



Buckinghamshire County Council

Chesham and Amersham Transport Study

Feasibility Study

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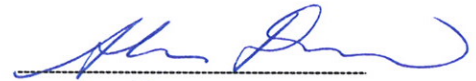
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1. INTRODUCTION

1.1 Background

- 1.1.1 The Second Local Transport Plan (LTP2) was published by Buckinghamshire County Council (BCC) in 2006. LTP2 sets out a twenty year vision for transport, and describes the authority's priorities, strategies and plans for the next five years (2006-2011). It includes a number of 'Area Action Plans' based on the three main urban areas in the county, namely Aylesbury, Wycombe and Chesham & Amersham and other smaller settlements known as natural communities.
- 1.1.2 The Area Action Plans describe how BCC will deliver transport improvements to meet the needs of the residents and road users.
- 1.1.3 The 'Chesham and Amersham Area Action plan' covers the towns of Chesham and Amersham, and the adjoining parishes including Chartridge, Cholesbury, St Leonards, The Lee, Latimer and Ashley Green, Penn, Coleshill, Chenies and Chesham Bois. This action plan is currently being revised by BCC.
- 1.1.4 The transport network in Chesham and Amersham is dominated by the local topography. Chesham is located within a valley in the Chiltern Hills. Amersham is situated at the top of a hill with the old town in a valley to the east. Both Chesham and Amersham are located within the Chiltern Area of Outstanding Natural Beauty (AONB) and are surrounded by Green Belt Land. This creates unique problems for the improvement and expansion of the existing transport network.
- 1.1.5 The Chesham and Amersham Transport Strategy (CATS) first started in 2003 with the aim to consider and tackle the significant transport challenges facing the urban area of Chesham and Amersham. Its aims were to encourage safer and more sustainable use of the transport network while preserving the natural environment across the area.
- 1.1.6 While this original study identified a number of key issues such as the lack of public transport, congestion, speeding and poor maintenance sufficient resources were not available to continue with this work.
- 1.1.7 Furthermore, LTP2 was being written with new priorities and strategies being developed for the 2006-2011 period.
- 1.1.8 With LTP2 now in place CATS has recommended drawing on information from a range of studies as indicated in Figure 1.



Figure 1: The Chesham and Amersham Transport Strategy

1.2 Project Description

- 1.2.1 Jacobs was commissioned by Buckinghamshire County Council (BCC) to undertake a feasibility stage transport study in and around Chesham and Amersham. The aims of the study were to identify transport problems in the area and present feasibility proposals to address these problems. The findings from this study will form part of the updated action plan for the area.
- 1.2.2 A plan showing the study area and the specific roads of interest within the study area is included in Appendix A. The 'boot shaped' study area was devised to ensure that the main urban areas, Chesham, Amersham and Little Chalfont were included in the study.

1.2.3 The feasibility study mainly concentrated on the following areas:

- **The A416 linking Amersham and Chesham**

The study concentrated on the length of the A416 through Amersham, Chesham Bois and Chesham and focused on identifying key problem areas and junctions that would benefit from improvements and any minor 'congestion busting' schemes.

The A416 Berkhamstead Road, between Moor Road and Vale Road, has been designated as a Priority Congestion Management Corridor (PCMC) in BCCs Local Transport Plan (LTP2). A PCMC is a congestion management that has been prioritised for action.

An assessment of the sections of the A413, A355 and A404 within the study area and their effects on the Chesham and Amersham area was also undertaken.

- **Chesham and Amersham Town Centres**

Specific issues relating to transport within the two town centres were investigated. These included issues concerning access, amenity and safety in Chesham and Amersham with particular focus on:

- Sycamore Road, Hill Avenue and Chiltern Avenue in Amersham
- The Broadway, Station Road and High Street in Chesham

This study involved looking at both the car and pedestrian environments and how people access facilities in the towns (shopping areas and the train stations) and concentrated on congestion and safety.

1.2.4 The first phase of the Chesham and Amersham Transport Study was a data collection exercise. Existing traffic data that was available was collated, site visits and observations were undertaken and a review of previously published documents was carried out. At the end of first phase Jacobs highlighted several problem areas that may benefit from further investigation.

1.2.5 The second phase involved a more detailed study of selected problem areas that were identified during the first phase of the study. Feasibility proposals were developed to address these problems.

1.2.6 This report presents the methodology and findings of the Chesham and Amersham Transport Study (CATS) 2007 carried out by Jacobs.

1.2.7 BCC have reviewed the findings and recommendations of the Chesham and Amersham Transport Study (CATS) 2007 and their response is outlined in Chapter 6.

2. METHODOLOGY

2.1 Data Collection and Analysis

2.1.1 During the first phase of CATS information that was relevant to the study area was collated. This information was obtained from a variety of sources including Jacobs Traffic Information Team, previously published documents supplied by BCC, the BCC Area Office and site visits undertaken by Jacobs.

2.1.2 This information is outlined below. A plan showing the collated traffic data is included in Appendix B.

Collision Data

2.1.3 Collision data for the 5 years to 31 October 2006 was analysed by Jacobs to try to identify any collision clusters and any trends or common collision types.

2.1.4 A table summarising the analysis is included in Appendix C. The analysis shows that:

- A large proportion of the collisions along the A416 are rear-end shunts. A rear end shunt is when one vehicle is hit from behind by another vehicle.
- A large proportion of the collisions involved pedestrians and cyclists
- A significant number of the collisions on the A416 occurred on St Mary's Way. This section of the A416 is a four lane single carriageway. This means there are two lanes in each direction of travel with no physical separation between the two directions.
- Collisions on the A416 Broad Street / Berkhamstead Road seem to be related to turning in and out of junctions and the extent of on street parking particularly near junctions.
- The majority of collisions on the A416 Amersham Road occurred either in wet conditions or at night.

Journey Time Surveys

2.1.5 Journey time surveys that were undertaken in 2006 were analysed. The journey time surveys were undertaken on the A416, A404 and A413 between the hours of 7am and 11 am. The routes of the journey time surveys are shown on the plan in Appendix B.

2.1.6 Journey time is the time taken it takes to travel from one location to another via a given route. During the survey the time is recorded at a number of designated locations along the length of the route. The same journey is repeated a number of times, usually during the peak periods, but also during the inter/off peak periods. These surveys are useful to identify the routes or sections of a route where traffic is moving slower than expected.

- 2.1.7 During the analysis particular attention was paid to sections where the variation in journey times varied greatly. The surveys show that:
- Journey times along the A416 (St Marys Way and Berkhamstead Road) through Chesham, are longer during the morning peak than they are during the off peak hours.
 - The journey time to travel between the Gore Hill roundabout and the Tesco roundabout varies between 21 seconds in the off peak and 10 minutes in the morning peak.
 - On the A416 through Amersham the time taken to travel a 0.4km section can take anywhere between 36 seconds in the off peak and 5.5 minutes in the peak hour.

- 2.1.8 The large variations in journey times between the peak and off peak hours indicate that there is congestion in a number of areas during the morning peak hour.

Junction Turning Counts

- 2.1.9 Locations where vehicle turning counts are available are shown on the plan in Appendix B. The turning counts give an indication of the volume of traffic using the network.

Speed Surveys

- 2.1.10 Speed surveys at various locations throughout the study area were analysed. Generally the measured 85th percentile speed (the speed at which 85 percent of drivers travel at or below) was greater by up to 10mph than the speed limit of the road. However the exception to this is that at safety camera sites the recorded speeds were much closer to the speed limit.
- 2.1.11 One point to note is that many of the speed surveys were undertaken prior to the Speed Limit Review proposals that were implemented in Area 4, which covers the western part of the CATS study area. A plan showing the speed limits in Area 4 is included in Appendix D.
- 2.1.12 The Speed Limit Review is an ongoing county wide process being undertaken by BCC. The county has been divided into areas that are being assessed in turn. The eastern part of the CATS study area, or east of the A416, is in Area 10 of the Speed Limit Review. A consultation relating to proposals for Area 10 is due to be held in 2008. A plan showing Area 10 is included in Appendix D.

Previously Published documentation

- 2.1.13 BCC provided information to Jacobs relating to previous studies undertaken in the study area, such as previous project reports, public consultation reports and websites which contained information relevant to this feasibility study.
- 2.1.14 A review of these documents was undertaken and a summary of this review is included in Appendix E.

Meetings and Discussions with BCC's Traffic Management South Team

2.1.15 A meeting between Jacobs and the Traffic Management South Team was held to gain any information that may be relevant to this study. Local knowledge is invaluable when identifying problem areas. The following points summarise the discussions held with the Traffic Management South Team:

- There are large traffic queues on Gore Hill in peak hours, heading north.
- Tesco has submitted a planning application to widen the entrance to their car park. The exact details are not known however modifications to the car park entrance are unlikely to impact on the wider network.
- Allocated parking in the Amersham hospital car park is not sufficient. This has led to illegal parking on the verge of Whielden Road. Parking restrictions are being implemented to displace parking on Whielden Road. This may increase the illegal parking issue on the high street.
- BCC are considering signalising the Moor Road roundabout.
- The section of Church Street in Chesham, near to its junction with the A416, is very narrow and not suitable for large vehicles. However most of the road is in good condition and wide enough for large vehicles. There is a need to assess the possibility of improving vehicle movements along the narrow section of Church Street.
- The Chartridge Lane roundabout is very busy. This could be due to rat running to and from the Aylesbury area or the traffic generated by the developments at the top of the lane.
- Pedestrianising Sycamore Road is not possible due to the required loading access to shops.
- St Mary's Way, Chesham was made two lanes both ways when the High Street was pedestrianised. The road was not widened and this has resulted in very narrow lanes in St Mary's Way.
- Rat-running throughout the whole study area was discussed. There is anecdotal evidence to suggest that there is much rat running in the study area.

Site visits

2.1.16 Jacobs' staff made multiple site visits, during which information was gathered on the physical features on the roads of interest in the study area. This information includes:

- The type and layout of roads and junctions
- The location of existing speed limits
- The location of all directional signing
- The location and type of pedestrian crossings, bus stops etc

- 2.1.17 Observations were made during these site visits to highlight any problem areas such as queuing, congestion and any safety issues. A combination of observations on foot and while driving the routes were undertaken to ensure that the perspective of these different road users was captured.
- 2.1.18 Site visits were made both in peak hours and during the off peak periods. Areas near schools were observed during the school peaks.

2.2 Problem Identification

- 2.2.1 Following the collection and analysis of the data outlined above, problem locations within the study area were identified. These problem areas are detailed below and are shown on the plan in Appendix F.

A355, Amersham Old Town - Gore Hill

- 2.2.2 Northbound queuing, down Gore Hill, was observed on the A355 up to the Tesco roundabout. The queues were observed both during the peaks and off peak. Southbound queuing was also observed between the Tesco and Gore Hill roundabouts.

A416 Chesham Road, Amersham - Junctions with Sycamore Road and the A4154 Rickmansworth Road (Boot and Slipper roundabout)

- 2.2.3 The A416/Sycamore Road junction is busy at all times. It is the main access point to the shopping area in Amersham. Sycamore Road also provides access to a number of residential households, although this is not their only access.
- 2.2.4 The provision of parking close to the shopping areas is deemed by many to be inadequate. The closest car park is the Sycamore Road car park however most of the public car parking provision is off Chiltern Avenue. Chiltern District Council are currently reviewing the provision of parking at the Sycamore Road car park with the view to increasing the number of spaces. In addition to the existing 230 spaces, the revised car park layout will have an additional 60 spaces subject to the compulsory acquisition of land.
- 2.2.5 The junction of the A416 with the A4154, known as the Boot and Slipper roundabout, is busy and often congested. There is also a safety concern relating to vehicles turning into and out of Devonshire Avenue. Devonshire Avenue does not form part of the existing roundabout junction, although it is almost opposite the splitter island for the junction. The existing right turn lane for vehicles turning into Devonshire Avenue is inadequate and queues form behind vehicles waiting to turn. Vehicles turning right out of Devonshire Avenue cause queuing through the roundabout junction.

A416, Amersham between A4154 Rickmansworth Road and Copperkins Lane

- 2.2.6 Heavy, slow moving traffic was observed along this length of the A416 and traffic was often queuing in both directions. The exact cause of the queuing was not easily identifiable.

A416 Amersham Road, near Our Ladies Convent School and Beacons School in Chesham Bois

- 2.2.7 Cars were parked on Chiltern Road and Clifton Road very close to their junctions with the A416. With cars parked too close to the A416 junctions, it is difficult for other vehicles to turn into Chiltern Road and Clifton Road and this can cause some queuing on A416 during the school drop off and pick up times.

A416 Amersham Road, between Chesham Bois and Chesham

- 2.2.8 During the site visits excessive northbound queues were observed, mainly during peak hours. The A416/Moor Road junction is particularly congested. Northbound traffic on the A416 has to give way to traffic from Moor Road at the roundabout, which may be the cause of the excessive queues. Queues were observed extending down Moor Road. There are priority signals on the southbound carriageway of the A416. These are used to stop southbound traffic, thus clearing the Moor Road queue.
- 2.2.9 There is also minor congestion at the A416/Waterside junction. Waterside leads to Latimer Road which may be being used as an alternative route for east west traffic.

B485 Church Street

- 2.2.10 Church Street is a narrow road and is unsuitable for HGV's. Parked cars and poor visibility add to the congestion along this road.

A416 St Mary's Way, between Church Street (B485) and Park Road

- 2.2.11 This stretch of the A416 near Chesham town centre is a four lane single carriageway. The lanes are narrow and this can be a particular problem for HGV's. One half of the carriageway was measured at 5.1 metres wide. The standard lane width is 3.65 metres. Reductions to lane widths are acceptable in various circumstances, however the minimum recommended lane width is 2.5 metres. This section of the A416 has a high collision record.
- 2.2.12 There is a zebra crossing at the southern end of the four lane single carriageway section. Visibility on the approaches to this crossing is particularly poor. A number of collisions involving pedestrians have been highlighted at this zebra crossing.

A416 Broad Street/ Berkhampstead Road, Chesham

- 2.2.13 Slow moving traffic was observed during peak hours in both directions along this section of the A416. Vehicles turning right into the B4505 to Bovingdon were causing queuing behind them on A416 during peak hours.
- 2.2.14 The air quality along this section of the A416 is currently being reviewed and may in due course be declared as an Air Quality Management Area by Chiltern District Council.

A404 Stanley Hill, near Amersham School (cemetery access to Salisbury Close)

- 2.2.15 Heavy traffic was observed during school drop off and pickup near Amersham School. There is a small lay-by at the front of the school; however this was full at the time of the survey. A bus was blocking the southbound traffic lane due to insufficient space in the lay-by, thereby causing queues.
- 2.2.16 Added to the traffic congestion, there are safety concerns relating to pedestrian activity. During the site visits many pedestrians were crossing the A404 at locations other than the designated pedestrian crossing near the school.

A404 White Lion Road, junction with A4154 Woodside Road

- 2.2.17 This is a busy junction with queues in all directions. The exact cause of the queues was not established, however they were observed both during the peaks and off peak. This problem may be made worse by those who may be using Plantation Road and Woodside Road to access the A404.
- 2.2.18 The nearby access to the Corinium Industrial Estate is a problem for HGVs turning from Woodside Road into Raans Road. HGVs were seen to be mounting the kerb in order to make this turn.

A404 White Lion Road

- 2.2.19 Heavy, slow moving traffic was observed along this section of the A404 between Lime Tree Walk and Lane Wood Close. This observation was made both during the peak and off peak hours.

Signage within the study area

- 2.2.20 Many of the direction signs within the study area are in poor condition. Some are signs are just dirty, and damaged. Some signs do not comply with current regulations. At the A416/A355 roundabout the direction sign for the A416 is missing. On one site visit a lorry was pulled over asking the Jacobs staff for directions. Signs that are in poor condition or missing may add to congestion in some cases.

Rat running

- 2.2.21 From discussions with the BCCs Team Leader (Traffic Management), it is clear that there is anecdotal evidence that rat-running exists in a number of locations within the CATS Study area. Because there is no detailed information to support this anecdotal evidence more detailed studies would be required to confirm the locations where rat running is occurring.

2.3 Key problem locations

- 2.3.1 Following the identification of the problem areas outlined above, it was agreed at a meeting between Jacobs, BCC and CDC that seven key locations would be investigated further. These are:

1. A413/A355 Junction (Gore Hill) – this will address the queuing identified either side of the junction
2. A404 Stanley Hill, near Amersham School – this will address the school peak hour congestion that was identified
3. A404 White Lion Road / A4154 Woodside Road Junction – this will address the congestion at the junction and along the A404
4. Amersham town centre (A416, Sycamore Road, Hill Avenue, Chiltern Road) – this will aim to address the congestion on the A416, problems at the Boot and Slipper Roundabout and congestion on Sycamore Road.
5. A416 Amersham Road, Chesham Bois – this will address the congestion on the A416 during school peaks
6. High Street / Broadway, Chesham – to address problems of parked vehicles blocking access to shops.
7. A416, Chesham between Moor Road and Vale Road – to address congestion on the A416 through Chesham

- 2.3.2 These seven locations are shown on the plan in Appendix F. Feasibility proposals for these locations have been developed and are detailed in section 4. The seven locations selected for further investigation will address most of the problems identified in the first phase of the study.

3. STAKEHOLDER MEETING

- 3.1.1 BCC arranged a meeting for selected stakeholders to discuss the current CATS study to ensure that the CATS study is focussing on the relevant issues. The meeting was held on the 14th March 2007 at the Chiltern District Council Chambers in Amersham. A list of those invited to the meeting is included in Appendix G.
- 3.1.2 Attendees included representatives from County, District, Town and Parish Councils together with representatives from other local groups. The full list of attendees has been included in Appendix G.
- 3.1.3 The primary aim was to provide stakeholders with information relating to the current CATS study and to give them the opportunity to put forward their comments and suggestions relating to transport issues in the study area, with a particular focus on the seven key problem areas outlined in section 2.3 above.
- 3.1.4 A short introductory presentation was given by BCC. A copy of the presentation, including notes, is included in Appendix G.
- 3.1.5 Drawings showing the seven identified problem locations and the feasibility proposals being considered for each location were displayed on boards. These drawings are included in Appendix G.
- 3.1.6 Stakeholder representatives were invited to write comments, concerns and suggestions on post-it notes and paste them on the drawings. Staff from Jacobs and BCC were available to respond to the queries or concerns of the Stakeholders and to discuss any issues they had.
- 3.1.7 Following the meeting the comments and suggestions were collated and reviewed. A summary of the comments received and responses to these comments is included in Appendix G. Most of the comments are being addressed by the current CATS study. Those that have not been addressed by this study have been passed to the correct teams for further development and inclusion in the development of future proposals.

4. FEASIBILITY PROPSALS

- 4.1.1 Feasibility proposals for each location have been developed and are outlined below. Plans showing these proposals are included in Appendix H. These proposals are feasibility options only and are subject to detailed investigation, analysis and design.
- 4.1.2 Cost estimates for each feasibility option are included and are summarised in section 5. These estimates are feasibility estimates only and are subject to change once the options are developed during detailed design.
- 4.1.3 BCC have reviewed the findings and recommendations of the Chesham and Amersham Transport Study (CATS) 2007 and their response is outlined in Chapter 6.

4.2 A413/A355 Junction (Gore Hill)

Drawing Number APPENDIX H/1

- 4.2.1 As outlined in section 2.2 queues were observed at this junction on all approaches. Particularly long queues were observed between this junction and the Tesco roundabout and on Gore Hill in the peak hours. BCC have previously identified this junction as a problem although no solution or strategy has been previously put forward.
- 4.2.2 Options that may address the queuing and congestion issues include the introduction of part time signals, full time signals or a dedicated left turn lanes at the A413/A355 junction.

Assessment of the Existing Junction

- 4.2.3 To enable this junction to be assessed in terms of suitability for traffic signals, the existing operation of the roundabout was assessed first using a modelling program called ARCADY.
- 4.2.4 The results of this initial assessment indicate that the existing roundabout operates well in the evening peak hour but in the morning peak it shows excessive queues forming on the A413 approach to the roundabout from the west (i.e. from Aylesbury/Beaconsfield direction). Further information about the assessment is included in Appendix I.
- 4.2.5 This initial assessment does not wholly support the observations on site, nor the suggestions made at the Stakeholder meeting that a left turn slip lane is required at the bottom of Gore Hill (A355).
- 4.2.6 It is recommended that more complex modelling of these junctions is undertaken prior to any feasibility options being progressed to preliminary and detailed design.
- 4.2.7 There is a proposal by Tesco to widen the access into their store car park. Few details about this proposal are known at this stage, however it is unlikely that any changes to the entrance to the car park will address the queuing at the A413/A355 junction.

Feasibility Options

- 4.2.8 Although the initial assessment is not conclusive regarding the exact nature of the problem, there are options available to address queuing and congestion at this junction. One or more of these options could be progressed following a more detailed study of the existing roundabout. Refer to the plan (Appendix H/1) included in Appendix H.

Modified Junction Layout

- 4.2.9 The existing roundabout layout could be modified to provide more capacity on the congested arms. This may involve constructing left turn slip lanes on the congested approaches. Suggestions to construct a left turn lane at the bottom of Gore Hill were received at the Stakeholder meeting. Further traffic modelling would be required to achieve the best junction layout. A left turn lane would cost in the order of £120,000.

Part Time Traffic Signals

- 4.2.10 Part time traffic signals could be installed at this junction. The layout of the junction would have to remain as a roundabout to ensure that it operates outside the signalised periods. If part time signals were installed there would be no pedestrian phases at the junction and existing pedestrian arrangements would remain. This option would require few physical changes to the junction and would cost in the region of £100,000.

Full Time Traffic Signals

- 4.2.11 Full time traffic signals could be installed at this junction. The junction could remain as a roundabout and be signalised. Alternatively the roundabout could be removed and the junction converted to a crossroads junction with full time traffic signals. With no work to the layout of the junction full time signals would cost the same as for the part time signals. If the roundabout were to be removed then the cost of construction of a traffic signal junction would be in the region of £350,000.
- 4.2.12 It should be noted that for any signalised junction option further investigation and modelling work would be required. An assessment of the impact on adjacent junctions should be carried out and a cost benefit analysis is also recommended. Traffic signals at this junction would have to be carefully designed and would probably be a Microprocessor Optimised Vehicle Actuation (MOVA) system.

4.3 A404 Stanley Hill, near Amersham School

Travel Plan

Drawing Number APPENDIX H/2

- 4.3.1 The problems identified on the A404 in Amersham were observed during the school peaks and are directly related to school traffic from the Amersham School. As outlined in section 2.2 vehicles were observed parking in the small layby at the front of the school which often leaves little room for buses. Many of the comments received at the Stakeholder meeting relate to inappropriate parking.
- 4.3.2 The school should be encouraged to develop a School Travel Plan. Funding may then be available to implement measures to address the problems identified through the School Travel Planning process.
- 4.3.3 Actions to address the problems identified in this report could include:
- Installing pedestrian fencing along the A404 to encourage pedestrians to cross at the designated crossing points
 - Construct a new layby at the front of the school to allow additional room for bus parking and convert the existing bus layby to a drop off point.
- 4.3.4 The pedestrian fencing is relatively inexpensive and would cost in the region of £6,000. The new layby however is a more expensive solution, made worse by the local topography. This option could cost approximately £100,000.
- 4.3.5 A review of pedestrian crossing facilities should be included if these options are to be progressed to detailed design. An additional crossing point, or relocation of the existing facilities, may be appropriate.

4.4 A404 White Lion Road / A404 Stanley Hill / A4154 Woodside Road Junction Signalisation

Drawing Number APPENDIX H/3

- 4.4.1 The problems identified at this junction were mainly related to congestion in peak hours. There are also concerns for the safety of pedestrians on the northern corner of Raans Road and Woodside Road due to Heavy Goods Vehicles often mounting the kerb when turning left into Raans Road.
- 4.4.2 Signalising this junction should be considered. By signalising the junction, the traffic flow on the A404 could be managed better. If signals were implemented here they would have to incorporate the Raans Road/Woodside Road junction as well as the A404/Woodside Road junction. The existing signalised pedestrian crossing would be removed and pedestrian movements would be incorporated into the signalised junction design.

- 4.4.3 It is recommended that further traffic modelling is undertaken to ensure that signalling this junction would in fact alleviate the queuing on the A404.
- 4.4.4 As well as the signalised junction, double yellow lines are proposed along the A404 east of the existing bus stop. Comments received at the stakeholder meeting indicated that vehicles parking on the pavement prevent pedestrian access during the school peaks.
- 4.4.5 The cost of signalling this junction, including the proposed double yellow lines on the A404 is estimated to be approximately £200,000.

4.5 Amersham Town Centre (A416, Sycamore Road, Hill Avenue, Chiltern Road)

Drawing Number APPENDIX H/4

- 4.5.1 Problems identified during the first phase of the CATS study included congestion and queuing on the A416, heavy traffic on Sycamore Road, possible rat running and safety concerns at the Boot and Slipper roundabout.
- 4.5.2 Feasibility options to address these problems include introducing a one way system in Amersham and remodelling the Boot and Slipper junction.

One Way System

- 4.5.3 Sycamore Road may benefit from pedestrianisation; however access for deliveries and residential accesses would need to be maintained. Therefore a one way system has been considered to restrict traffic movements without preventing them all together.
- 4.5.4 A one way system on Sycamore Road and Hill Avenue southbound has previously been proposed for the Amersham town centre by groups such as the Amersham Action Group. It has been under consideration since 2005, when the Draft Chesham and Amersham Urban Action Plan was produced. A one-way system is also being considered in this current CATS Study.
- 4.5.5 A one way system could be introduced on Hill Avenue and Sycamore Road. Traffic could either flow northbound or southbound. Modifications to the junctions at Oakfield Corner and Sycamore Corner would be required. At Oakfield corner the two mini roundabouts could be removed and the A416 could be physically separated from Hill Avenue and Sycamore Road. At Sycamore Corner one of the mini roundabouts at the junction of Sycamore Road and Rickmansworth Road could be removed.
- 4.5.6 A one way system would have the following advantages:
- The number of parking spaces close to the shopping areas would be increased
 - Better traffic flow on the A416 would result from modifications to Oakfield corner
 - The number of vehicles using Sycamore Road and Hill Avenue as through routes would decrease, leaving only local traffic on these roads.

- 4.5.7 The Amersham Action Group have developed proposals for a one way system in Amersham. Their proposals include tree planting on Hill Avenue, 'gateway' features for pedestrians and other streetscape improvements. This group should be involved in future developments of these feasibility proposals.
- 4.5.8 The cost of implementing a one way system with junction improvements and some hard landscaping works would be in the order of £300,000. However, it should be noted that costs will vary greatly depending on the choice and extent of hard landscaping materials.

The Boot and Slipper Roundabout (A416 Amersham Road junction with A4154 Rickmansworth Road)

- 4.5.9 Options are being considered to reduce congestion on the A416 and to improve safety for vehicles turning into and out of Devonshire Avenue. Three options are being considered to improve this junction. For all options consideration needs to be given to the relatively narrow nature of the A416 through this junction, the narrow footpaths and the fact that both the A416 and the A4154 are part of the local bus routes. Any existing accesses near the junction would be considered and would be maintained. Consultation with local residents would be undertaken prior to any of these options being progressed.

Ban Right Turns

- 4.5.10 Vehicles turning out of Devonshire Avenue often queue across the northbound exit from the roundabout. This causes vehicles to queue on the A416 and the A4154 across the roundabout. By banning right turns this would be eliminated. The splitter island could be extended to physically prevent vehicles turning right onto the A416.
- 4.5.11 Although this option is relatively inexpensive (approximately £10,000) all vehicles wanting to turn right onto the A416 or the A4154 would have to travel north and turn around at the A416/Copperkins Lane roundabout.

Cross roads junction that includes Devonshire Avenue

- 4.5.12 The existing roundabout could be removed and a crossroads junction constructed. The A416, A4154 and Devonshire Avenue would all form part of the crossroads junction. Traffic Signals would be required at this junction to ensure that all traffic movements are provided for with minimum conflict.
- 4.5.13 A signalised crossroads junction would cost approximately £150,000 to construct.

Roundabout that includes Devonshire Avenue as an arm

- 4.5.14 The existing roundabout junction could be remodelled to include Devonshire Avenue as an arm of the roundabout. This option would require further investigation, including a detailed topographical survey. A roundabout at this junction would cost in the region of £250,000 to implement.

4.6 A416 Chesham Bois

Drawing Number APPENDIX H/5

- 4.6.1 The problems identified on the A416 in Chesham Bois are directly related to school traffic from The Beacon School and Our Lady's Convent School. Both of these schools should be encouraged to develop School Travel Plans. Funding may then be available to implement measures to address the identified problems.
- 4.6.2 The problems identified relate to parking during the school peaks. Cars parked too close to the A416 on Chiltern Road and Clifton Road prevent other vehicles from being able to turn off the A416, thus causing queuing behind them.
- 4.6.3 One action could be to introduce double yellow lines on the side roads to prevent parking too close to the junctions with the A416. This could be included within the review of the Chiltern Special Parking Area.
- 4.6.4 Another option could be to make Chiltern Road and Clifton Road one way. This option could not be included in a school travel plan and would have to be progressed by the County Council.
- 4.6.5 Should either of these options be progressed consultation with local residents would be undertaken. These options would cost in the region of £1,000 for the double yellow lines, and £15,000 for installing signs for the one way system.
- 4.6.6 Many of the comments received at the Stakeholder meeting relate to inappropriate parking, speed and rat running. Many comments reinforced the observations that there are significant problems during the school peaks. Through the development of the School Travel Plans schools can identify specific problems which can then be looked at and solutions developed, in conjunction with the School Travel Planning team at BCC.

4.7 Chesham Town Centre Taxi Rank Improvements

Drawing Number APPENDIX H/5

- 4.7.1 The problems identified in Chesham Town Centre are directly related to the inadequate provision for taxi parking. The existing taxi rank provides for only around 6 vehicles at any given time. Observations on site indicate that there are significantly more taxis parking in The Broadway/High Street at any given time. Reports have been received that taxis park on double yellow lines, therefore restricting access for deliveries to the High Street and restricting turning movements for buses.
- 4.7.2 Additional taxi parking areas could be provided by removing the double yellow lines and extending the taxi rank. This is a relatively inexpensive option, although it can not be guaranteed that this would prevent all inappropriate and illegal parking. Parking restrictions need to be enforced to ensure that buses can turn without having to drive over the kerb.

- 4.7.3 By modifying the bus stop arrangements, the space available for taxi parking could be maximised. As shown on the plan in Appendix J the bus stops could be modified and a one way system for buses introduced. All vehicles would have to exit the town centre via Station Road and access to the A416 would be via East Street.
- 4.7.4 If a one way system for buses were to be progressed then modifications to the East Street/A416 junction may be necessary. The existing disabled parking provision on the High Street should remain for both options and not be reduced.
- 4.7.5 These options would cost in the region of £10,000 for the additional taxi parking areas and £50,000 for the one way bus system.

4.8 A416, Chesham between Moor Road and Vale Road

Drawing Number APPENDIX H/7

- 4.8.1 Feasibility proposals for the A416 in Chesham will be aimed at reducing congestion, maintaining safety and will help to improve the air quality in the area.
- 4.8.2 The air quality along part of this section of the A416 is currently being reviewed and may in due course be declared as an Air Quality Management Area by Chiltern District Council.
- 4.8.3 Options being considered include an Urban Traffic Control System (UTC) for A416 from Moor Road to Vale Road. UTC is a coordinated traffic signal system which allows more reactive traffic management to actual traffic flows. UTC can be used to limit the number of vehicles entering a network, only allowing in the number of vehicles that the network can actually cope with. To do this effectively may involve the signalisation of all the major routes into Chesham. This would enable the relocation of queuing traffic away from the town centre. It could also assist in the transfer of emissions from vehicles due to congestion away from sensitive areas making the area more pleasant to walk through. The signalisation of these junctions could also give better access to other road users, such as buses and cycles. For the coordination of traffic signals in UTC, the system relies on average journey times between junctions making it impractical for vehicles to speed between them.
- 4.8.4 At this stage of the study, a UTC corridor can not be guaranteed to be the most appropriate solution for Chesham town centre. Manual or video traffic count surveys will be required for all the junctions that may become signalised. Each junction will then have to be modelled individually and then as a network to see if this solution is practicable. A cost / benefit analysis should also be undertaken. The modelling of the network should be able to give an idea of the reduction in pollution levels through better management of the network.

A416 Amersham Road / Moor Road

- 4.8.5 This junction would be the start of the UTC corridor and so would become a traffic signal controlled junction. By signalling the junction, the number of vehicles entering the network at this point can be controlled and all roads leading to the junction can be given a fair amount of time. This should also assist the management of the one way system around Waterside and Moor Road. The queues on Moor Road can be managed better with a signalised junction.

Pelican Crossing on Red Lion Street

- 4.8.6 This is a major pedestrian route into Chesham High Street, which is pedestrianised, from a public car park, offices and residential properties. As such it would be expected that the crossing has high usage during peak times. On site observations showed that this crossing's red time to traffic was no greater than that of similar sized crossings and that slower pedestrians needed all the available time to cross the road. If the A416 through Chesham is turned into a UTC corridor then this crossing would be linked to any signal controlled junctions on either side of it to ensure good progression of traffic.

A416 St Mary's Way / Red Lion Street / Water Meadow

- 4.8.7 On site observations showed that a high proportion of southbound vehicles using this roundabout to do a u-turn so that they can turn left into B485 Church Street. If this junction is considered for signalisation then the A416 junction with B485 Church Street would also have to be considered.

A416 St Mary's Way / B485 Church Street

- 4.8.8 This junction is a major route in and out of the Chesham road network. Due to the barrier between north and southbound traffic on the A416, vehicles wanting to turn right into and out of the junction have to travel to the appropriate roundabout and make a u-turn. If the roundabouts are turned into traffic signal controlled junctions and therefore the u-turn facility removed, this junction will have to be signalised and a break made in the central barrier. The junction would have to be closely coordinated with the Red Lion Street junction and would regulate traffic entering the network from the southwest. Consideration should also be given to Church Street, east of the A416.

A416 St Mary's Way

- 4.8.9 This section of 4 lane single carriageway is very narrow and it was observed on site that some vehicles using the outside lane straddle the centre line between the opposing traffic. Vehicles were observed using the outside lane to bypass slow moving traffic and cutting in at the last moment to the nearside lane on the A416. This occurred at both ends of the 4 lane single carriageway section as the vehicles then exit onto Red Lion Street and Broad Street in a single lane. Vehicles were also observed speeding. It should be considered as part of more detailed analysis of the network if two narrow

lanes would still be required or if road space could be given to other users.

A416 / Park Road / Blucher Street

- 4.8.10 This is a large roundabout with zebra crossings on the southern side. Traffic appeared to flow through the roundabout well but occasionally suffered exit blocking from the zebra crossing. In principle this junction could be signalised, either by retaining the roundabout or re-engineering the junction. If signalised, the zebra crossings would be replaced by pedestrian facilities within the junction. This junction would regulate traffic joining the network from the northwest.

Star Yard Car Park

- 4.8.11 On site observations showed that this was a well used crossing during the morning peak by school children going to Chesham Park School. A number of parents were observed dropping their children off in the Star Yard car park for them to walk up to the secondary school. Pedestrians approaching the Zebra Crossings from the High Street have either to walk through the Star Yard car park or walk over the grass verge on the southern side of Blucher Street. This area of grass verge should be converted to footway for pedestrians so they do not conflict with vehicles in the car park. The conversion of the verge to footway could be implemented in advance of the UTC being progressed and would cost in the region of £2500.

A416 / Bellingdon Road

- 4.8.12 It was noted on site that vehicles wanting to turn right towards Amersham from Bellingdon Road are required to turn left towards Ashley Green and make a u-turn at the A416 / White Hill roundabout. Bellingdon Road serves quite a large number of houses as it leads onto Asheridge Road and if signalised could provide more coordinated access to the network for these residents. If the A416 / White Hill roundabout is signalised as part of a UTC route and a U turn facility is maintained for the Sainsbury's delivery vehicles, then this junction does not have to be signalised; but signalising this junction would be advantageous for route management.

A416 Broad Street / White Hill

- 4.8.13 This roundabout serves as a feeder for traffic, from the east, from Botley and Ley Hill and also the northern end of Chesham High Street. There is a dual Pelican crossing located to the south of the roundabout. On the A416 southbound at the roundabout three narrow lanes have been provided and it was observed that they were not used to their full potential. This junction could be signalised but further traffic counts and modelling will have to be carried out to see if it is practicable to do so. Consideration would have to be given to The Elgiva theatre and the shops at the junction on Broad St. In addition there are vehicles that currently turn left out of Bellingdon Road and do a u-turn at the roundabout. Sainsbury's delivery vehicles are also required to do a u-turn at this roundabout. Therefore some form of U turn facility would have to be provided if the junction was signalised.

A416 Broad Street / B4505 Eskdale Ave / Sunnyside Road

- 4.8.14 This junction is one of the main routes into Chesham from Hemel Hempstead. To provide consistency and control over the network this junction would be controlled via traffic signals.

A416 Berkhamstead Road/ Addison Road / Britannia Road

- 4.8.15 It was noted that this junction has a number of collision incidents. Although from a traffic management view the signalisation of this junction may not normally be considered, due to the nature of the incidents it may be appropriate in this case. Further assessment of this junction is required not just for traffic management but also from a road safety perspective.

Vale Road / A416 Nashleigh Hill / A416 Berkhamstead Road

- 4.8.16 This junction gives the impression of being a natural starting point for the UTC corridor from the north and would enable the control of traffic into the network from there. It has been observed that the petrol station on the corner of Vale Road and A416 Nashleigh Hill is subject to abuse by motorists from Vale Road who are using the forecourt as a cut through to A416 Nashleigh Hill. In signalising this junction access to the garage would have to be considered as part of any works. Queuing at this junction may cause rat-running along Severalls Ave to Alexandra Road enabling traffic from the northeast to bypass the traffic on the A416 Berkhamstead Road. Some form of traffic management may therefore also be required at the A416 / Alexandra Road junction.
- 4.8.17 The cost of implementing a UTC system along this section of the A416 will be in the region of £1,500,000.

5. COSTS OF FEASIBILITY PROPOSALS

- 5.1.1 The following table provides a summary of the approximate works costs of the feasibility options. These estimates are feasibility estimates only and are subject to change once the options are developed during detailed design. The estimates do not include for any modifications to statutory undertakers plant, design fees, supervision fees or other costs that may be incurred by the County Council such as land costs, legal costs and surveys.

5.1.2 Where more than one option is given for a location then only one of these options would be implemented.

Location	Feasibility Proposal	Approximate Cost (£)
Gore Hill Roundabout	Modified Junction Layout (left turn lane at bottom of Gore Hill)	£120,000
	Part Time Traffic Signals (roundabout Junction)	£100,000
	Full Time Traffic Signals (roundabout Junction)	£100,000
	Full Time Traffic Signals (with roundabout removed)	£350,000
Amersham Town Centre	One Way System, including modifications to junctions at Sycamore Corner and Oakfield Corner	£300,000
	Ban right turns from Devonshire Avenue	£10,000
	Remodel Boot and Slipper roundabout to include Devonshire Avenue as an arm of the junction	£250,000
	Convert the Boot and Slipper roundabout to a signalised crossroads junction and include Devonshire Avenue.	£100,000
A416, Chesham Bois	Convert Chiltern Road and Clifton Road to one-way roads	£15,000
	Introduce double yellow lines on Chiltern Road and Clifton Road	£1,000
A416, Chesham between Moor Road and Vale Road	Urban Traffic Control corridor (10 signalised junctions)	£1,500,000
	Footpath near Star Yard Car Park	£2500
Chesham Town Centre	Additional Taxi Parking Provision	£10,000
	One Way Bus System	£50,000
A404, near Amersham School	Pedestrian Fencing only	£5000
	New layby and pedestrian fencing	£100,000
A404/A4154 junction	Remove two mini roundabouts and construct one Traffic Signal Junction	£200,000
Throughout the Study Area	Maintain signs and replace missing or damaged signs	£50/sign to clean a sign Between £200 - £1200/sign to replace a sign Total Cost dependant on number of signs

6. **RECCOMENDATION**

- 6.1.1 Following consideration of the draft report BCC have made recommendations for future work. These recommendations are outlined in the following table.

- Key:**
- Proposals supported by BCC and work being progressed
 - Proposals supported by BCC but work progression subject to resources and funding
 - Proposals not supported by BCC / work not to be progressed

Feasibility Proposal	Does the proposal meet the Second Local Transport Plan Strategic Objectives?					Customer Feedback (From Transport Matters Event 2005 and Stakeholder Meeting held on 14 th March 2007)	BCC Recommendation
	Enhancing Accessibility	Tackling Congestion	Improving the Environment	Improving Safety	Managing & Maintaining the Transport Asset		
A413 / A355 Junction (Gore Hill)							
Modified Junction Layout (left turn lane at the bottom of Gore Hill)	✘	✓	✘	✘	✘	<ul style="list-style-type: none"> ▪ Put in dedicated left hand turn lane down from Gore Hill on to the bypass west. ▪ Consider a slip road from Gore Hill left on to the A413. ▪ Consider foot of Gore Hill. Signals may increase air pollution. ▪ Queues at A404 and A413 junction coming into Amersham at peak times ▪ If people choose to travel by car in peak times, why shouldn't they have a slow journey? 	Further consideration has shown that a dedicated left hand lane onto the A413 west from Gore Hill is unlikely to alleviate traffic queues. The dominant traffic flow is along the A413 so cars travelling northbound and wishing to turn left would still have to give way to the dominant flow. Issues of merging cars from Gore Hill onto the A413 may also raise safety concerns. Therefore no further work will be undertaken on this proposal.
Part Time Signals (roundabout junction)	✘	✓	✓	✘	✘		The part time signalisation in peak hours of this junction would aim to alleviate the peak time traffic queues identified within the report, while allowing the free flow of traffic at other times. Subject to funding, further investigation into this option, including modelling work, would need to be undertaken to realise the cost / benefit ratio.
Full Time Signals (roundabout junction)	✘	✓	✓	✘	✘		The full time signalisation of this junction has never been an aspiration of BCC. The high cost/ low benefit ratio of signalising the junction means that this is not a viable option.
Full Time Signals (with roundabout removed)	✘	✓	✓	✘	✘		
A404 Near Amersham School							
Pedestrian fencing only	✘	✘	✘	On the east side of Stanley Hill pedestrian fencing may encourage pedestrians to use the crossing point. It would not improve safety for pedestrians if installed on the west side of Stanley Hill.	✘	<ul style="list-style-type: none"> ▪ "School run" parents park in and block Stanley Hill Avenue ▪ Promote car sharing; give rewards to schools for this ▪ A problem is teachers sometimes not telling parents not to park. Sometimes buses cannot fit into the school lay by. The problem here could be solved by a modal shift to buses etc from car use ▪ Enforcement needed to apply restrictions. Restrictions must be reconsidered for adjacent streets/roads ▪ Prevent cars parking on road alongside wood below school ▪ Cars park on the street on school days. Very dangerous, against field and wood. Cyclists coming down hill risk car doors opening just in front of them. 	The implementation of pedestrian fencing on the western side of the A404 Stanley Hill is not supported by BCC. Access would have to be allowed into the properties on this side of the road and would therefore allow pedestrians to use these accesses as a means of crossing the road. This would not therefore encourage pedestrians to use the existing signalised pedestrian crossing. Pedestrian fencing may be suitable on the eastern side of A404 Stanley Hill to encourage pedestrians leaving the school site to use the pedestrian crossing.
New lay-by and pedestrian fencing	✘	✓	✘	See above.	✘		The issue of buses causing congestion and safety concerns was raised within the Jacobs report. The proposal for a new lay by would have to take into account issues of land ownership as the land does not belong to BCC.

Feasibility Proposal	Does the proposal meet the Second Local Transport Plan Strategic Objectives?					Customer Feedback (From Transport Matters Event 2005 and Stakeholder Meeting held on 14 th March 2007)	BCC Recommendation
	Enhancing Accessibility	Tackling Congestion	Improving the Environment	Improving Safety	Managing & Maintaining the Transport Asset		
							The Amersham School have recently started developing a School Travel Plan, which aims to reduce car use on the school run, and thereby tackle congestion, and to encourage modal shift on the school run. As part of the School Travel Plan process the school will identify issues relating to school travel and will work with BCC officers to develop solutions to these problems.
A404 / A4154 Junction							
Remove two mini roundabouts and construct one Traffic Signal Junction	✗	To be further investigated.	✗	✓ (The re-positioning of the pedestrian crossings may improve safety for pedestrians)	✗	<ul style="list-style-type: none"> Woodside Road – Is it not the only route to Chesham / Amersham from Little Chalfont rather than a rat run? If traffic on Woodside Road gives way to side traffic, it would make a difference. Or install filter lights prior to Plantation Road and other side of bridge on A404 Parents parking from Lime Tree Walk to and around corner of Stanley Hill, mostly on the pavement, preventing access to school with pushchairs A404 – need to have junctions reassessed and if improvements are needed we should have the roundabouts replaced with a fully signalised junction to create free flowing traffic 	<p>There is no collision record at this junction and BCC do not, at this moment, have an aspiration to signalise the junction. The benefits of signalising the junction would have to be proved through further investigation work, including modelling work.</p> <p>Issues relating to school traffic could be addressed through the school travel plans of the individual schools involved.</p>
Amersham Town Centre							
One Way System, including modifications to junctions at Sycamore Corner, and Oakfield Corner	✓	✓	✓	✓	✗	<ul style="list-style-type: none"> One-way system in the town centre is an excellent idea. One-way system to go southbound towards Chesham Road / Oakfield Corner on Sycamore Road with increased on street parking. One-way system would need to be combined with limiting turning movements at Oakfield Corner. Along with one-way system, only have dedicated parking in Sycamore Road for disabled and parent with children spaces One-way system through High Street is an excellent idea, especially if on road parking is increased. Good for revitalisation. Loading vans is a problem on the main High Street. Need to be very early or very late i.e. after 6pm 	Further work would need to be undertaken to determine the feasibility of this proposal and the work involved. Further work would also be needed to determine the most appropriate direction of traffic flow (north or southbound). Issues regarding routing of buses and access arrangements (e.g. deliveries for local businesses) would have to be addressed. If external funding were available this could be investigated further.

Chesham and Amersham Transport Study 2007
Buckinghamshire County Council Table of Recommendations

Feasibility Proposal	Does the proposal meet the Second Local Transport Plan Strategic Objectives?					Customer Feedback (From Transport Matters Event 2005 and Stakeholder Meeting held on 14 th March 2007)	BCC Recommendation
	Enhancing Accessibility	Tackling Congestion	Improving the Environment	Improving Safety	Managing & Maintaining the Transport Asset		
Ban right turns from Devonshire Avenue	✗	✗	✗	✓	✗	<ul style="list-style-type: none"> Boot & Slipper roundabout needs improvements. It is difficult and dangerous to come out from the Devonshire Avenue. Roundabout has got busier due to the car wash and will be worse after the new housing developments. 	While removing the traffic queues through the junction, caused by vehicles turning right out of Devonshire Avenue, this proposal would not reduce congestion on the A416 and would encourage vehicles to travel north and turn around using the roundabout. This proposal is therefore not supported by BCC.
Remodel Boot and Slipper roundabout to include Devonshire Avenue as an arm of a junction	✗	✓	✗	✓	✗		As these proposals do not meet all the strategic objectives of the LTP2 it is unlikely that these proposals would be considered a priority and therefore it is unlikely that BCC funding would be available for implementation. However if third party funding could be found and subject to further feasibility work, these proposals are supported in principal.
Convert the Boot and Slipper roundabout to a signalised crossroads junction and include Devonshire Avenue	✗	✓	✗	✓	✗		
A416 Chesham Bois							
Convert Chiltern Road and Clifton Road to one-way roads	✗	✓	✗	✗	✗	<ul style="list-style-type: none"> Lack of comments concerning congestion and safety outside of Our Lady's School and The Beacon School Numerous comments regarding safety and congestion in the vicinity of Chesham Bois C of E Combined School 	There are concerns with the creation of a one-way system in Chiltern Road and Clifton Road as this may encourage cars to speed and /or use it as a short cut if there is congestion on the A416. This type of engineering would not be supported through a School Travel Plan. Consultation would also have to be undertaken to assess the impact on local residents. As these proposals do not meet all of the strategic objectives of the LTP it is unlikely that these proposals would be taken forward.
Introduce double yellow lines on Chiltern Road and Clifton Road	✗	✓	✗	✓	✗		The issue of cars parking too close to the junctions of Chiltern Road and Clifton Road and the A416 and causing an obstruction is an issue of enforcement for the police, as there are no double yellow lines present. These proposals have been passed on to the Parking Team at BCC to be included in the review of the Chiltern Special Parking Area. If this problem is identified through the Travel Plans of the schools involved, then solutions to address this problem can be developed.
							The Beacon School has recently submitted a planning application with a condition that they develop their School Travel Plan. This will enable BCC to work with the school to develop ways of tackling any problems identified by the school with regards to school traffic and safety concerns.
Chesham Town Centre							
Additional Taxi Parking Provision	✓	✓	✗	✓	✗	<ul style="list-style-type: none"> Need licensing to encourage taxi drivers to wait sensibly, including warnings and removal of licenses Need enforcement of existing rules on speed and waiting taxis, not more rules Taxis also jam bus stops. Taxis 	BCC support the proposal of providing additional taxi rank facilities within Chesham town centre. Lack of availability of funding for evening bus services, mean that taxis form an important part of our integrated transport network. The impact on the parking capacity for buses in The Broadway by an increase in taxi parking would have to be addressed. The progression of this work would be subject to resources.

Feasibility Proposal	Does the proposal meet the Second Local Transport Plan Strategic Objectives?					Customer Feedback (From Transport Matters Event 2005 and Stakeholder Meeting held on 14 th March 2007)	BCC Recommendation
	Enhancing Accessibility	Tackling Congestion	Improving the Environment	Improving Safety	Managing & Maintaining the Transport Asset		
One Way Bus System	Would depend on impact on bus services i.e. if re-routing was needed	✓	✗	✓	✗	seem uncoordinated, so individual drivers fear to lose place in the rank. Better evening bus service would reduce the need for more taxis.	The proposal for a one-way system within Chesham town centre would have to be investigated further to see what impact this would have on existing and future bus services, with regards to routing and capacity requirements. The progression of this work would be subject to resources.
Moor Road to Vale Road, Chesham							
Urban Traffic Control corridor (10 signalised junctions)	✓	✓	✓	✓	✓	<ul style="list-style-type: none"> A416 Broad Street – poor maintenance, water mains collapsing. Makes it almost one lane due to flooding. A416 / Eskdale Avenue junction needs signalising Make St. Mary's Way three lanes, two northbound and one southbound A416 / Vale Road – northbound is quite congested around 8am, southbound totally congested around 9am. Traffic is cutting through garage. Industrial sites on Asheridge Road and Bellingdon Road have lead to lorries on Berkhamstead Road There is a major issues of congestion on the A416 through Chesham and on approach to town 	The A416 through Amersham and Chesham was declared a Priority Congestion Management Corridor within the Second Local Transport Plan. This means that BCC are committed to tackling congestion along this route. One way of doing this could be to introduce an Urban Traffic Control (UTC) system along the route, which involves controlling traffic flows through linked traffic signals. The feasibility proposal put forward within CATS 2007 includes the introduction of UTC between Moor Road to Vale Road, Chesham along the A416. The proposal meets the strategic objectives of the LTP2 and consequently BCC have begun to investigate this proposal further. However the high cost of implementing UTC means that external funding would have to be found.
Creation of footpath near Star Yard Car Park	✓	✗	✗	✓	✗	<ul style="list-style-type: none"> Dangerous pedestrian access from Lowndes Park across the Star Yard car park to toilets and town centre 	Subject to further feasibility work, including a safety audit, BCC support the proposal for the introduction of this footway, to improve both accessibility and safety for pedestrians. This scheme has been submitted to BCC's Scheme Assessment Matrix for assessment for funding.
Throughout the study area							
Maintain signs and replace missing or damaged signs	✓	✓	✓	✓	✓		This work is the responsibility of BCC's Area Traffic Management Teams, who carry out regular checks on signing through the Local Area Technician. This process will continue but any works are subject to available funding.

- APPENDIX A – Study area and Routes of Interest
 - APPENDIX B – Plan Showing Collated Traffic Data
 - APPENDIX C – Summary of Collision Statistics
 - APPENDIX D – Speed Limit Area Review Plans
 - APPENDIX E – Published Information Review
 - APPENDIX F – Identified Problems and Key Problem Locations
 - APPENDIX G – Stakeholder Meeting
 - APPENDIX H – Feasibility Proposals
 - APPENDIX I – ARCADY Assessment of the Existing A413/A355 Roundabout
-