the end of the South East Plan period of 2026 up to an additional 453 dwellings would be built to meet requirements. If these were on non-residential/residential land in the same proportions as set out in paragraph 5.9 above, and the same trip rates were applied, a net reduction of traffic movements of around 16% as shown in Table 3 above would still apply.
- 5.16. The significance of the drop can be put in context by comparing the figures to predicted traffic flows from the existing housing stock.
- 5.17. The existing housing stock is characterised by a high proportion of family housing with some 50% being 3 bedroom dwellings. This contrasts with the proposed mix of small dwellings in future development. If an average of trip rates found at Wraysbury

Gardens (0.45) and Harrison Way (0.59) are used to assess existing residential development (source Table 2 of Appendix E) an average trip rate of 0.52 applies. Applied to the existing housing stock of 40,000 dwellings this produces 20,800 movements.

- 5.18. Future housing traffic movements of 865 represent only 4.1% of this total and the net difference of 231 movements represents only about 1.0%.
- 5.19. Whilst the proposed net additional housing leads to a fall in vehicle movement it is small when compared to total movements from existing dwellings in the Borough in the am peak.

c) Non-residential Development

- 5.20. As at April 2005 the commercial floor space in the Borough comprised:

Offices	201,000m ²
Industry	182,000m ²
Warehousing	243,000m ²
Retail	172,000m ²
Other	34,000m ²
Total	832,000m ²

- 5.21. Unemployment in Spelthorne has traditionally been low and is currently 1.4% (October 2006). Scope for the figure to be reduced is statistically limited and therefore so is the consequent potential impact on employment related travel patterns.
- 5.22. There are existing commitments for employment floorspace growth within and immediately adjoining the Borough although they are counter balanced in part by losses to residential use of about 1000 jobs.
 - a) Terminal 5 Heathrow – we assess 1,100 people from Spelthorne from the total 16,000 jobs to be created.
 - b) Shepperton Studios – additional 1,000 jobs.
 - c) Other planning permissions – additional 2,200 jobs – (mainly Staines, including Majestic House scheme)
- 5.23. A committed employment net growth of 3,300 exceeds the growth of the economically active population of 2,600 by 700. This may assist in reducing the current total net out commuting of 7,968. (Source data 'Economy and Employment Land Study – May 2006'). In turn this may reduce journey lengths and traffic levels.
- 5.24. The only non-residential proposals in the emerging LDF are for the Elmsleigh Centre Extension, Airtrack and open space near Edward Way. The Transport Statement of Site Specific Proposals at Appendix D explains the latter two proposals have not been assessed for their highway impact for reasons, respectively, of lack of detail by the promoters and no public vehicular access being provided.
- 5.25. The Site Specific Proposal Transport Statement assesses the Elmsleigh Centre impact on the am peak at paragraphs 3.43 – 3.51. It shows a gross traffic generation of 109 movements of which 50 would be on the wider network anyway by virtue of the retail development otherwise being provided elsewhere. Of the balance of a net 59

movements the 24 relating to the residential element have already been considered above in the assessment of residential development generally. There is a net balance of 35 increased movements from the Elmsleigh Centre extensions other non-residential elements.

- 5.26. The Core Strategy and Policies DPD proposes to identify some existing major and sustainable employment locations for protection for continued employment use. These are:
- a) Staines Town Centre
 - b) Ashford Town Centre
 - c) Shepperton Town Centre
 - d) Sunbury Town Centre
 - e) Windmill Road, Sunbury
 - f) Hanworth Road, Sunbury
 - g) Ashford Road, Littleton Road and Spelthorne Lane, Ashford
 - h) London Road, Staines
 - i) Bedfont Road, Long Lane Area, Stanwell
 - j) BP, Chertsey Road, Sunbury
 - k) Shepperton Studios
- 5.27. The only location at which employment growth is expected to occur over and above existing commitments is Staines Town Centre. No specific sites have been identified in the emerging Development Plan Documents other than the Elmsleigh Centre but a continuation in the process of renewal of the existing stock of employment floorspace, particularly offices is expected.
- 5.28. Whilst there is no specific increase in floorspace that can be identified, redevelopment provides the opportunity to apply car restraint policies where they currently do not exist and the scope to manage the process of renewal without adverse impact on the highway network. As they arise schemes will need to be carefully assessed and the cumulative impact in terms of traffic movement and parking provision considered. Within Staines there are localities with particular air quality problems which are transport related. These provide additional reasons for the Council to restrict vehicle movements.
- 5.29. Staines is the only location where increased retail floorspace provision is planned. Policies in other centres are to simply maintain their existing retail and local service role.
- 5.30. Some 22,500m² of additional retail floorspace provision is planned in the Elmsleigh Centre extension in Staines. There is scope for a further 12,500m² of retail floorspace in the longer term beyond 2011 but the assessment of this amount of space is less certain (source Spelthorne Retail Study 2004). No specific proposal is made for this further requirement but scope for additional floorspace by redevelopment/intensification is possible in the area of the Two Rivers retail scheme.
- 5.31. The town centre shops are generally not open at all in the am peak period. The Council's Annual Report on Staines Town Centre Pedestrian Survey (May 2006) shows the greatest number of shoppers in the town to be on Saturdays. During the week the greatest shopper activity, as indicated by pedestrian movement, is from 9.40 – 4.30 with the higher levels between 10.30 and 11.30. Generally shopper activity does not impact on peak hour traffic movements.

- 5.32. Planned retail provision in Staines is based on the findings of the Spelthorne Retail Study – August 2004. The provision is to meet the needs of the town's catchment population. If the need were not met people would use other town centres thereby increasing the proportion of people, including those in the Borough, travelling to shop outside the Borough. Currently Staines takes some 39% of comparison goods expenditure within its catchment area and the retail proposals envisage this increasing to 45%. Increased penetration into the Staines catchment areas by retail provision in Staines will reduce longer trips to centres further away and result in less travel in the wider network in mainly north Surrey. It will, however, increase trips to and within the town centre itself, however, this study shows the am peak impact to be very limited.

d) Impact of Public Transport Proposals

- 5.33. The plan does safeguard land for the Airtrack proposal. The Airtrack proposal involves a new section of rail line between Staines and Heathrow and provision of new services on existing lines in the area South West of London to Heathrow. It is a proposal in the Regional Transport Plan, Surrey Structure Plan and draft South East Plan. Its promoters suggest it could take 5,000 vehicle movements a day off the M25 but have not produced a detailed scheme from which the traffic impact on Spelthorne can be assessed.
- 5.34. An improved Staines Bus Station is proposed as part of the Elmsleigh Centre extension. It will provide safer, more comfortable and more attractive facilities for passengers. It is intended to assist in increasing public transport use generally. Staines is already the focus of a large number of bus routes and the impact of the improvements is potentially very beneficial.

e) Development Plan Policies

- 5.35. The Council's emerging DPDs are currently at the post Preferred Option stage and changes for the submission stage are being agreed.
- 5.36. The Council's approach to future development is to maintain the Green Belt and locate all new development within the urban area on previously developed land. Flood policy places some limitation on the location of housing sites and areas suitable for housing development.
- 5.37. Other than housing, major development is only proposed in Staines Town Centre. This is already well served by public transport and gives scope for effective implementation of policies to further encourage non-car based means of travel.
- 5.38. The main transport related policies are set out in the section of the plan dealing with Climate Change. This is intended to convey the important linkage between harmful transport emissions and their impact on climate. Transport related issues are also picked up in other parts of the plan ensuring that transport issues are integral to the overall strategy.
- 5.39. The following itemises references in the Core Strategy and Policies DPD to transport issues. Areas where policies may be further developed to support alternative transport are identified in brackets (policy numbers relate to those in the Preferred Options draft):

- a) CS1 – Location of Development – states major traffic generating development will be located where it is accessible by a choice of modes of travel.
- b) CS4 – Town Centre Retail Development – improvement in access to Staines Town Centre, particularly by non-car based modes will be encouraged.
- c) CS6 – Maintaining and Improving the Local Environment – includes contributing to improving air quality in the Borough (the air quality problems in Spelthorne are transport related).
- d) CS7 – Climate Change and Transport – (b) refers to ensuring development is located in a way that reduces the need to travel and encourage alternatives to car use (c) supports initiatives, including travel plans, to encourage non car-based travel and will refer to transport interchanges.
- e) HO7 – Density of Housing Development – higher density housing development is encouraged in town centres and accessible by non car-based modes of travel.
- f) TC1 – Staines Town Centre encourages major development. (c) encourages measures to improve traffic management in the town centre and further improve accessibility by public transport and non car-based modes and if necessary require such improvements in connection with major developments in the town centre. New development will be expected to incorporate measures including travel plans to reduce reliance on car-based modes of travel for access to the town centre.
- g) TC5 – Proposals for Retail Development – (d) requires development to be accessible by a choice of means of transport that would not lead to an increase in car use or cause an unacceptable increase in traffic congestion.
- h) EN3 – Design of New Development – (c) requires the design to be inclusive so as to be accessible to all members of the community regardless of disability and refers to means of travel.
- i) EN16 – Air Quality – where poor air quality arises from a proposed development due to vehicle movements mitigation measures are required – the supporting text refers to EU targets.
- j) CC2 – Location of Major Traffic Generating Development – Development generating large numbers of trips to be located where it is or can be made accessible by a choice of mode of travel. Specific site travel plans will be required.
- k) CC3 – Traffic Impact on Development – only permit development when it is compatible with the transport infrastructure in terms of number/nature of movements, capacity of roads, access/egress arrangements, cumulative impacts and highway safety. Travel plans will be required for developments with 10 or more dwellings
- l) CC4 – Parking Provision – seeks appropriate provision but also requires means to reduce the need for on-site parking by use of public transport. Includes provision for cycle parking
- m) CC5 – Airtrack and Rail Access to Heathrow – supports the principle of improved accessibility of Heathrow Airport from the Borough by non car-based modes

5.40. Collectively the above policies are intended to limit car-based travel and provide non car-based facilities where possible. Cumulative impact and air quality are important considerations. The policies enforce the plan strategy of locating development at sustainable locations.

6. Likely impact of the policies and proposals of the emerging Development Plan Documents

- 6.1. The analysis of traffic impact on development during the LDF period of 2008-2026 is based on existing travel patterns. Whilst the traffic impact of proposals in the plan itself collectively result in less am peak movements no attempt has been made to quantify the further beneficial impact on both development proposals and existing development of the policies in the emerging LDF. Some policies impose particular requirements on development proposals in containing vehicle movements and some have a wider beneficial impact such as improvement to public transport.
- 6.2. The emerging policies represent a comprehensive approach to securing sustainable travel patterns and seek to address the unacceptable adverse effects of road travel in terms of contributing to poor air quality in parts of the Borough.
- 6.3. The findings of this report, including the assessment of proposals in Appendix E, already show that the impact of the proposed developments are as follows:
 - a) The proposed housing developments will not significantly alter the overall population total or those likely to be driving and, overall will result in less traffic in the am peak hour because a significant amount will be on former employment sites.
 - b) There will be no additional shopper related traffic in the am peak from retail expansion in Staines town centre as shopper traffic occurs outside the peak hour.
 - c) The extension of the Elmsleigh Centre will result in a small increase in traffic in Staines town centre but this is more than cancelled out by the drop in traffic arising from the residential proposals in the town centre.
 - d) Growth in employment floorspace is only generally expected in Staines Town Centre. This is a very accessible location by public transport and the restraint based policies of the plan, if applied effectively, should not result in a net increase in car based travel.
- 6.4. It is concluded that the policies and proposals of the plan will not lead to an increase in travel demand.
- 6.5. An important qualification however needs to be made. This statement assesses the Council's emerging LDF; it has not attempted to assess the possible change in travel patterns arising from existing development or of traffic which passes through the Borough. The Plan can have no direct impact or control on this. Nevertheless improvements to public transport infrastructures and services to facilities for cycling and walking generally benefit everyone and will have a wider beneficial effect.

7. Impact of the LDF on the trunk road network

- 7.1. The Highways Agency have particular responsibility for the trunk road network and the potential adverse effect of proposals on its operational capacity and safety.
- 7.2. The evidence set out in paragraphs 4.10 to 4.13 shows that the journey lengths of most people living or working in Spelthorne are quite short with 81% of those living in Spelthorne either working in the Borough or in the adjoining Authority.

- 7.3. The directions of these movements suggest that very few are likely to be using the trunk road network. Potential movements are assessed in more detail as follows:
- a) M25 North – The M25 is located on the far west side of the Borough. Use of the North bound section of the motorway would only theoretically be attractive for people seeking to get to Berkshire (5.59%) and seeking access to the M4 or those going to Buckinghamshire (0.7%) or seeking to get to Heathrow or the rest of Hillingdon/Outer London. A significant part of the Berkshire movements are Slough related with much thought to be to the Poyle Industrial Estate just west of junction 14. Travel to the Estate is likely to involve some movement Westbound on the A3113 in the am peak, however people living in Staines would be unlikely to use the M25 but instead use the Stanwell Moor Road. People seeking to get to Heathrow from the Borough are most likely to travel north along the Stanwell Moor Road and Clockhouse Lane, Ashford or through Stanwell. The very small number going to Buckinghamshire are more likely to use the M25. In conclusion very few northbound movements on the M25 probably arise from Spelthorne residents.
 - b) M25 South – Movements from Spelthorne to the rest of Surrey, other than to Runnymede and Elmbridge, are very limited. It is only journeys to the other authorities that are likely to lead to M25 related movements. Some movements to Hampshire may use the M25 to get to the M3 but only in the case of movements to and from the Staines area as they would otherwise use the M3 or even A30. In conclusion southbound movements on the M25 are likely to be few.
 - c) A3113 – Airport Way – This is likely to be used by some seeking access to the M25 for Northbound movements and access to the Poyle Trading Estate. Movements to Slough from Spelthorne are only 3.1% of which up to two-thirds may be to Poyle. In conclusion use of this road will be relatively limited.
 - d) A30 – There is a relatively high number of movements to Heathrow and Hounslow. Those lying north of the A30 in Stanwell are unlikely to use the trunk road, instead using Town Lane, Long Lane and Bedfont Road. Those in the Staines area are most likely to use the A30 for journeys on a broadly North-East direction but not for those going to Heathrow who are more likely to simply cross the A30 at the Crooked Billet roundabout at Staines and use the Stanwell Moor Road. People from the main population centres of Ashford, Shepperton and Sunbury are likely to have journeys which tend to cross to areas the A30 when travelling to the Heathrow area but some may use the A30 if going to other parts of Hounslow and outer West London Boroughs. The A30 is likely to be the greatest used trunk road in Spelthorne by those living in the Borough or travelling to it. However, it still has spare capacity in 2026.
 - e) M3 / A316 – The only M3 junction on the M3 in Spelthorne is at Sunbury Cross. The A316 continues from Sunbury Cross into London. Those likely to use the M3 will be travelling to or from Hampshire or, via the M25, to more distant Surrey Districts. The scale of these movements to and from Spelthorne are very limited. A more significant number are likely to be using the A316 to travel from and to Spelthorne from South-West London.
- 7.4. The above describes the pattern of movements found in the 2001 Census. The findings of this Transport Statement suggest that the Council's emerging LDF is likely to result in a very small reduction in movements when compared to the existing situation and the impact of policies to encourage non-car based trend could further improve the position.

- 7.5. The above suggests that the effect of the policies and proposals of the emerging LDF when compared to a no-plan situation is to slightly reduce movements on the trunk road network.

8. Conclusions

- 8.1. Spelthorne is a small Borough with a fairly compact urban area.
- 8.2. The M25, M3, A316 and A3116 trunk roads pass through the Borough. Only the M25 and A3116 will be operating above their design capacity in 2026.
- 8.3. Only limited development is proposed in the Borough in the emerging Development Plan Documents over the period 2008 – 2023. All development will be in the urban area.
- 8.4. Some 2265 dwellings are proposed to be built in the 15 year period 2008 – 2023 of which 80% will be one or two bed dwellings. All new dwellings will be on Brownfield sites of which 60% are likely to be non-residential sites.
- 8.5. The study shows there will be lower trip generation rates on residential developments in the am peak when compared to commercial development, which suggests the 2265 dwellings will lead to a net reduction of traffic movements. Projecting house building to 2026 does not change the proportion of that net reduction.
- 8.6. The survey findings do not take account of the application of further policy measures to secure greater non-car based means of travel from policies in the emerging DPDs which may lead to greater levels of traffic reduction in the immediate vicinity of the sites.
- 8.7. Extension of the Elmsleigh Centre will lead to a very small increase in traffic in Staines town centre in the am peak of approximately 60 movements. This number of movements is more than compensated by the reduction from residential proposals in the town centre. Some 50% of the traffic movements related to the Elmsleigh Centre would occur on the wider highway network even if the Elmsleigh Centre were not extended.
- 8.8. Only in Staines town centre is any further significant additional employment development expected which is over and above existing commitments. This will, however, only arise as a result of redevelopment of existing sites. Redevelopment schemes provide the opportunity to limit car based means of travel to levels no greater than the existing.
- 8.9. The emerging Core Strategy and Policies DPD has a comprehensive range of policies with measures to contain car-based travel and encourage other travel modes. These policies are intended to fully reflect the Government guidance on transport.
- 8.10. From the findings of the Transport Statement it is concluded that the emerging DPD's policies and proposals will not add to travel demand.
- 8.11. The plans can, however, only have a limited impact on existing travel patterns, in particular the large amounts of traffic passing through the Borough each day. Whilst traffic originating in the Borough or coming to the Borough can be influenced by local

policies to encourage/facilitate non-car use, little impact on traffic originating outside the area and not having a destination here can be realistically secured.

- 8.12. It is concluded that the plans will not of themselves have any adverse impact on the operation or safety of the trunk road network passing through Spelthorne when compared to the no-plan situation or cause detriment therefore in terms of air quality.
- 8.13. Problems of growth on the trunk road network from proposals outside the Borough and travel habits of those with origins and destinations outside the Borough are beyond control of the Council.

Appendix A

Brief for the Transport Statement of the Emerging Core Strategy and Policies DPD and Allocations DPD

1. Introduction

- 1.1. Spelthorne Borough Council is preparing two main Development Plan Documents as part of its LDF:
 - a) Core Strategy and Policies DPD
 - b) Allocations DPD.
- 1.2. They involve relatively modest levels of development all of which will be within the urban area on existing brownfield sites. Policies are being drafted to encourage non-car travel and will include/refer to a range of demand management measures. The Council's approach is generally consistent with the transport objectives of both the Highways Agency and Surrey County Council.
- 1.3. The Council intends to prepare a high level Transport Statement of the policies and proposals to be included in the DPDs in an attempt to establish their impact on the trunk road network and the impact of the specific proposals on the local road network.
- 1.4. The statement is in addition to the formal Sustainability Appraisal of the plans already prepared by the Council.
- 1.5. The purpose of this brief is to set out the nature and scope of that statement.
- 1.6. It is intended that the approach of the statement should be consistent with advice contained in Draft Circular X/2006: 'Planning and the Strategic Road Network' (published 7th August 2006) and Draft Guidance on Transport Assessment (published 7th August 2006).
- 1.7. The Council wishes to secure the assistance of the Highways Agency and Surrey County Council in guiding the preparation of the statement and their agreement to the final report.

2. Context of the Statement

- 2.1. Over the 15 year time period of the proposed DPDs (2008-2023) only a modest level of additional development is proposed.
 - a) Housing is expected to increase by 151 dwellings per annum – 2265 in total - representing growth of the housing stock by some 5.6%. Of these most will be small units and a significant proportion of schemes will be on sites currently in commercial use.
 - b) Employment development will not increase over and above the level of existing commitments.
 - c) Retail development - some further growth is envisaged in Staines but only sufficient to meet growth in retail expenditure and to secure a greater use of Staines by those in the existing catchments area.
 - d) The total population is projected to be virtually static despite the small increase in housing. This is due to falling household occupancy rates.

- 2.2. The housing development will be spread across the existing urban area. Approximately a third of the housing will be on sites of 0.4ha or larger. The largest scheme will be only 100 dwellings. The remainder will be small windfall sites.
- 2.3. It is expected that there will be no significant change to the existing travel to work patterns which involve relatively short journeys mainly within the Borough or to the immediately adjoining Boroughs.
- 2.4. The Borough has a relatively well developed public transport network compared to most Surrey Districts therefore providing greater scope to encourage modal shift without significant additional investment.

3. Approach to the Statement

- 3.1. The primary purpose of the statement is to understand the potential impact on the trunk road network and identify any problems/concerns that may require specific mitigation or amendment to policies and proposals.
- 3.2. Given the limited and dispersed pattern of proposed development detailed mathematical modelling of every likely development change is not thought necessary at this stage by either the Highways Agency or Surrey County Council. Instead the following twin approach is proposed:
 - a) Identification of the key issues and factors likely to lead to change in transport movements arising from the proposed DPDs and evaluation of their potential impact using existing information.
 - b) Detailed assessment of the specific sites proposed for development (12 in total) and their potential individual and cumulative impact on the trunk and local road network.

4. Specific Requirements of the Study

- 4.1. The study requirements are to assess the following:
 - a) Future population changes in terms of numbers and age composition, economically active and car owning age groups.
 - b) Existing housing provision and proposed future provision in terms of numbers, size of dwelling, type of dwelling and tenure.
 - c) Existing employment provision and likely changes over the plan period – particularly with regard to losses to residential use.
 - d) Likely changes to travel to work patterns.
 - e) Existing retail provision and proposed changes and account of the catchment area for shoppers and the extent of new trips as against transferred trips.
 - f) Other types of development eg. sport, health, leisure, etc.
 - g) Highway Agency data on relative capacity of the trunk road network in Spelthorne and its surroundings in 2006 and 2026.
 - h) Brief transport statement of each DPD proposal to assess:
 - i. its impact individually and cumulatively on the local road network
 - ii. potential impact individually and cumulatively on the trunk road network.
 - i) Level of public transport accessibility in Spelthorne and assessment of the scope for modal shift as a result of proposed PPG 13 based policies.

- j) General assessment of the proposed DPD policies and proposals in relation to national and regional guidance.
- k) An overall evaluation of potential impact of the policies and proposals in the proposed DPDs on the trunk road network.

5. Data Sources

- 5.1. Data sources will include the following Spelthorne publications:
- a) Population and Social Characteristics of Spelthorne - February 2005
 - b) Spelthorne Housing Capacity Study September 2003 – and subsequent updates
 - c) Spelthorne's Retail Study – Airport 2004
 - d) Economy and Employment Land Study – May 2006
 - e) Housing Market Assessment – in preparation.
- 5.2. Traffic surveys of all existing occupied proposal sites (seven) will be undertaken as well as use of any relevant recent surveys which have been previously agreed with Surrey County Council. Surveys will be undertaken of existing housing sites to establish local information on likely traffic generation patterns at peak times. Proposal sites will be assessed on the basis of survey information only.
- 5.3. Information from the Highway Agency on current and projected use of the trunk road network.

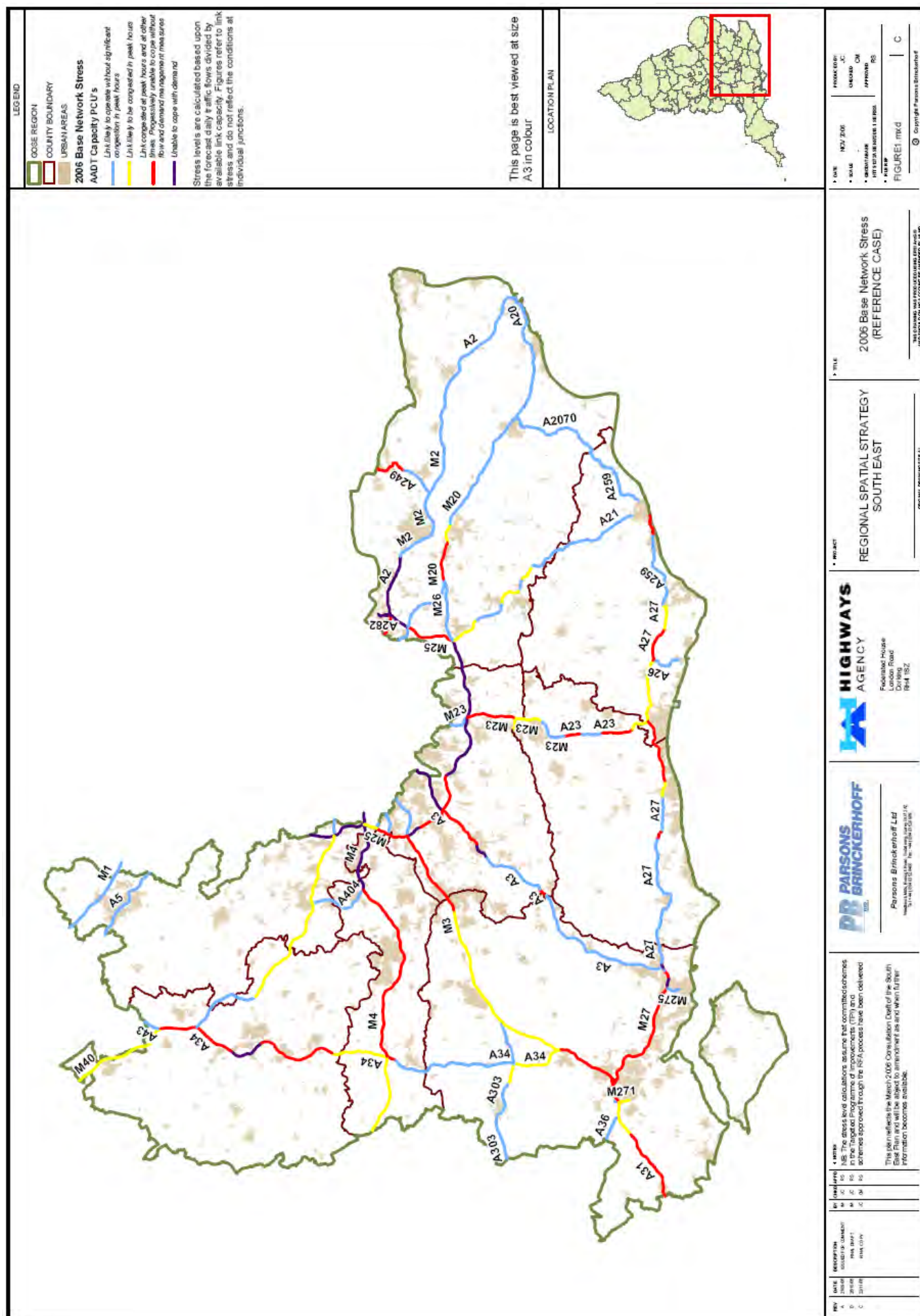
6. Timetable

- 6.1. The study will seek to follow the timetable below:

5 – 13 October	Circulation of draft study brief and return of comment on draft brief by Highways Agency and Surrey County Council.
16 October – 17 November	Completion of traffic surveys and preparation of first draft of study report.
17 – 24 November	Consideration of draft report by Highway Agency and Surrey County Council
27 November – 1 December	Complete final report

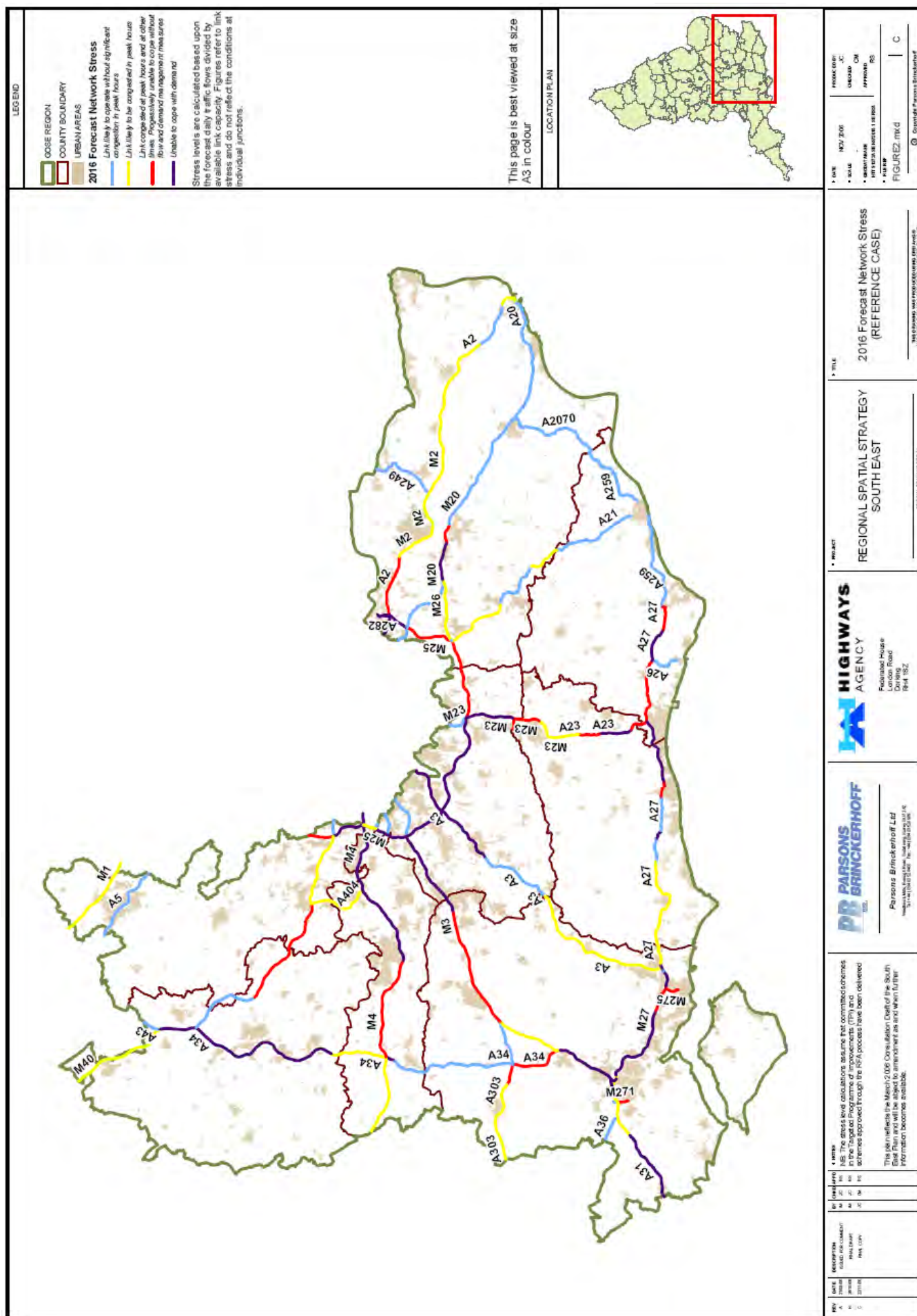
Appendix B

Current Network Stress in Surrey area (2006)



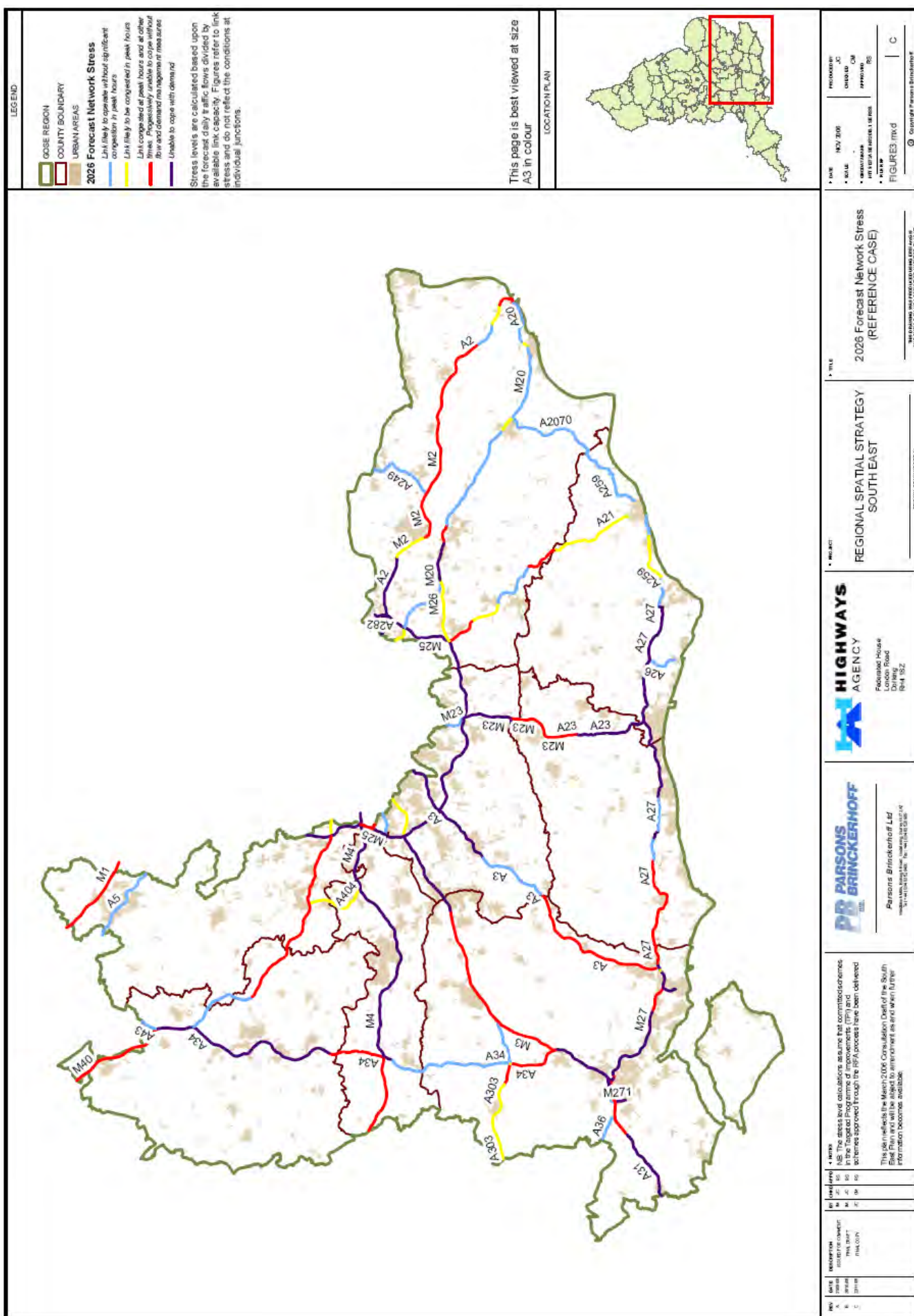
Appendix C

2016 Network Stress on Surrey area taking account of Targeted Programme Improvements (TPI) and Regional Funding Allocation (RFA)



Appendix D

2026 Network Stress on Surrey area taking account of Targeted Programme Improvements (TPI) and Regional Funding Allocation (RFA)



Appendix E

Transport Statement of Specific Proposals in the Allocations Development Plan Document

1. Introduction

- 1.1. The purpose of this assessment is to establish the likely traffic impact of the individual proposals in the Spelthorne Development Plan – Allocations Development Plan Document.
- 1.2. The findings are used in the Transport Statement which assesses the impact of both the Core Strategy and Policies DPD as a whole and Allocations DPD.
- 1.3. The assessment of these individual sites are not at the level of detail required for a planning application where a specific scheme is available for consideration and other issues relating to access, design and safety in the vicinity of the site will also need to be considered. Therefore more detailed consideration, in line with the County Council's requirements, will be required for planning applications.

2. Survey Method

- 2.1. The general method of survey follows the brief for the Transport Statement agreed by the Highways Agency and Surrey County Council and set out at Appendix A of the Statement. The detailed survey method to assess individual sites has been agreed with Surrey County Council.
- 2.2. The following 10 sites have been assessed and details of existing and proposed use are given:

Table 1 Schedule of Assessed sites

Proposal Number	Address	Proposed Use	Existing use, site area, built area
P1	28-44 Feltham Road, Ashford	Approximately 23 dwellings	Construction equipment hire base/other commercial uses. Site area 0.47ha. 609m ² of buildings (excluding 3 existing residential units) and some open storage.
P2	158-166 Feltham Road, Ashford	Approximately 60 dwellings	Industrial estate. Site area 1.3ha. 7,214m ² of buildings.
P3	Land adjoining Feltham Hill Road and Poplar Road, Ashford	Approximately 70 dwellings	Industrial site (currently vacant). 1.47ha. 7,584m ² of buildings.
P4	Works adjoining Harrow Road, Ashford	Approximately 36 dwellings	Industrial commercial site. Site area 0.58ha. 2,550m ² of buildings. Limited car sales use on the A30 frontage.
P5	Steel Works and Builders Merchant, Gresham Road, Staines	Approximately 100 dwellings	Steel stockist/fabricators and builders merchant. Site area 1.37ha. Buildings 1,500m ² and open storage.

P7	Builders Merchant, Moor Lane, Staines	Approximately 30 dwellings	Builders Merchant. Site area 0.57ha. Buildings 1,532m ² and open storage.
P8	Riverside Works, Fordbridge Road, Sunbury	Approximately 50 dwellings	Offices, individual buildings and some open storage/parking. Site area 1.57ha. Buildings 2,785m ² .
P9	Bridge Street Car Park, Bridge Street, Staines	Approximately 75 dwellings	Car park with 280 spaces and Sea Cadet building. Site area 0.71ha. Buildings 135m ² .
P10	Land west and south of the Elmsleigh Centre, Staines	Mixed use in two parts comprising retail use (total 20,500m ²) residential (total 95) other non-retail uses.	Site occupied by Tothill multi-storey car park and 7,852m ² of other buildings.
	Rodd Engineering site, Govett Avenue, Shepperton	Approximately 85 dwellings.	Industrial site. Site area 1.66ha buildings of 7,800m ² .

2.3. The traffic impact of the following 'proposed' sites have not been assessed for the reasons given below:

- a) **P6 – Council Offices Knowle Green.** Whilst included as a housing proposal at the Preferred Options stage, it has been deleted and not considered in this assessment (except for trip rate data used to assess the office element in Proposal P10).
- b) **P11 – Land to the west of Edward Way, Ashford.** The site is proposed for public open space to meet the needs of a nearby housing area. No public vehicular access is proposed. It is concluded there is no material traffic impact to assess.
- c) **P12 – Safeguarding for the Airtrack Corridor.** The plan is not making a specific proposal for Airtrack only safeguarding land in the eventuality a scheme emerges. The schemes promoters have not provided sufficient detail to enable the traffic impact on Spelthorne to be assessed. The objective of the scheme is nevertheless to reduce vehicular traffic seeking to get to Heathrow. Whilst its intention is to enable a modal shift from car use and up to 5000 vehicle movements per day could be removed from the M25, the transport benefits for Spelthorne are considered at this stage to be uncertain.

2.4. The method of assessment involves surveys of the existing sites, where they are in use, to establish current traffic levels. Two sites were vacant/part occupied (P3 – land adjoining Feltham Hill Road/Poplar Road and P8 – Riverside Works, Fordbridge Road, Sunbury). Existing traffic levels for these sites were established from survey data from:

- a) Similar sites in the survey – 158-166 Feltham Road, Ashford (P2) and Works adjoining Harrow Road, Ashford (P4).

- b) Findings of an existing survey of the Rodd Engineering Site at Shepperton.
- 2.5. Two existing residential sites were surveyed to assist in establishing likely traffic generated by residential development and of existing development. Regard has also been had to a survey at Harrison Way, Shepperton undertaken as part of a transport assessment of the Rodd Engineering site for a recent planning application. The two additional surveyed sites were:
- a) International Way, Windmill Road, Sunbury.**
- The main part of the site was surveyed which included 238 dwellings with a dwelling mix of 43 (18%) 1 bed, 184 (77%) 2 bed, 7 3 bed and 4 4 bed. The scheme was chosen as being typical of current development and proposed future development in terms of dwelling mix. It involved some alternative transport measures including cycle parking provision for all dwellings, £200 travel vouchers/cycle vouchers for new occupants, £75,000 for selective vehicle detection equipment for buses at the signalled site entrance junction. It nevertheless, has no public transport within 400 metres of the site and has vehicle parking at an average of 1.43 spaces per dwelling. The site is considered good for establishing a cautious base line trip rate for the study.
- b) Wraysbury Gardens, Moor Lane, Staines.**
- A scheme of 65 dwellings comprising 31 2 bed and 34 3 bed. This site is useful as it reflects the mix of the existing housing stock in Spelthorne. It is very close to Staines town centre.
- 2.6. Surveys were conducted on Tuesdays and Thursdays which are normal survey days in Spelthorne. Counts were undertaken for the am period from 7.30 – 9.00. From the first few surveys it was established that the peak hour was 7.45 – 8.45. This finding is similar to other studies (e.g. planning applications for the Rodd Engineering site).
- 2.7. Vehicles were counted according to type so their PCU value (passenger carrying unit) could be assessed. This broadly attributes a higher value to vehicles taking greater amounts of road space. The values are as follows:
- | | |
|----------------|-----|
| a) car | 1 |
| b) van | 1.5 |
| c) lorry (hgv) | 2.3 |
| d) bus | 2 |
| e) motor cycle | 0.4 |
| f) cycle | 0.2 |
- 2.8. Counts at each site were undertaken to establish:
- a) vehicles entering and leaving the site and their direction of arrival/departure
 - b) traffic levels in the highway at the site entrance.

3. Survey Findings and Analysis of Proposal Sites

a) Residential traffic generation

- 3.1. Findings of the two surveys of residential sites undertaken and results of the existing survey at Harrison Way were as follows:

Table 2 Trip Rates from Residential Sites (am peak)

Site	Number of movements	No. of Residential unit	Movements per unit
International Way, Sunbury	94	238	0.39
Wraysbury Gardens, Moor Lane, Staines	31	65	0.45
Harrison Way, Shepperton ¹	-	-	0.59

Note ¹ – the survey of Harrison Way by consultant did not define the extent of the estate surveyed or actual vehicles counted but only gave the trip generation rate per residential unit. The findings have been agreed by Surrey County Council as part of a traffic assessment of the Rodd Engineering site and therefore considered in this study.

- 3.2. The Council's policy for residential mix in new developments is to secure 80% 1 and 2 bedroom dwellings and, across all sites, 40% to be social housing. Social housing generally has lower levels of vehicle movement.
- 3.3. Both Harrison Way and Wraysbury Gardens are predominantly family housing with limited or no very small dwellings. They broadly equate to the existing mix of housing in the Borough and therefore are useful in establishing likely travel levels from the existing housing stock. The International Way site had no social housing in that part of the site surveyed leading to possibly higher traffic levels than might otherwise be the case. It also had a slightly higher level of 2 bed units as against 1 bed with 1 and 2 bed units representing 95% of the scheme. However, it also had a relatively high car parking provision at 1.43 spaces per dwelling compared to the likely average for the plan period which will include a number of large town centre sites and at least 200 extra care residential units. The site is some 400 metres from public transport services and not as well served as many of the proposed sites in the emerging LDF. On balance it is considered these factors suggest the ratio of 0.39 vehicle movements per dwelling is a reasonable and suitably cautious measure of traffic generation from the mix of generally smaller dwellings being proposed in the emerging LDF.
- 3.4. Movements in and out of the International Way site constituted a 6.5% inward movement in the am peak and 93.5% out. This split is used in assessing the Proposal sites.

b) Commercial Traffic Generation

- 3.5. Survey information from three similar occupied commercial sites has been used to assess likely traffic levels at site P3 – Feltham Hill Road/Poplar Road and P8 – Riverside Works/Fordbridge Road, Sunbury. The surveyed sites are primarily industrial sites.
- 3.6. The three sites used to provide average trip rates for commercial sites surveyed as part of the study included 158/166 Feltham Road, Ashford and Land adjoining Harrow Road, Ashford and the third, Shepperton Business Park, which was surveyed by consultants as part of the assessment of the Rodd Engineering site (results agreed by Surrey County Council).

Table 3 Average trip rates from commercial sites

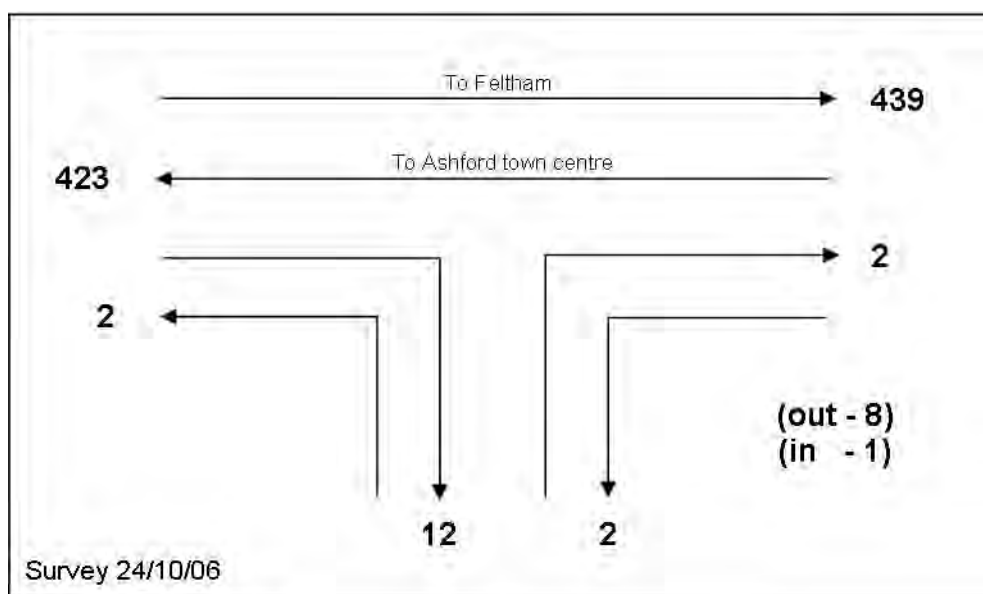
Commercial Sites	Sq metre to vehicle ratio (rounded)
158/166 Feltham Road, Ashford	126
Land adjoining Harrow Road, Ashford	182
Shepperton Business Park	80
Average	129

- 3.7. An average of the findings shows a figure of 129m² per vehicle movement in the am peak. This figure is used to assess the trips generated at Proposal sites P3 and P8.

c) Assessment of each site

P1 – 28-44 Feltham Road, Ashford

- 3.8. The existing am peak movements were 17 and the projected residential am peak movement is 9 (23 dwellings x 0.39 trip rate).
- 3.9. Actual and projected traffic movements at the site entrance are summarised in the following diagram with numbers in brackets being the projected residential movements.

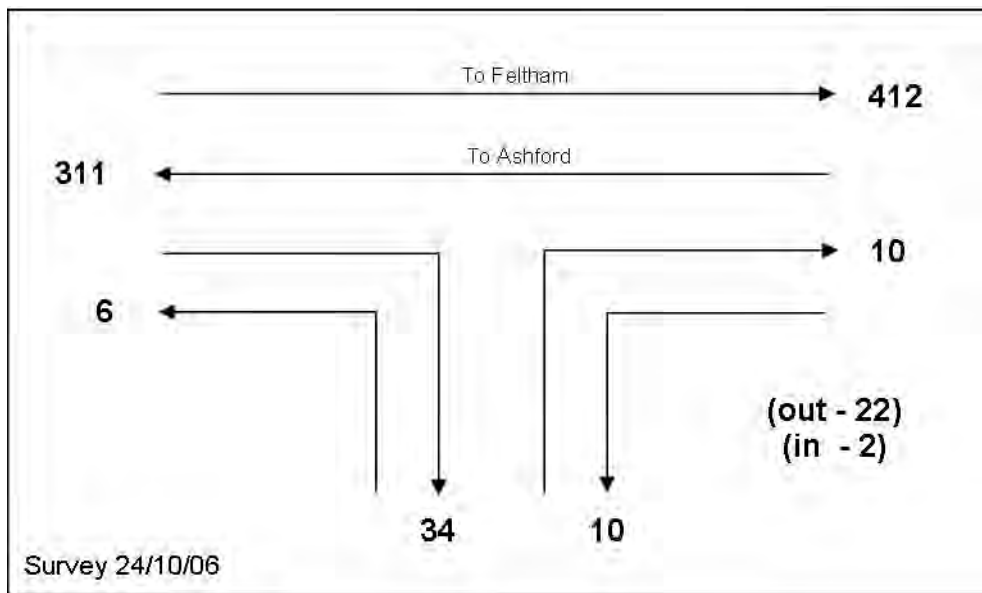
Figure 1 28-44 Feltham Road

- 3.10. Existing site movements represent 0.02% of movements in Feltham Road and projected movements only 0.01%.
- 3.11. Projected residential movements at the site will represent only 52% of existing site traffic movements in the am peak.

P2 – 158-166 Feltham Road, Ashford

- 3.12. The existing am peak movements were 60 and the projected residential am peak movement is 24 (60 dwellings x 0.39 trip rate).
- 3.13. Actual and projected traffic movements at the site entrance are summarised in the following diagram with numbers in brackets being the projected residential movements.

Figure 2 158-166 Feltham Road



- 3.14. Existing site movements represent 7.6% of the vehicle movements in Feltham Road at this point. The residential movements at the site will represent 3.0%.
- 3.15. Projected residential movements at the site represent only 40% of existing traffic movements in the am peak.

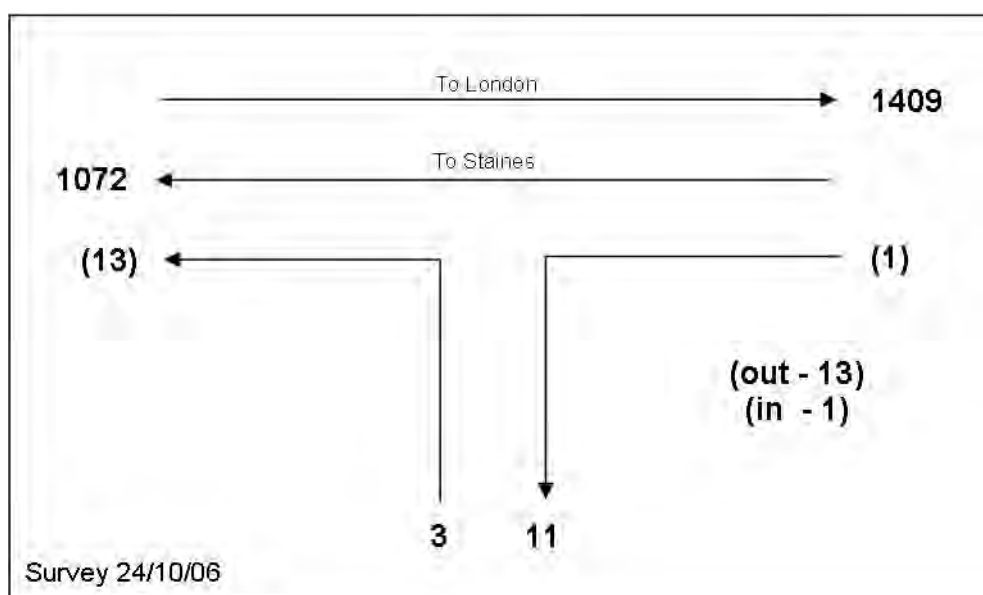
P3 - Land adjoining Feltham Hill Road and Poplar, Ashford

- 3.16. The site is unoccupied and survey data from comparable sites is used to project existing movements for the site.
- 3.17. The projected existing am peak movements for the site are 59 and the projected residential am peak is 22 (70 dwellings x 0.39 trip rate).
- 3.18. Existing traffic levels in Feltham Hill Road or Poplar Road have not been surveyed because the projected movements are less than existing.
- 3.19. Residential movements at the site represent only 37% of existing projected traffic movements in the am peak.

P4 – Works adjoining Harrow Road, Ashford

- 3.20. The existing am peak movements are 14 and the projected residential am peak movement is 14 (36 dwellings x 0.39 trip rate).
- 3.21. The site has an access onto the A30 Trunk Road. Actual and projected traffic movements at the site entrance are summarised in the following diagram with numbers in brackets being the projected residential movements. It should be noted that at this site the A30 is on dual carriageway with only left in and left out movement to and from the site being possible. There is a very small element of the frontage of the site used for car sales and intentionally visible from the A30. This use presents a potential slight distraction to motorists and therefore a nominal safety issue. Whilst this safety issue has not been quantified the removal of the car sales use as a result of residential use will remove that risk.
- 3.22. The survey of the A30 itself was undertaken by alternating 5 minute counts of each carriageway through the am peak i.e. a total of 30 minutes in each direction. The results were then factored up to give a full peak hour flow.

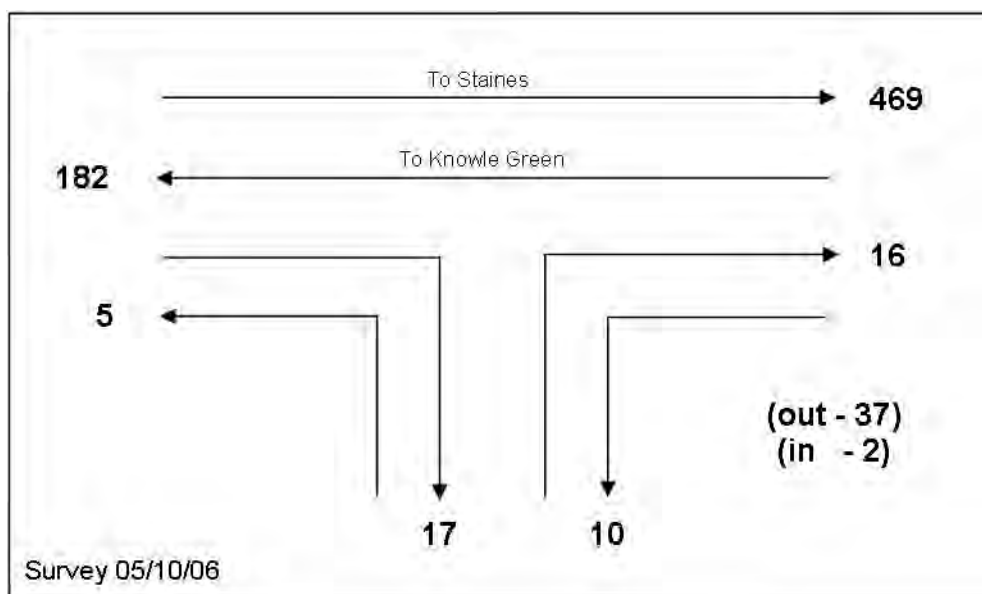
Figure 3 Land adjoining Harrow Road



- 3.23. Existing site movements represent just 0.0056% of total movements on the A30 at this point. As projected flows remain the same the proportion of residential movement to commercial does not change for residential use.

P5 – Steel Works and Builders Merchants, Gresham Road, Staines

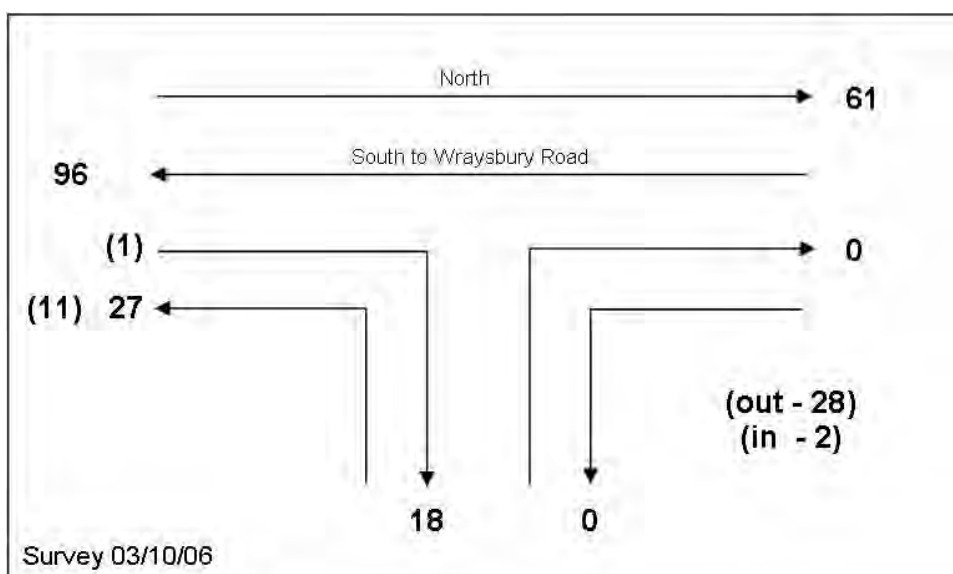
- 3.24. The existing am peak movements were 48 and the projected residential am peak movement is 39 (100 dwellings x 0.39 trip rate).
- 3.25. Actual and projected traffic movements at the site entrance are summarised in the following diagram with numbers in brackets being the projected residential movements.

Figure 4 Steel Works/Builders Merchants, Gresham Road

- 3.26. Existing site movements represent 7.3% of the vehicle movements in Gresham Road at this point. The residential movements at the site would represent 5.9%.
- 3.27. Residential movements at the site represent only 81% of existing traffic movements in the am peak.

P7 – Builders Merchants, Moor Lane, Staines

- 3.28. The existing am peak movements were 45 and the projected residential am peak movement is 12 (30 dwellings x 0.39 trip rate).
- 3.29. Actual and projected traffic movements at the site entrance are summarised in the following diagram with numbers in brackets being the projected residential movements.

Figure 5 Builders Merchants, Moor Lane, Staines

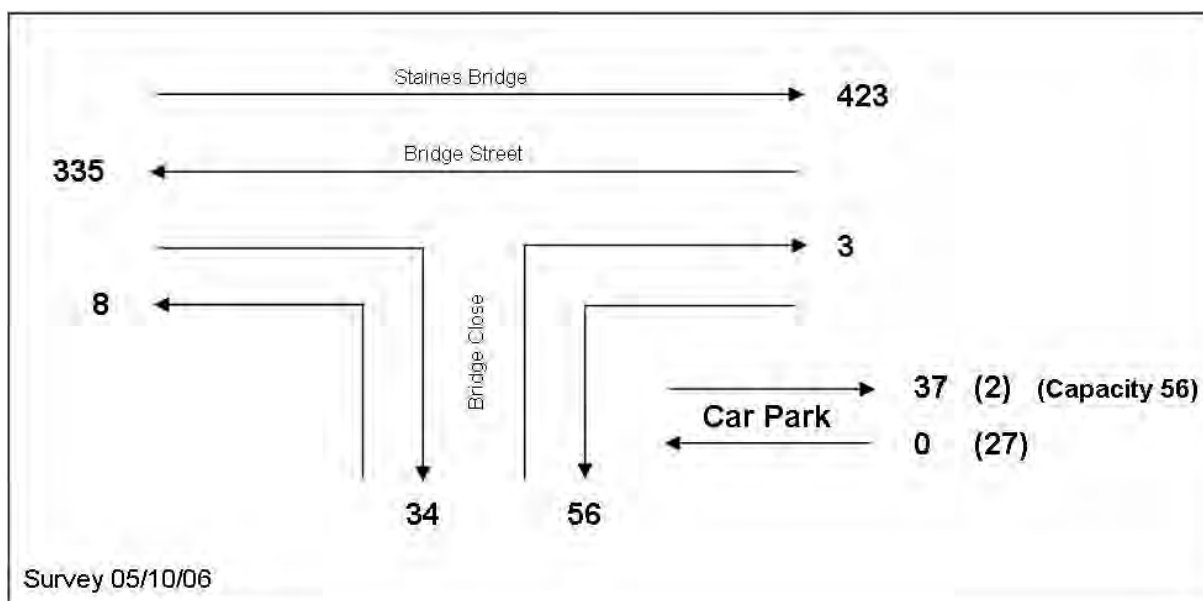
- 3.30. Existing site movements represent 22% of movements in Moor Lane in the am peak. The residential movements would represent 5.9% of movements.
- 3.31. Residential movements at the site represent only 26% of existing traffic movements in the am peak.

P8 – Riverside Works, Fordbridge Road, Sunbury

- 3.32. The proposed existing am peak movements for that part of the site proposed for redevelopment are 22 and the projected residential am peak is 20 (50 dwellings x 0.39 trip rate).
- 3.33. The existing site is a partly vacant Environment Agency depot/base and therefore the existing traffic levels would not give a picture of the sites likely traffic pattern when in full use. It should be noted that the existing site has a small office building which is a use likely to have a worker to floorspace ratio greater than industrial use and therefore more traffic movements. There is also a large area for vehicles to park which was used for vehicles used off site. The use of average traffic trips for industrial uses may underestimate the sites existing traffic generating potential compared to the proposed residential use.
- 3.34. Residential movements at the site represent 90% of projected existing movement potential.

P9 – Bridge Street Car Park, Bridge Street, Staines

- 3.35. This proposed site has a two level car park of 280 spaces. 100 of the spaces are licensed to the occupier of the adjoining Ashby House. At the time of the survey Ashby House was only partly occupied and its parking needs were substantially met by its own basement car park. Only six cars were parked in the restricted area of the Bridge Street Car Park set aside for the occupiers of Ashby House. The Sea Cadet Building was not in use during the am peak.
- 3.36. The traffic survey showed 37 cars entering the car park. However, as 94 spaces were not being taken up, only 186 spaces or 66% of the capacity was in use. The count of 37 has been increased pro-rata to reflect the position if Ashby House were fully occupied and its quota of spaces in the car park were fully used.
- 3.37. The projected am peak movements with the car park being used fully are 56. The projected residential am peak movement is 29 (75 dwellings x 0.39 trip rate).
- 3.38. The car park is accessed from Bridge Close which has a junction with Bridge Street. Two office buildings also gain access from Bridge Close. Actual and projected traffic movements into the car park are summarised in the following diagram which shows movements in both Bridge Close and Bridge Street. Projected residential movement are shown in brackets unless notes indicate.

Figure 6 Bridge Street Car Park, Staines

- 3.39. Projected existing traffic movements between the car park and Bridge Street are 7.4% of the Bridge Street Flow. Projected residential movements are 3.8%.
- 3.40. Residential movements to the site will represent only 48% of existing traffic movements in the am peak.

P10 – Land to the West and South of the Elmsleigh Centre

- 3.41. Mixed use extensions to the Elmsleigh Centre are proposed comprising:
- 20,500 m² of retail
 - 95, 1 and 2 bed residential units
 - other uses appropriate to a town centre
 - improved bus station
- 3.42. The existing proposal site already has some 7,842m² of floorspace comprising retail and other D2 uses in the form of a library, museum, community centre, night club and Masonic hall.
- 3.43. It is intended that the library, museum and community centre are re-provided in the development and it is assumed, for the purposes of this transport statement, the other D2 uses, whether or not returning with their current occupiers, represent a level of D2 use nevertheless appropriate to a mixed use scheme of this nature. Re-provision of the existing 2,200m² of retail would be over and above the 20,500m² proposed additional retail floorspace.
- 3.44. Whilst the nature of the proposal is still in general terms, so far as other uses are concerned, for the purposes of this traffic assessment, it is assumed 5,000m² of offices may also be provided. It is assumed that the traffic generated would be limited by lack of dedicated parking, parking charges and ready availability of public transport. A trip rate of 30% of office movement at the Knowle Green Council Offices is assumed giving a total of 35 am peak movements. (A survey of am peak trips to

and from the offices showed a rate of 20.3 movements per 1000 m² of gross floorspace).

- 3.45. The size of the proposed retail extensions, at 22,500m² broadly equate to the size of the existing Elmsleigh centre at 23,410m² and can reasonably be used as a measure of an extension servicing traffic. During the am peak no shops in the existing Elmsleigh Centre were open for any significant trading and it is assumed an extension will not generate shopper traffic during this time. There is some servicing activity and use of the existing service ramp was surveyed for the am peak. 15 vehicles entered and 10 departed giving combined numbers of 25. Some shop employees were observed opening premises in the period before 9am and it is assumed some of them arrived in Staines during the am peak. The traffic associated with the employees cannot be readily surveyed. In the absence of survey data it is assumed the number of premises in the Elmsleigh Centre which have car park season tickets represents 75% of vehicle movement associated with shop staff during the am peak. Council records show 19 season tickets were current at the time of the survey and a traffic flow of 25 is therefore derived on this basis. A relatively low trip generation figure is considered justified by the cost of all day parking and ready access to public transport.
- 3.46. Residential trip generation is assumed to be only two thirds of survey results at International Way due to close proximity to public transport facilities. This might still be a little high for such a central town centre site but nevertheless provides a robust figure for assessment purposes.
- 3.47. In summary, the additional traffic generated by the Elmsleigh Centre proposals is considered to be:

Table 4 Elmsleigh Centre extensions traffic generation

Retail extension of 22,500m²	
Shopper traffic	0
Servicing traffic	25
Shop workers traffic	25
D2 uses – replacing existing - no net gain	0
Offices 5,000 m ²	35
Residential $0.39 \div \frac{2}{3} \times 95$	24
Total	109

- 3.48. It should be added that the retail provision is intended to meet assessed growth in retail requirements in the Staines shopping catchment area. If the space were not provided it is likely that people would travel to other centres of a similar or larger size such as Windsor, Woking, Camberley, Hounslow and Kingston which would take up the retail capacity not provided for in Staines. Therefore, whilst the projected additional retail related am peak movement of 50 would not arise necessarily on the town centre itself, the movement would occur on the wider highway network due to retail provision being made elsewhere. This also applies to shoppers, albeit not travelling in the am peak, who would be likely to travel greater distances from the catchment area to other centres resulting in more movements per road length overall than if retail provision is made in Staines.

- 3.49. The net effect of the Elmsleigh Centre proposal on Staines Town Centre may be up to 109 movements but only some 49 net additional movements on the wider highway network.

Rodd Engineering, Govett Avenue, Shepperton

- 3.50. The site is currently the subject of planning applications. This site was consulted on at the Issues and Options stage of the LDF process but omitted at the Preferred Options stage due to a flooding objection. The flooding issue has been resolved by developers and it is intended the proposal will be re-inserted in the Submission Draft.
- 3.51. There is an existing traffic survey undertaken by consultants WSP for the developers Persimmon Homes which has been agreed by Surrey County Council. The findings of the report are summarised as follows:

Table 5 Rodd Engineering Traffic Generation

	AM		PM	
	In	Out	In	Out
Existing BI use	79	19	15	79
Residential use at 96 dwellings	15	42	52	21

- 3.52. The site is vacant so traffic generation figures for industrial were taken from a survey of the adjoining Shepperton Business Park.
- 3.53. The residential traffic figures were taken in the main from Harrison Way in Shepperton – an area of mainly family housing. These figures are also compared by WSP to other sites on the TRICS database. The number of residential units to be proposed in the plan is only 85 and the nature of Harrison Way is not wholly comparable to the proposal for the Rodd site where there would be a high proportion of smaller units. Harrison Way had a trip generation rate of 0.59 compared to this study's figures of 0.39 from what is regarded as a more comparable site due to its dwelling mix. Applying the lower number of dwellings and the 0.39 trip rate total projected flows would be 33 in the am peak as against 57 projected in the alternative trip data. The lower figure is used for comparative purposes in this study and not to be used for the purposes of assessing a planning application.

4. Conclusions

- 4.1. At all proposal sites, except the Elmsleigh Centre and Harrow Road, there is a net reduction in traffic movements on implementation of the proposed new use. Harrow Road shows no change. The sites are grouped by area of the Borough so the cumulative impact can also be seen. See Table 6 below.

Table 6 Summary and Cumulative Impact of Proposal Sites in AM Peak

Proposal Site		Existing Traffic Flow	Flow from Proposals
Ashford			
P1	28-44 Feltham Road	17	9
P2	158-166 Feltham Road	60	24
P3	Feltham Hill Road/Poplar Road	59	22
P4	Adj Harrow Road	14	14
Sub Total		150	69
Staines			
P5	Steel Works/Builders Merchants	48	39
P7	Builders Merchants, Moor Lane	45	12
P9	Bridge Street Car Park	56	29
P10	Elmsleigh Centre - residential	0	24
	- other uses (net)	0	85
Sub Total		149	189
Sunbury/Shepperton			
P8	Riverside Works, Sunbury	22	20
	Rodd Engineering, Shepperton	98	33
Sub Total		120	53
OVERALL TOTAL		419	311

- 4.2. For Harrow Road traffic movements remain the same but are very low.
- 4.3. The Elmsleigh Centre is by far the biggest proposal, but, because a large part of it is a retail use, which is not open to shoppers in the am peak, trips are relatively low at 109 movements. Of the 109 movements 49 would arise anyway on the wider highway network as retail provision would otherwise be made elsewhere.
- 4.4. This assessment has not considered the likely impact over time of emerging policies in the LDF to further encourage non-car based travel. Those policies would be expected to have the effect of reducing further the projected am peak movements from the sites.
- 4.5. Only in the case of the Elmsleigh Centre is there a net growth in traffic. When taken with other proposals in the town centre area (and the net impact of Elmsleigh of 60 movements), there is still a net drop in traffic movements from 149 to 140 (189 minus 49).
- 4.6. All of the proposals together result in a drop in the traffic movements from 419 to 311 in the am peak which is only 74% of existing flows from all the sites.
- 4.7. It is concluded that as a whole none of the site proposals will result in an adverse highway impact on the local highway networks of Ashford, Staines, Sunbury and Shepperton.
- 4.8. Draft 'Guidance on Transport Assessment' – August 2006, states at paragraph 2.11 that generally development typically generating less than 30 two-way peak hour vehicle trips would not require formal assessment by way of either a Transport

Statement or Transport Assessment. It is of note that of the 11 proposals assessed in the assessment, seven of the sites individually fall below this threshold and only three are above.

Appendix F

Public Transport Accessibility in Spelthorne

1. Introduction

- 1.1. The purpose of this report is to assess accessibility of public transport in Spelthorne.
- 1.2. In particular it will:
 - a) Identify existing provision.
 - b) Define for the purpose of development plan making and monitoring.
 - i. Those parts of the Borough within 30 minutes public transport travel time of a GP, hospital and primary and secondary school, employment and shopping facilities.
 - ii. Those parts of the Borough with 400 metres or five minutes walk of a half hourly bus service.
 - c) Provide a basis for assessing the relative availability and therefore sustainability in travel terms of proposals in the emerging Local Development Framework.
 - d) Areas where public transport provision might be improved.
- 1.3. Much of the evidence is set out in maps.

2. Existing Provision

- 2.1. Spelthorne is a relatively small Borough geographically being some 6 miles long and 2.5 miles wide. It has relatively compact urban areas.
- 2.2. Map 1 shows the existing network of bus routes in the Borough and also the rail network. Most of the urban area is covered by bus services.
- 2.3. There are key locations where a number of bus routes converge particularly Staines (and in particular the bus station), Ashford Hospital, Ashford (Church Road) and Sunbury Cross.

3. Access to Frequent Bus Services

- 3.1. Map 2 shows those bus routes with a half hourly frequency and the areas of the Borough within 400 metres or five minutes walk of those routes.
- 3.2. This measure of frequency is suggested by the Department of Communities and Local Government (DCLG) in the document 'Local Development Framework Monitoring: A Good Practice Guide' as a possible local output indicator to monitor the relative accessibility of new development.
- 3.3. An extensive part of the urban area of the Borough is covered by services of this frequency.
- 3.4. Frequency is considered in the context of day time services. Many services are more limited in the evenings.

4. Accessibility of Key Local Facilities by Bus Services

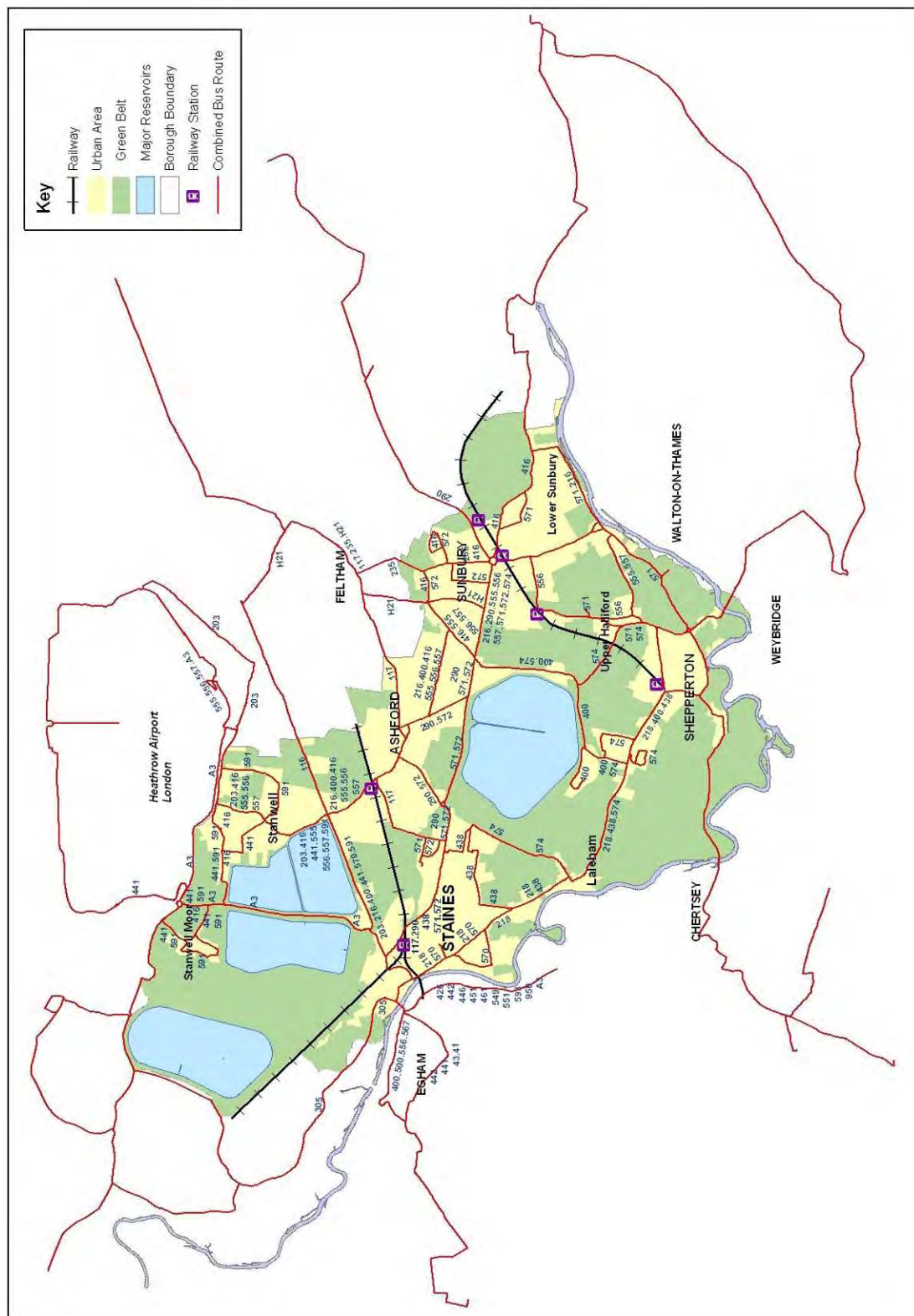
- 4.1. The guidance from DCLG referred to in paragraph 3.2 above identifies accessibility to a range of local facilities as a 'core output indicator'.
- 4.2. The measure assesses accessibility within 30 minutes public transport time of a:
 - a) GP Surgery/Health Centre (Map 3)
 - b) Hospital (Map 4)
 - c) Primary School (Map 5)
 - d) Secondary School (Map 6)
 - e) Mayor employment location (Map 7)
 - f) Shopping/Town Centre (Map 8)
- 4.3. Maps 3 to 8 show in turn the respective 30 minute travel isochrone(s) for the above. The area accessible for all of the facilities is the same as that shown for public transport 30 minute accessibility to a Hospital (Map 4)
- 4.4. The accessibility areas have been calculated on the basis of the Borough Council's own assessment of accessibility in relation to published public transport information. The information has been plotted on the Council's GIS system to produce 30 minute travel isochrones for each type of facility.
- 4.5. This approach has been used instead of the Public Transport Accessibility Model (PTAM) used by the County Council. That model uses the Accession software package. The PTAM is not an exact measure; for example it uses a coarse origin grid of 250 metre intervals and does not include school bus services. The Borough's approach uses exact travel distances and all available public transport information.
- 4.6. The Borough's approach uses the same assumptions about walking distances and speeds as the Accession model. A maximum walking distance of 0.8km as the 'crow flies' is taken but then factored by 1.2 to account for the actual walking distances. A walking speed of 4.8km per hour is used. On this basis a maximum 12 minutes walk is assumed.
- 4.7. A five minute wait is assumed for all bus services and the walking distance at the destination between the service stop and facility visited is accounted for in the 30 minute travel time.
- 4.8. Accessibility is based on day time services. Evening services are generally less frequent making some facilities much less accessible.
- 4.9. The series of maps show that for all facilities, except hospitals, bus services give a 30 minute public transport travel time from virtually all parts of the Borough. The only exceptions are the Shepperton Lock area, Felix Lane area of Shepperton, a small part of Sunbury and small part of east Ashford. Well in excess of 95% of the urban area is covered.
- 4.10. In the case of access to hospitals, the facilities at Ashford and St. Peters have been assessed. Approximately 75% of the urban area of the Borough is accessible within 30 minutes travel time. (It should be noted that for A and E services an ambulance would be expected to be called).

- 4.11. This assessment has not taken into account community transport facilities in Spelthorne.

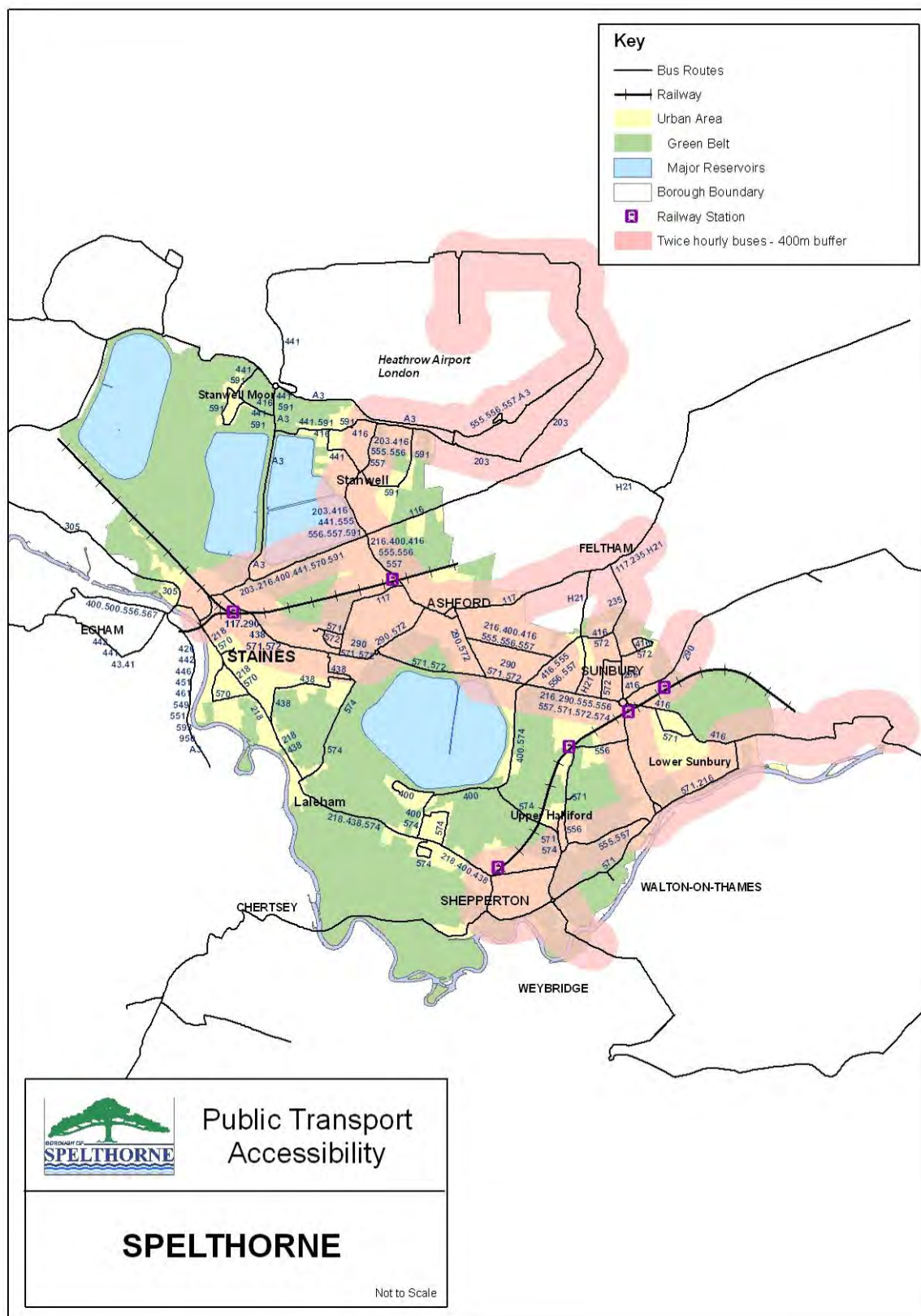
5. Assessment of Overall Public Transport Accessibility

- 5.1. The series of plans set out in this assessment record a relatively high level of accessibility to public transport from most of the urban areas of the Borough during the day time to a range of destinations including key facilities.
- 5.2. Key facilities are also accessible during the day to a large proportion of the Borough's urban area.
- 5.3. There are areas where there are less frequent services and also travel between some areas is easier than others. There is scope to improve the accessibility and frequency of services within the Borough.
- 5.4. The coverage of public transport provision provides an existing network offering non-car based travel choices to a large part of the population and scope for significant modal shift. There is also scope to improve provision.

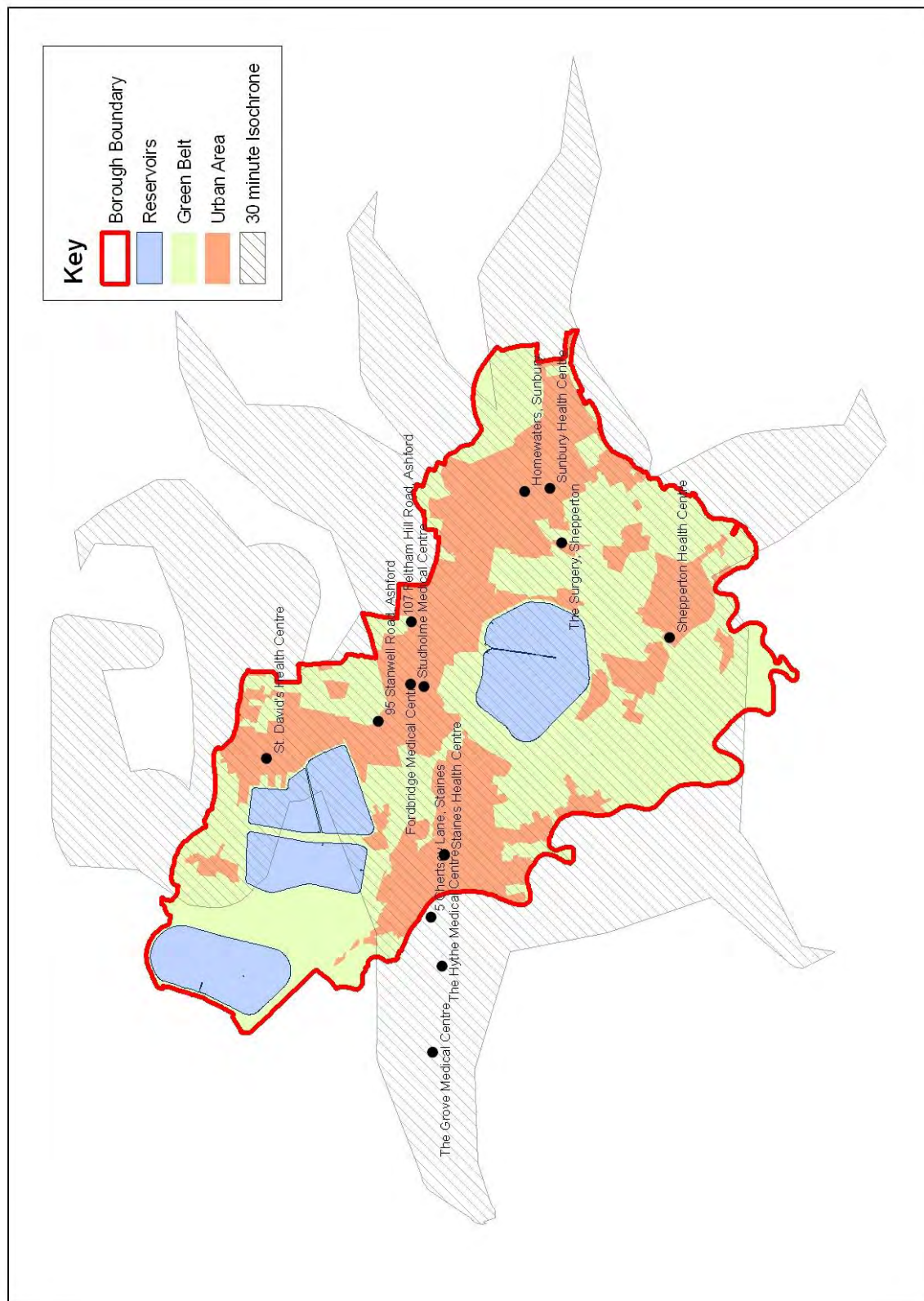
Map 1 Existing Bus and Rail Networks in the Borough

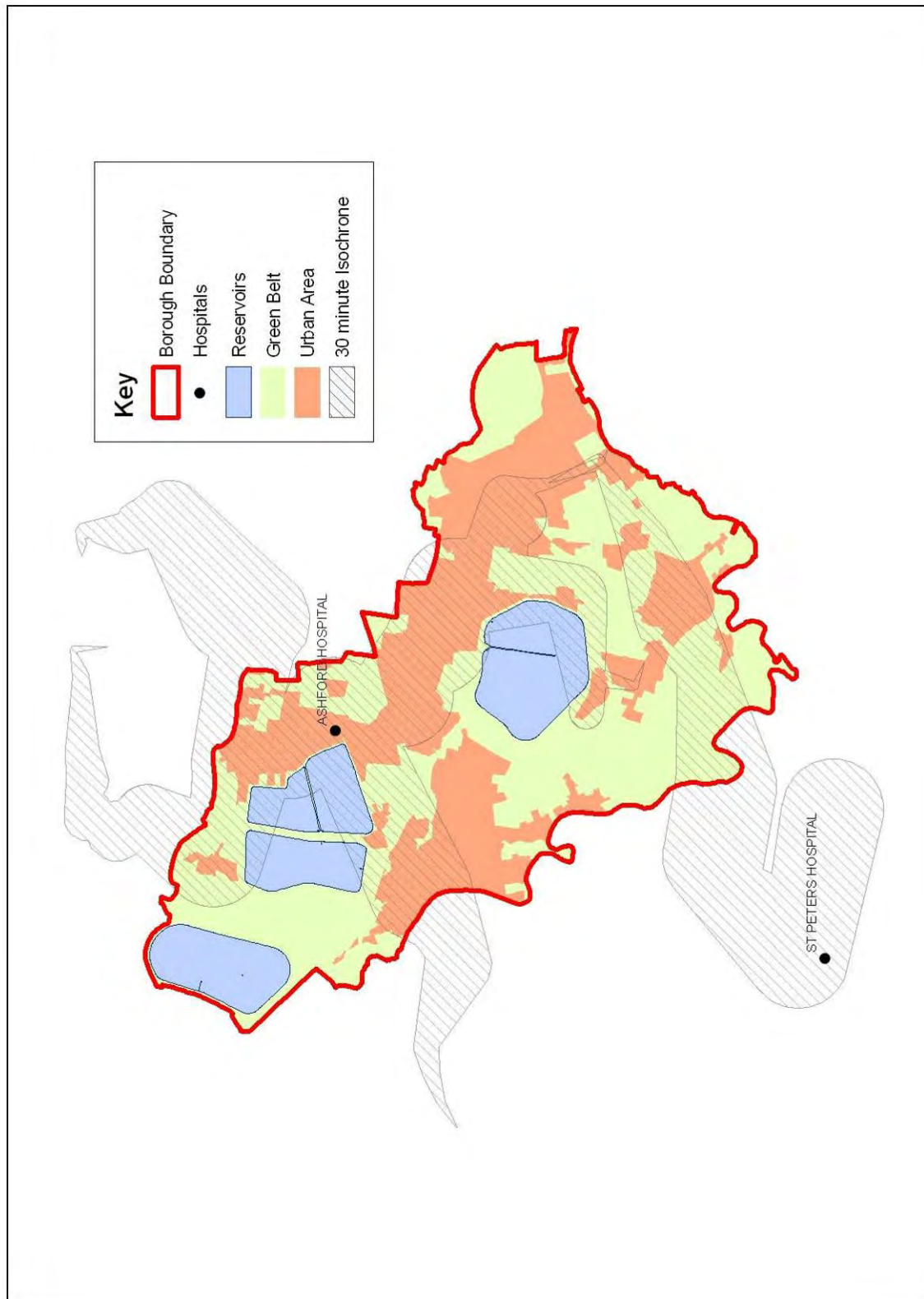


Map 2 400m buffer of twice hourly bus services in the Borough

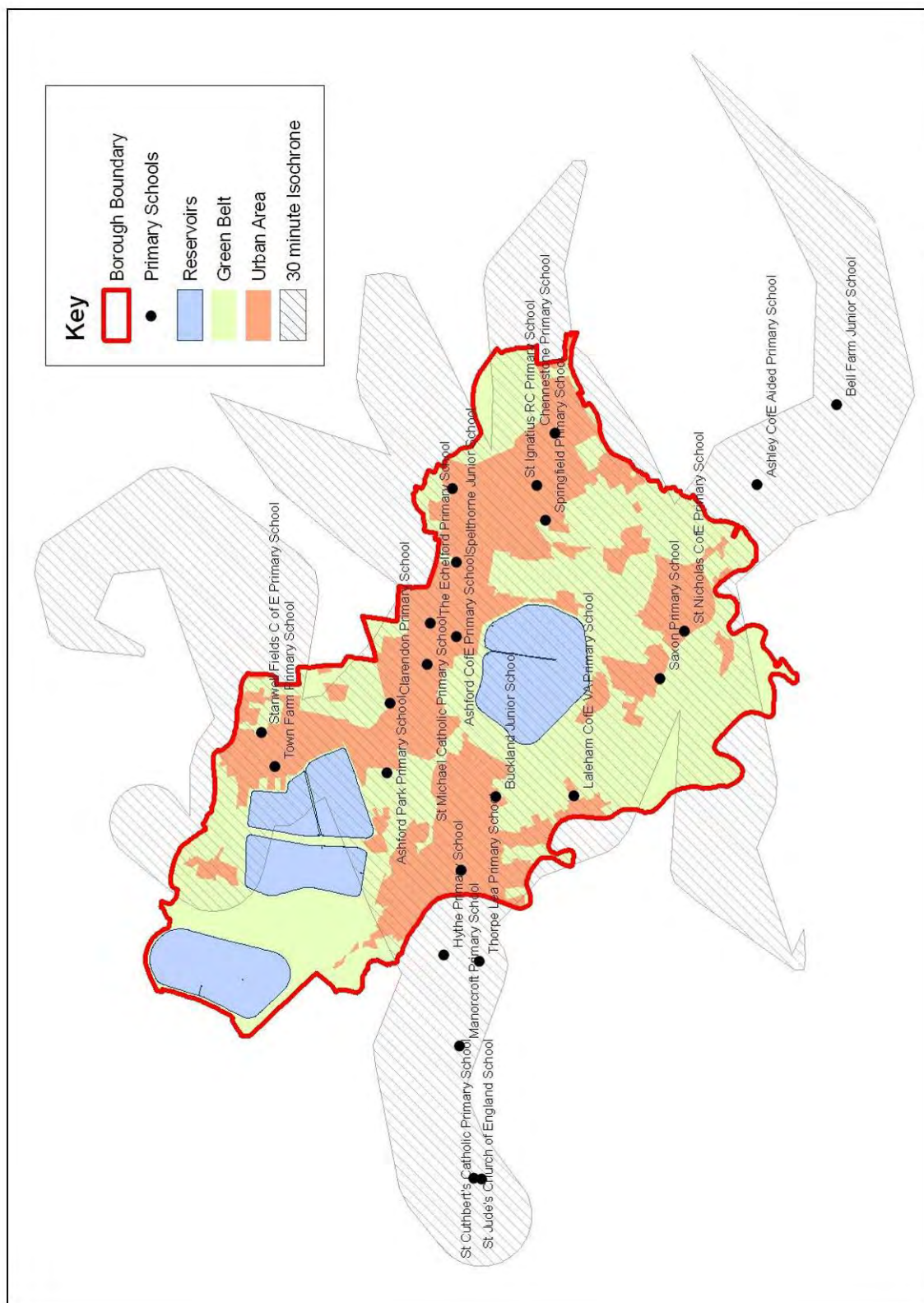


Map 3 30 minute Public Transport Accessibility to General Practitioners

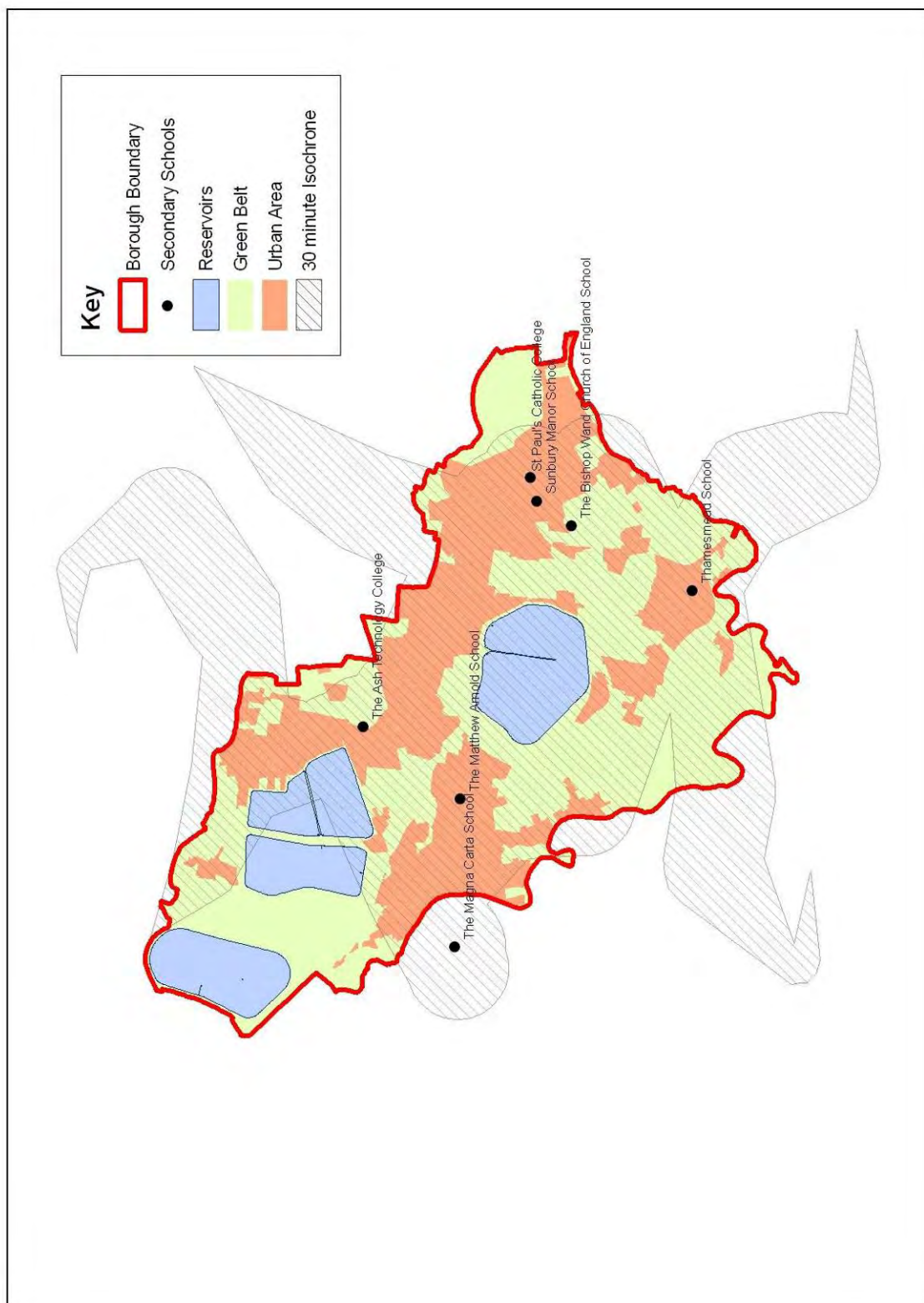


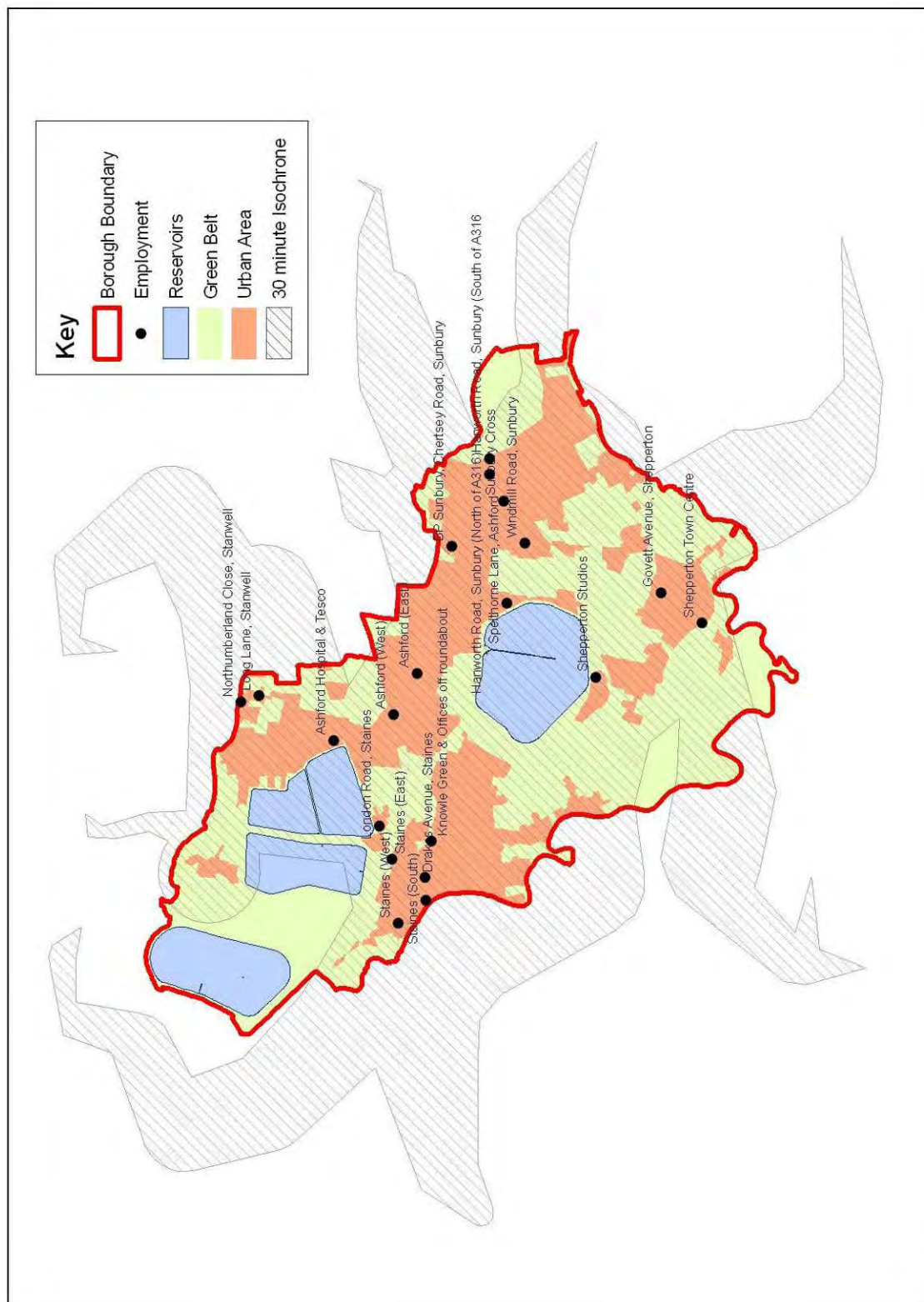
Map 4 30 minute Public Transport Accessibility to Hospitals

Map 5 30 minute Public Transport Accessibility to Primary Schools



Map 6 30 minute Public Transport Accessibility to Secondary Schools



Map 7 30 minute Public Transport Accessibility to Employment sites

Map 8 30 minute Public Transport Accessibility to Town