Cherwell District Council and Oxfordshire County Council

Banbury Integrated Transport and Land Use Study

Stage One Report and Background Papers

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1.1 *Introduction*

1.1.1 This summary report is the output from the first stage of the Banbury Integrated Transport and Land Use Study (BITLUS) which had been commissioned from Llewelyn-Davies and Oscar Faber by Oxfordshire County Council and Cherwell District Council.

1.1.2 The aims of Stage 1 were to:

- explore and clarify the draft objectives of the study as set out in the brief. These need to be agreed before Stage 2 work can commence;
- to generate an understanding of Banbury's transport system and the problems for different modes; and
- to investigate local people's views of travel to and within Banbury and identify key issues.

1.1.3 Stage 1 of BITLUS involved a number of pieces of work as follows:

- consultation with representatives of local groups to investigate their perceptions of key issues;
- a review of current data and studies;
- the design and dispatch of a household questionnaire; and
- physical surveys of the town's travel infrastructure including roads, cycle ways and footways.

1.1.4 Each of these pieces of work is the subject of background papers which are attached. This summary report contains a brief review of the key issues and findings highlighted by each area of work (Sections 1.2 – 1.5).

1.1.5 The report then goes to set out the revised objectives for the study (Section 1.6). **Agreement to these objectives is the first key task for the Steering Group in Stage 1.**

1.1.6 Section 1.7 sets out five issues which the Stage 1 work suggests require early consideration. A focus on some or all of these issues could change the shape of the study considerably. **A decision on the importance placed on the six issues is the second key task for the Steering Group in Stage 1.**

1.2 *Consultation with local groups*

1.2.1 *Perception of changes over time*

1.2.2 The key factors that consultees noted about changes in travel in Banbury since the 1950s were:

- the growth of the town, both in residential and commercial terms;
- more commuting from the villages to Banbury and more longer distance travel generally;
- increased car use and traffic congestion; and
- declining bus services.

1.2.3 The impact of the M40 was perceived to be mixed with some people feeling it has reduced traffic in Banbury while others felt that the M40 has channelled traffic through the town.

1.2.4 *Key issues*

1.2.5 There were a number of groups of key issues which were raised by the consultation exercises. They are set out below broadly in their perceived order of importance:

- public transport:
  - rural buses – the frequency of services, the lack of evening and weekend services and the possible improvements to the allocation of the new rural bus resources;
  - town services – the frequency and reliability of services, the lack of evening and weekend services in some areas;
  - the bus/rail interchange – the lack of facilities for interchanging between the bus and the train;
- traffic congestion:
  - Hennef Way – congestion at the eastern access to the town on Hennef Way and adjoining streets;
  - congestion caused by giving children lifts to school;

    - the impact of the M40 – different views in terms of reducing congestion and increasing traffic through the town;

- the town centre:
    - encouraging people to live in the town centre;
    - providing appropriate conditions for the town to prosper including providing adequate parking;
    - the need for pedestrianisation of Market Place and Parson's Street;
    - town centre visitors parking in residential streets to avoid parking charges;
- future development of Banbury:
    - designing new development so that it encourages people to walk, cycle or take the bus or train;
    - including local shops and facilities in new residential development; and
    - regenerating the area around the station.

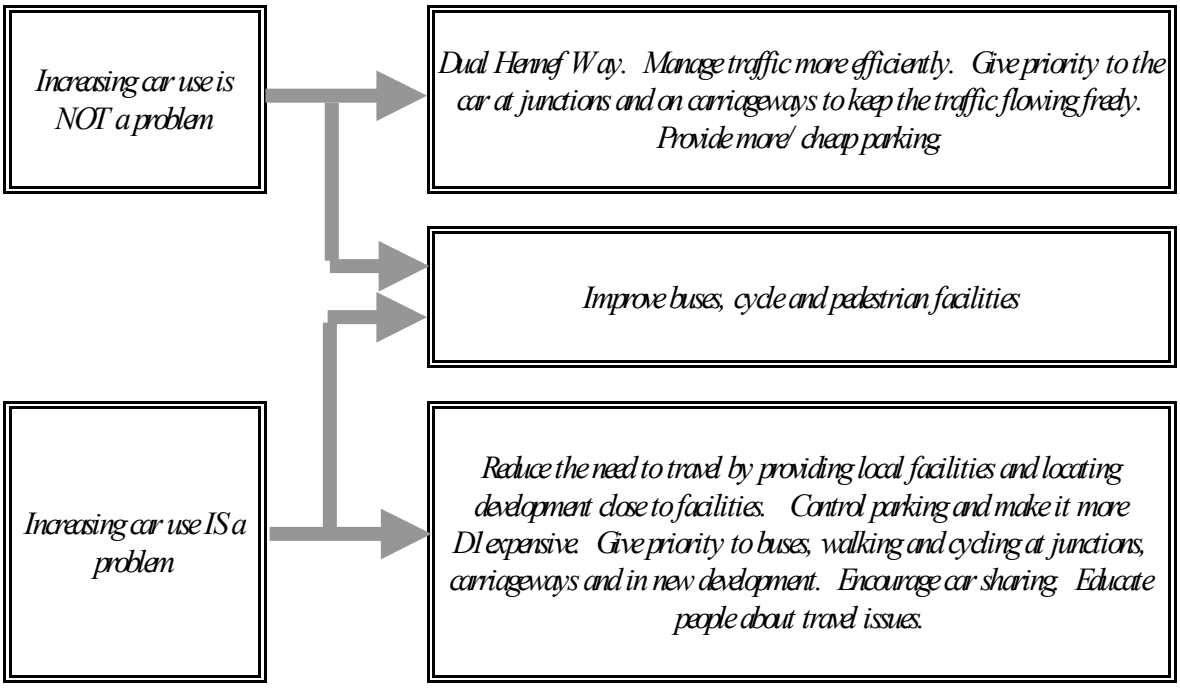
1.2.6 Other issues were mentioned but were perceived to be less important. These included provision of improved facilities for cyclists and pedestrians and safety issues.

1.2.7 Noise and air pollution were generally not perceived to be important issues in Banbury.

1.2.8 *Solutions*

1.2.9 The consultees suggested a range of solutions to the issues they identified. These fell broadly into two approaches as shown in Figure 1.1.

Figure 1.1: Approaches to solving travel problems



1.3 *Review of data and studies*

1.3.1 The review of data has raised a number of key issues. These can be summarised as follows:

- travel in Banbury:
  - travel to and within Banbury is dominated by the car and this dominance is increasing. This is less true of trips made within the town, where walking accounts for a significant proportion of journeys. Use of the train, buses, motorcycles and bicycles account for very limited proportions of travel in the town;

- commuting into Banbury for work is more important than commuting out of Banbury. Through vehicular traffic accounts for less than a fifth of peak hour traffic;

- vehicular traffic:
  - traffic congestion is most serious in peak hours on Hennef Way and is a less significant problem at junctions of arterial roads thoughout the town. Many of these routes are older roads lined by mixed use development which should function as "mixed priority" roads rather than as traffic routes as they do at the moment. These are also the routes where many accidents occur;

  - traffic relief provided by the M40 and the Inner Relief Road is being eroded by growth in car travel and flows on some links have returned to their earlier levels. The current high flows on the town's north-south route (North and South Bar and through the Cross) show that this key historic route has not benefited from the new roads;

  - modelling of forecast traffic growth to 2001 showed that dualling Hennef Way will do little to relieve queues on this route;

  - national transport policy is developing rapidly and measures to reduce car use are increasingly emphasised;

- parking:
  - use of the town centre car parks has grown steadily in recent years. Traffic modelling suggests that parking restraint in the town centre could lead to reductions in traffic queues throughout the town. The test assumed that the restrained trips would be replaced by trips by other modes such as park and ride from the M40 junction;

  - provision of parking for new development is being reviewed at the regional level and may mean that the Council's approach needs to be revised;

  - the relationship between provision of town centre parking and economic vitality is difficult to assess. There are many examples of successful towns and cities with restricted

parking. Increases in parking charges do not appear to put off town centre visitors;

- public transport:
  - modelling suggests that introducing bus priority measures in the town could have a significant impact on reducing traffic queues;
  - Quality Partnerships with bus operators can lead to dramatic improvements to services;
- public awareness campaigns are key parts of an integrated approach to tackling transport issues. Safe routes to school schemes and green commuter plans are important mechanisms for raising awareness. CDC could lead the way in implementing a green commuter plan;
- Banbury's urban design study included some useful ideas about treatment of key routes and strategies for "mending the holes" in the town centre; and
- investigation of the potential for developing housing on inner urban sites will be a key part of the Council's exploration of the most suitable locations for new housing.

1.4 *Household questionnaire*

1.4.1 The household questionnaire was designed primarily to collect travel data but also to explore people's views about travel in and to Banbury and their views on use of the car. 10,000 questionnaires were dispatched to 5,000 households. The response to date has been disappointing. In order to make the most effective use of the survey, the representativeness of the responses will be checked against the Census and other data. Decisions will then be made as to the statistical validity of the factual and attitude components of the total response.

1.5 *Physical surveys of the town's travel infrastructure*

1.5.1 The key issues highlighted by the infrastructure survey were:

- many of the "mixed priority areas" on the arterial routes to and through the town currently give priority to motorised traffic, while other activities in these spaces are treated as secondary;
- the draft cycle network is based on the most direct links from the residential areas to the town centre. There are steep slopes on routes to many of the residential areas from the town centre. Cycling in these hilly locations is unlikely to be an important travel mode. Investment in cycle infrastructure should focus on the flatter areas where cycling is most likely to be comfortable for a wide cross section of people. Key issues on the cycle network were identified as being:
  - conflict with traffic on arterial routes;
  - conflict with pedestrians on routes where these two modes share space; and
  - lack of provision for cyclists at junctions to the town centre and within the town centre.
- the key issues on the pedestrian networks were identified as being:
  - junctions on the edge of the town centre which are inconvenient, uncomfortable and present an unattractive gateway to the pedestrian;
  - the lack of crossing facilities on busy routes with fast flowing traffic;
  - conflict between traffic and pedestrians particularly in the town centre; and
  - poorly overlooked foot paths in new housing development areas.

1.6 *Study objectives*

1.6.1 This section provides an appraisal of the aims and objectives related to the BITLUS. An initial set of aims and study objectives was provided by the study Brief (section 5). We have reviewed these in the light of consultations and our own studies to date.

1.6.2 We have attempted to distinguish between two types of aims and objectives:

- basic objectives – these are overall aims for transport in Banbury which have been related to the DETR headline appraisal; and
- operational objectives – these explore the basic objectives in more detail, setting out specific aims.

1.6.3 The draft operational objectives are based on, but go further than, the bulleted items in 5.2 of the study brief, and are suggested as the framework for testing policies and proposals in Stage 2 of the study. The objectives are set out in Table 1.1.

Table 1.1: BITLUS objectives

Headline Criteria	Basic objectives	Draft operational objectives for 2010 (Targets to be developed)
ACCESS	• Reduce reliance on the car • Ensure access to facilities for those without cars	• Local facilities within reach of all residents (draft proximity target to be reviewed) • Buses both comfortable and accessible • Key walking routes meet the "5Cs" to town centre, schools and employment areas • Key cycle routes to meet similar criteria, especially between home – work – town centre • Top priority to be given to non-car modes at critical junctions in the network, and in all "living" areas (to be defined) • Shared priority between modes to be achieved where functions are mixed and where networks intersect • New development to be located/designed to achieve mode choice • Non-car links to be provided between new housing and employment/other facilities • Safe routes to school to be developed with schools, especially primary schools • Villages to be provided with good non-car access to Banbury • Good pedestrian links to be provided between Banbury and the surrounding countryside • Barriers to pedestrian and cycle movement to be

		removed, especially between the town centre and Grimsbury and other nearby residential and employment areas. • Protect buses from congestion, especially to and from the town centre • Public transport to villages which competes with the car for some purposes (to be defined) • Raise awareness of transport issues

ECONOMY	• Enhance vitality and viability of town centre • Protect/enhance economy • Efficiency for all modes and parking	• Match transport to expansion of Banbury town centre to fulfil its sub-regional role (serving catchment but not encroaching on neighbouring catchments) • Provide good trading environment and access for businesses in west part of town centre • Maintain balance of people, skills and jobs in the town as a whole • Reduce congestion at peak times on Hennef Way and other key routes • Balance supply and demand for town centre parking • Parking priority to medium-stay visitors to town centre • Reduction of private employee parking • Long-term stability and commercial viability of public transport within Banbury
ENVIRONMENT	• Reduce air/noise pollution • Protect/enhance historic area	• Reduce noise and pollution in town centre and on main roads into Banbury • Open space to be enhanced in Cherwell valley (linear walk created) • Create canal/river environment in town centre for amenity of residents and visitors • Reduce the number of properties exposed to noise and fumes, especially from HGVs

		• Pedestrianise Parsons Street and Market Place • Reduce traffic in roads relieved by recent road investment, including Horse Fair and Banbury Cross • Reallocate road and parking space in central and inner areas to reduce dominance of motor vehicles • Enhance the appearance and functionality of all major roads in and around the town centre
SAFETY	• Ensure safety for all modes • Create safer walking and cycling conditions • Enhance community safety	• Reduce the number and severity of personal injury accidents throughout the town • Provide safe and automatic crossing priority at critical junctions and roads in inner Banbury • Provide all traffic signals with pedestrian phases • Design community safety into all new development schemes (criteria to be given)
INTEGRATION	• Integrate bus, rail and private transport • Integrate transport with land use development	• Rail station can be accessed by bus from all key areas of Banbury • Bus/rail/taxi interchange accessible directly from areas east and west of the railway • New development to be provided with direct non-car routes to local facilities and to key networks • New development to have communal parking except where security over-rules

1.7 *Key issues*

1.7.1 The study team has identified a number of key issues on which comment at this stage would be helpful. These issues need to be considered as part of Stage 1 because there is likely to be a need for more-or-less immediate action to ensure that opportunities are not lost.

1.7.2 *Cattle market, railway station area regeneration*

1.7.3 There are major opportunities here to create a highly accessible, high density, mixed use area of quality. This would go some way to

meeting the growth requirements for the town in a way that is environmentally sustainable.

1.7.4 In our judgement this will not happen without a fairly pro-active role by the District Council. Reactive planning, even with the aid of development briefs, will not secure the integration needed to achieve the full potential.

1.7.5 In view of the current development interest in the cattle market site and the railway station, we recommend that urgent consideration be given to the establishment of mechanisms to achieve:

- well-planned assembly of sites;
- integrated master planning of areas either side of the railway;
- integration of Railtrack refurbishment plans, and
- the creation of vital new east-west links.

1.7.6 Without such action, major and unrepeatable opportunities could be lost.

1.7.7 We know of a Danish suburban centre with similar circumstances which could offer a vision of what this area could become with careful planning.

1.7.8 *Exploiting environmental and public transport benefits of road investment*

1.7.9 Banbury has secured relief from heavy traffic through the M40 and the inner relief road to the east of the town centre. North-south traffic will, however, build up on the Horse Fair route because as yet nothing has been done to prevent such growth.

1.7.10 Comments have already been made to us that the benefits of the new roads are not as clear as they were.

1.7.11 We regard the implementation of measures to "cap" the build up of traffic on the former main routes as an urgent priority, possibly to be studied in advance of its "natural" place within the study programme.

1.7.12 *Park and Ride opportunities*

1.7.13 Our preliminary view is that there is only one realistic scenario for Park and Ride to assist in the solution of Banbury's traffic problems, and this is for a site related to the M40 junction. However, there are likely to be competing demands on available land in that area, especially from industrial and other employment uses.

1.7.14 If the client authorities wish to pursue the possibility of Park and Ride, it is suggested that urgent attention be given to this issue, again probably in advance of the "natural" place in the study programme. Otherwise there is the danger of losing any remaining land opportunities.

1.7.15 *Congestion is seen as a problem, but not car use*

1.7.16 Perception of transport problems in Banbury appears to be that traffic problems are not severe. To the extent that there are congestion problems, notably Hennef Way, there is no apparent consensus that this should be solved by anything other than further road construction.

1.7.17 In view of the difficulties of expanding road capacity without in turn encouraging further traffic growth, not to mention the strong policy current against such an approach, the study could be confronted with a difficulty.

1.7.18 The issue is how to solve current and future traffic growth in advance of public acceptance of the traffic reduction measures likely to be necessary. The car currently provides the highest level of service for most categories of travel, except of course for those without cars. It is unlikely that improving the quality of alternatives will by itself have any noticeable impact on mode shift.

1.7.19 It may be difficult, and perhaps wasteful of resources to develop walk, cycle and bus facilities in the absence of strong local support for changes in travel behaviour towards non-car modes. If, however, such a direction is desired, it would seem that a campaign to win the "hearts and minds" of Banbury residents and visitors will be required.

1.7.20 *Rural buses*

1.7.21 We understand that rural buses have been expanded with the aid of the rural bus grant. But we also hear that people are not using the improved services. If confirmed, this seems to us to be an example of how the provision of carrots by itself is ineffective in bringing about mode switch away from the car.

1.7.22 If measures to encourage use of rural buses are ineffective, the long term viability of the expanded level of services, and ultimately the bus grant itself will be in jeopardy.

1.7.23 We feel that a more imaginative and innovative approach to rural public transport is required. There may be a limit, however, to how far the present study can develop such an approach.

1.7.24 *Other issues*

1.7.25 There are of course many other issues to be addressed by BITLUS. These will take their place in the study process, and measures to tackle them will be framed for the ensuing 5-10 year period. They include:

- network development (all modes) focusing on the key issues identified by the infrastructure survey;
- traffic management and bus priority building on work currently being carried out by OCC;
- parking strategy investigating all aspects of town centre parking including parking in residential streets;

- traffic calming;
- town centre pedestrianisation; and
- townscape and functional "repair" of the areas adjacent to the town centre.

2 *Background Paper - Consultation with Local Groups*

2.1 *Aim*

2.1.1 We consulted with local groups to find out how people who live and work in Banbury and its catchment perceive local transport, and to investigate the issues which they think are most important. We investigated people's views about current conditions, as well as exploring issues which they think might be more important in the future as the town grows.

2.2 *Types of consultation*

2.2.1 The consultation took three forms:

- focus groups to which we invited representatives of a broad range of organisations;
- written comments from some organisations who were unable to attend focus groups; and
- discussion at a meeting of the Banbury Traffic Advisory Committee.

2.3 *Form of the focus groups*

2.3.1 Three focus groups were held in Banbury town hall at the following times and dates:

- Focus Group 1: 2.00 p.m. Monday 23rd November 1998;
- Focus Group 2: 6.30 p.m. Monday 23rd November 1998; and
- Focus Group 3: 6.30 p.m. Monday 25th November 1998.

2.3.2 The form of the focus groups is set out in Box 2.1.

2.4 *Focus group invitees and participants*

2.4.1 Approximately 60 organisations were invited to each focus group. The list of invitees and a copy of the invitation are included in

Appendix A. The organisations which sent representatives to each group are shown in Box 2.2.

Box 2.1: Format of the focus groups

Welcome: *Signing people in and informal welcome.*

Introduction: *Introduction by the consultants setting out who Llewelyn-Davies are, the aims of the focus group and an introduction to the issues.*

Travel Timelines: *The aim of the exercise was to build a shared view of past and present travel in Banbury by asking people to write down key events and issues over time. The timelines asked people to explore changes that happened to them personally, changes that occurred in the town and broader changes. Attendees completed a chart, as set out below.*

	1950s –1960s	**1970s-1980s**	**1990s**
Personal			
Banbury			
Global			

Identifying issues : *Participants were split into small groups. Each individual wrote down their key concerns and issues were summarised. Participants then voted for the issues which they think were most important. Key issues are summarised for each group.*

Exploring issues: *The key issues were then explored further through general round table discussion. Points of conflict and agreement were identified.*

Summing up and next steps*: The focus groups closed with thanks for attendance and explanation of the next steps in the study*.

Box 2.2: Focus Group Participants

Focus Group 1	***Focus Group 2***	***Focus Group 3***
Oxfordshire Fire Service	*Cropredy Parish Council*	*Fine Lady Bakeries*
Warwickshire County Council	*Middleton Cheney Parish Councils*	*Bloxham Parish Council*
Boots the Chemist	*Adderbury Parish Council*	*Thames Valley Police - Banbury*
Age Concern Banbury	*Cherwell Rail Users Group*	*Brackley Town Council*
Bodicote Parish Council	*Farabi Ltd*	*Mr J Taylor*
CPRE	*Mollington Parish Council*	*Ms S Reeves*
Aston Martin		
Hanwell Parish Council		
Mannesmann Dematic Ltd		
North Oxfordshire College		
Northampton County Council		
South Northamptonshire Council		

2.5 *Findings of Focus Group 1*

2.5.1 *Perception of Banbury*

1950s and 60s

2.5.2 Personal comments focused on walking, cycling and the bus for short trips, trains for longer journeys. Driving was described as pleasure.

2.5.3 Banbury was noted for its buses and the start of suburban and industrial growth.

2.5.4 Globally people referred to little congestion and much use of buses. The Beeching rail cuts were noted and the start of transfer of freight to road.

1970s and 80s

2.5.5 Personal comments referred to moving to Banbury to escape road development elsewhere. Movers liked the quiet roads and many footpaths.

2.5.6 Banbury was seen as small town with character. Problems with reaching the town from outlying villages were noted.

2.5.7 Globally rail travel was noted as important.

1990s

2.5.8 Personal comments focused on people becoming more time conscious and frustrated with traffic congestion. Rare use of public transport was mentioned and a poor perception of public transport, although commuting by train and improvements to the Chiltern Line were also noted. More selfishness in car use was noted, both in terms of driving and parking.

2.5.9 Banbury comments noted the construction of the M40 relieving congestion, although conversely people also felt that it channelled drivers through the town for destinations to the south and west. Congestion at the M40 junction was noted, increased car use and numbers of commuters and shoppers. Roads were perceived to be unsuitable for the number of vehicles on them. Problems with parking at the weekend were noted.

2.5.10 Globally, the deregulation of buses and rail privatisation were perceived as negative, particularly in rural areas. The need for

urban development to be planned alongside transport proposals was noted.

Summary

2.5.11 The 'timelines' exercise produced a general consensus of:

- increasing car use and congestion;
- the decline in use and quality of public transport; and
- the growth and changing character of the town.

2.5.12 The exercise also noted people's changing perceptions of time, convenience and increased emphasis on private travel.

2.5.13 The impact of the M40 was also important, although there was no consensus on this. Some people thought it had improved things, other felt it had encouraged traffic through the town.

2.5.14 No mention was made of global issues such as global warming or air pollution.

2.5.15 ***Key issues***

2.5.16 The focus group attendees highlighted three key issues:

- rural transport;
- parking; and
- traffic congestion

2.5.17 These were perceived to be the most important transport issues.

2.5.18 The problems of travelling to Banbury from **rural areas** were noted. The lack of public transport was a key concern. Attendees stated that people who live in outlying villages need their cars for travel. Safety was also highlighted as an issue in the villages with cars rat-running through them at high speeds.

2.5.19 **Parking** was an important topic debated. The need for signage to parking and more convenient access to car parks were noted. Some attendees felt that parking was insufficient "you can't park in

Banbury on a Saturday", although others felt that the re-opening of the multi-storey car park had solved the problem. Traffic congestion over the last few months created by people looking for parking spaces was mentioned.

2.5.20 Some attendees, notably local traders, felt that conveniently located parking was a key issue. The problems of carrying large bags of shopping long distances were noted. However, other attendees stated that people do not visit the town centre for bulk food shopping and rarely have a large number of heavy bags.

2.5.21 Perceptions of the levels of parking charges varied. "Parking is cheap". "Leamington is twice the rate". "Milton Keynes has free parking". "I shop in Leamington because of both parking and the choice of shop". One attendee suggested that "Oxford has got it right". He went on to explain that town centre charges should be high to deter people from driving into town, while charges should be low in areas where it is acceptable for people to park, like at Park and Ride sites. Another noted the need for "tough decisions in the town centre".

2.5.22 The competitive position of Banbury came out as an issue through the parking discussion. The opening of Castle Quay was thought to have the potential to increase Banbury's catchment by 50% and to improve retention of trade within the catchment. This was seen as being threatened by increased traffic congestion "People will go elsewhere if the traffic gets very bad", but at the same time dependent on parking provision.

2.5.23 Park and Ride schemes were frequently mentioned. The current perceived failure of the Bodicate scheme was compared with the success of Oxford's park and rides. The difference was thought to be due to people's low awareness of the scheme in Bodicate, the relative frequency of buses and the availability of cheap alternatives. Using out-of-town supermarket car parks for park and ride was suggested.

2.5.24 **Traffic congestion and increased car use** in the town was the third key issue. Trouble spots were identified as the M40 junction, Hennef Way and along the A422 to Ruscote Avenue at peak hours. The M40 junction channelling traffic for a wide range of destinations through the town was highlighted. Congestion was seen as a particular issue for the emergency services.

2.5.25 Traffic management measures were often suggested as solutions. Keeping the traffic flowing and moving efficiently were seen as important concerns. It was suggested, for example, that traffic signals on Oxford Road and Cherwell Street are co-ordinated to allow freer flow of traffic.

2.5.26 New development was perceived by some to be fuelling the increases in traffic. Traffic congestion was expected to get worse in the future. "Banbury is set to grow. When the new houses are occupied with everyone with two cars, then we will notice pollution and traffic problems".

2.5.27 The pollution caused by vehicular traffic and the negative impact on the pedestrian and cycling environment were noted, and these were cited as a reason for using the car. Pollution caused by buses was raised as an issue. "The Council has to take positive action. Buses must be stopped and pulled in for (pollution) testing".

2.5.28 Not all participants saw car use as a problem. One participant who placed high value on efficiency thought that car users should not be penalised. The emphasis should be on making transport systems work efficiently, including systems for cars.

2.5.29 **Public transport** was perceived to be the next most important issue, after the first three key issues. Participants noted that better co-ordination is required between bus and rail services. Making special provision for buses such as bus lanes were discussed although road space was thought to be limited "In Banbury, where would you put bus lanes?" The relative lack of road space for public transport in the town centre compared with private vehicles was criticised.

2.5.30 The problems of making public transport an attractive alternative to the car were noted. Perceptions of the inconvenience of using public transport and the uncomfortable nature of trips were evident. "I would need my car physically taken away from me before I would use public transport". "Time is everything. Using public transport would mean I got home 45 minutes later".

2.5.31 The use of the train for longer distance commuting was raised. The high prices of journeys to London before 9.30 p.m. were noted as a disincentive to using the train. However, one participant noted that

he saves a lot of money each year by not having an additional car and that the cost of running a car is high.

2.5.32 **Town centre** issues were raised by some participants who felt that the environmental quality of the town centre was reduced by traffic. It was noted that the new shopping centre will bring more traffic into the town centre.

2.5.33 **Local shops** were also mentioned. These were seen as being particularly important by the older participants who did not have cars. The Co-ops in Cherwell Heights and Hardwick were mentioned as good examples of a chain store providing accessible local facilities. However, town centre traders felt that people do not use local shops and that there is insufficient demand to keep them open.

2.5.34 Providing local parades of shops with **new development** was seen as an important issue, although this was seen as being secondary to making new housing development accessible to public transport, walking and cycling. Participants stated that bus routes need to be provided at the start of the development.

2.5.35 Other forms of shopping were discussed including **out-of-town stores** which were seen by one attendee as being efficient. **Home delivery** was suggested as a mechanism for allowing people without cars to use superstores.

2.5.36 Traffic generated by **children being taken to school** was mentioned as a problem. Suggested solutions included staggering school start and finish times, encouraging car sharing and schools organising transport to be funded by parents who would otherwise drive.

2.5.37 **Car sharing** was also mentioned as a solution to traffic created by people travelling to work. However, some participants felt that they would not be prepared to wait for fellow workers to finish work in order to share a lift. Others noted that people work different hours and that lift sharing might not be feasible.

2.5.38 Problems in the **pedestrian environment** were also mentioned. Of particular concern were the traffic lights at Bridge Street. "Some traffic lights you can't get over safely as a pedestrian".

2.5.39 The need for an **integrated, holistic approach** to tackling traffic issues was noted. "It's a series of measures". "The transport strategy

must be appropriate for the different needs of different people". " We don't want to shove our problem onto someone else".

2.5.40 **Taxis** were mentioned but no issues were raised.

2.6 *Findings of Focus Group 2*

2.6.1 *Perception of Banbury*

1950s and 60s

2.6.2 Comments about Banbury noted the start of the suburban residential growth of the town. Lack of measures to restrict traffic movement and parking were also mentioned. It was noted that conservation of buildings was not an issue at this time.

2.6.3 Globally participants noted the limited nature of long distance travel and the more limited distances travelled generally. The small size of many settlements was noted.

1970s and 80s

2.6.4 Personal comments referred to having to travel further for work.

2.6.5 Banbury was described as a small, pleasant market town with reasonable buses (although poor rail services). The development of out-of-town stores and the introduction of traffic management measures was noted.

2.6.6 Globally the participants noted increases in car ownership and the oil crisis. They also noted the Rio Conference and the emergence of Agenda 21 as environmental issues became more important.

1990s

2.6.7 One personal comment stated that the participant had moved into town which means he can now walk to work. However, another noted that he was commuting further by car.

2.6.8 Comments about Banbury noted the lack of public transport in the town and one participant noted its high cost. The privatisation of public transport was noted. Slower trips to London by public transport were mentioned, although one attendee felt that rail transport has greatly improved, including the Chiltern Railways turbo train to London and Birmingham.

2.6.9 The development of out-of-town stores was perceived to continue in the 1990s in Banbury, and the decline of local shops was mentioned.

2.6.10 The reduction in traffic through the town by transfer of some through trips to the M40 was set out.

2.6.11 It was noted that the centre of Banbury is becoming less residential.

2.6.12 The increase in long distant commuting from rural areas was mentioned and the poor public transport services from small towns and villages were noted.

2.6.13 Globally, changes in working practices and communications such as mobile phones and the internet were noted.

Summary

2.6.14 The timelines exercise highlighted the growth of Banbury over time and the importance of suburban residential development and out-of-ten superstores. Bus services are perceived to have deteriorated, although train services were perceived to have improved to London and Birmingham. The recent increase in commuting from rural areas was highlighted, and increasing distances travelled to work generally.

2.6.15 ***Key issues***

2.6.16 In Focus Group 2 improving public transport was highlighted as the key transport issue. This was thought to be the town's most important transport issue. Two other issues were highlighted, although they were not perceived to be as important as public transport. These were:

- the town centre; and
- new development and expansion of the town.

2.6.17 **Public transport** was the key issue. The focus group participants represented organisations from a range of locations and this allowed the discussion to explore services in some detail. The use of a County-wide grant for rural bus services was mentioned and the improved frequency of services was noted. However, people were not thought to be using the improved services. "What we must do is encourage people on to the buses so that the services stay good." It was stated that although the services are now better, the improved frequency of service is not at peak times or late enough in the evenings. " There is no bus service after 6.00p.m. so you can't go to

anything in the evening". "Extra buses are run off peak so it hasn't helped commuters one jot".

2.6.18 Some town services were perceived to be good. "The Bretch Hill service is very good". It was suggested that this is due to relatively low car ownership in the area. However, some of the town's current routes were criticised. "It's a service designed for the '60s and '70s."

2.6.19 The lack of direct services to employment areas were noted, although the B99 does run at peak times. However, it was stated that information on the service was poor. "Not many people know about it". In addition, the circuitous route taken by the bus was thought to have discouraged people from using the service. One participant stated that he did not know where to get information on bus services more generally, although others pointed him to the bus station.

2.6.20 The possible integration of bus and rail services was mentioned. The problems of rail commuters parking in the areas adjoining the station car park were noted. It was suggested that bus services should be co-ordinated with rail services to allow more commuters to travel their whole journey by public transport. "They need to set up a (bus) user consultative group".

2.6.21 The relative cost of sharing a taxi and taking public transport was mentioned, with taxis stated as often being cheaper.

2.6.22 The ways of encouraging people to use buses and the reasons they do not were discussed. "It's a hassel. It's laziness. It's convenience and wanting to do instantly what you want to do". Encouraging people to **switch modes** was seen partly in terms of improving services as set out above, but also in terms of making car use less attractive. "Go the other way round and discourage private transport. Raise parking prices and introduce road pricing". "Use money from the car parks to improve public transport". Measures to favour buses over cars so that bus trips were quicker in the peak were suggested as a way of encouraging people on to buses.

2.6.23 The **quality and character of the town centre** was another key issue. "We would like to see more people living in the town centre. Banbury is a little gem but it's dead at night." "It's a wasted asset". "Developers could find ways of using the top floors of buildings". "It would really put the life back into town". "Its important to think

about the type of place you want to create. Green spaces, high quality." The **area around the station** was highlighted as a key location for regeneration.

2.6.24 The need for premises for non-residential uses in the town centre was also noted with a local businessman suggesting that there is latent demand for small serviced offices. The lack of this type of accommodation could be holding back young entrepreneurs.

2.6.25 The impact of **new development** and transport to and from new development were also important issues. The poor public transport services to the new development on the eastern edge of Grimsbury was mentioned. "This makes it difficult for non-car owners to share in activities in the town centre". Provision for pedestrians and cyclists in new development was stated to be important, rather than just providing for the car.

2.6.26 **Parking** in the town centre was mentioned and the problems caused by town centre visitors avoiding parking charges and parking in residential streets was noted. "The hospital introduced parking charges and now people park outside my house". However, it was noted that this had reduced traffic speeds on the edge of centre streets and diverted rat-running through traffic to the inner ring road.

2.6.27 **Vehicular access to the east side of the town** was highlighted as a problem. It was noted that it can take as long as 45 minutes to get from the M40 junction to Ruscote Avenue at peak times. It was stated that people drive through outlying villages to avoid approaching the town on Hennef Way.

2.6.28 **Creating employment and providing services in the rural areas** was mentioned. However, some participants felt that this does not work and that people now travel long distances to work, irrespective of local opportunities.

2.6.29 A number of **mechanisms for reducing car trips** were suggested. These included:

- high tech solutions such as computerised dial-a-ride services;
- better use of car sharing; and
- green commuter plans for employers.

2.6.30 However, other participants thought that **reducing the amount of travel** was the key issue. One noted that whenever additional roads are built, the traffic expands to fill them (although not everyone agreed). The solution to transport issues was not building more roads or traffic management, but reducing the need to travel.

2.6.31 **Noise and air pollution** were not important issues. "Noise and air pollution are not as bad as in Oxford."

2.7 *Findings of Focus Group 3*

2.7.1 *Perception of Banbury*

1950s and 60s

2.7.2 Personal comments focused on the (now closed) railway line between Brackley and Banbury, the safety of cycling, the lack of traffic on the country roads and the fact that ponies and traps were still used to travel around.

2.7.3 Banbury comments focused on the more convenient bus service, that people were more inclined to walk to the villages (some 15 miles), that there were few car owners and many people in the villages rarely travelled further than Banbury.

1970s and 80s

2.7.4 Personal comments focused on the fact that everyone was getting cars and enjoying the new congestion-free motorways.

2.7.5 Banbury comments highlighted that Banbury was a stop off on the route to the Cotswolds etc, that the town and rural areas were beginning to grow. Problems of traffic and parking were beginning to emerge and public transport services were in decline.

1990s

2.7.6 Personal comments included the problems of traffic in rural areas, the decline in public transport and personal awareness of the need to reduce the number of car trips made.

2.7.7 Banbury comments focused on the M40 and how on the one hand it relieves congestion in some villages and makes wider markets available to local businesses, and on the other it increases traffic problems caused by it channelling cars into one area of the town (Grimsbury). The lack of Sunday buses was also an issue especially relating to hospital visiting.

2.7.8 Globally comments centred on the lack of knowlege of what Agenda 21 actually is and the need to discourage the assumption that global travel and tourism is alright.

Summary

2.7.9 The 'timelines' exercise produced a general consensus that

- there had been a steady increase in car use, bringing congestion;
- there had been a fundamental reduction in public transport; and
- there had been significant growth in Banbury and the villages.

2.7.10 Further to this, the exercise highlighted the mixed feelings attached to the M40 and its relative pros and cons.

2.7.11 ***Key issues***

2.7.12 The focus group attendees highlighted four key issues:

- public transport;
- town development;
- traffic congestion and accidents; and
- environmental education.

2.7.13 The development of the town and public transport were seen as the most important issues. However, it should be noted that no Banbury residents attended this focus group.

2.7.14 The particular problems of using **public transport** from the villages was noted. It was generally felt that the bus services were geared to shoppers and not those travelling to work - especially shift workers - and those travelling to college. The comment was made that "it sounds like there is a public transport service from the villages but

there isn't really". The point was also raised that the buses are not very user friendly and that Brackley bus stops are "always full of parked cars".

2.7.15 The point was also raised that "buses are wonderfully designed in Denmark" where they are much more user friendly and do not have huge steps down to road level so you can push a pram straight on. The worth of reintroducing bus conductors was also discussed. Although it was generally accepted that the cost of this to the bus companies made it unlikely. However, one attendee pointed out that more and more companies are moving towards a more "service led approach - something that is common in the United States". Another attendee commented that "I would never be able to rely on public transport."

2.7.16 Issues of **long distance** travel by public transport were also discussed with particular reference to the use of coaches. The issue of the lack of signage at the bus station and the railway station was highlighted as was the distance between the two facilities in Banbury if you are on foot and have luggage. It was accepted that the bus station did operate smoothly but there was a lack of short term (say half an hour) car parking provision. One attendee suggested that this should be introduced and policed to stop commuters parking there all day and abusing the facility.

2.7.17 In terms of **growth and redevelopment** the main point made was that "people never find out in time when their population is going to grow". One attendee highlighted that he thought that there was little population in the town centre and that there was "no good concept of living in a country town". Stuart Yeatman pointed out that the planning department had produced a leaflet of guidance to town centre property owners to aid them in the conversion of the accommodation above shops back to residential uses.

2.7.18 **Congestion** was raised as a problem especially for residents in the Grimsbury area of Banbury as were **traffic accidents** caused by impatience and frustration.

2.7.19 The issues of **environmental education** was raised by one attendee who suggested that the best way to make people more environmentally friendly and to change their habits was to "educate people through the soaps". The need to learn from other places was also raised and to adopt schemes that had proved successful

elsewhere. It was felt by one attendee that if "environmental education is tackled, many other issues will be less significant".

2.7.20 One attendee raised the issue of **park and ride** to aid congestion in the city and it was acknowledged that land at Wycombe Farm could be used all year round, in the same way as it is currently for Christmas shoppers. However, it was highlighted that the area where park and ride was really needed was to the north of the town to intercept people leaving the M40 at junction 11 and that there is difficulties in finding land for it in this area.

2.7.21 The need to give **cyclists** better priority was also raised.

2.7.22 The expansion of the **pedestrianisation** of the town centre along Market Place and Parsons Street was thought by one attendee to be beneficial and that it "could solve traffic problems there". Safety of pedestrianised areas at night was not thought to be a problem due to the comprehensive CCTV scheme. The opening of the nightclub in the old telephone exchange was also thought to benefit town centre safety.

2.7.23 Finally one attendee highlighted that generally "people aren't bothered until it is too late."

2.8 *Written comments*

2.8.1 Written comments were received from two invitees who were unable to send representatives to the discussion groups. These were Cherwell Chasewell Youth Club and Fenny Compton Parish Council. Their comments are summarised below.

2.8.2 **Cycling** was an important issue for the Youth Club. The dangers of cycling in Banbury were mentioned including danger from drivers, the poor condition of road surfaces and broken glass on the road. Negative comments about cyclists shouted out by pedestrians on some streets were also noted.

2.8.3 The cost of using **public transport** was noted as a deterrent to using the bus. The lack of peak hour bus services from Fenny Compton was noted, particularly in terms of the lack of services for young people who are just starting work. The lack of services in the evening and at the beginning of the week were also mentioned. The

Parish Council recognised the economics of providing additional services.

2.8.4 The **congestion on Hennef Way** was noted and it was suggested that this is made into a dual carriageway.

2.8.5 It was stated that **traffic calming** measures on Bankside are not working.

2.8.6 It was noted that **traffic is getting worse** in the town, and that the situation will worsen further with the opening of the new shopping centre.

2.9 *Discussion at the Banbury Traffic Advisory Committee*

2.9.1 *Introduction*

2.9.2 The meeting was held on 2nd December 1998 and was attended by representatives from a number of organisations (as set out Box 1.3) After a brief introduction to the study, representatives stated their key concerns about travel in Banbury and its catchment, and growth of the town. A summary of the comments made is set out below.

2.9.3 *Key issues*

2.9.4 The **impression that visitors get of the town** as they arrive by both car and rail was noted as poor. It was suggested that gateways are designed on to key arterial roads and that the rail station is refurbished to improve the visitors' first impressions of the town. In addition to the poor condition of the rail station, the poor links between the station and the town centre were noted. It was felt that Banbury is an attractive town, but that the entrances to the town do not give this impression.

2.9.5 A number of comments were made about **public transport** in the town. Only people without cars were thought to use the bus and were identified as "captive" bus users. The unreliability of services both in terms of arriving on time and the routes they take was noted, as was the lack of evening services. The poor quality of the bus services, in terms of the comfort of buses and bus stops was mentioned.

2.9.6 The use of resources for bus services was raised as a problem. Examples were cited of empty buses at off-peak times and over-crowded shuttle buses at peak times. One member called for research into how the buses are used and the need and demand for services. This was seen as being important in matching services to needs.

2.9.7 The provision of information on services, particularly information at bus stops stating when the next bus is arriving, was suggested as being important.

2.9.8 **Parking** in the residential areas around the town centre was raised as an issue and particular streets identified. Town centre visitors avoiding parking charges and using on-street and communal residential parking areas was the key issue. The same problem was noted in the residential streets surrounding Horton Hospital. Over-spill parking from the station in the Tramway Industrial Estate was also highlighted as an issue.

2.9.9 Parking to serve the town centre was an important issue which was perceived to influence the **prosperity of the town centre**. It was stated that most shopping trips in Banbury will be by car. It was felt that reducing parking in the town centre would make the new shopping centre a "white elephant" with insufficient trade. It was thought that a huge amount of parking is required to encourage shoppers. It was stated that closure of the multi-storey car park had reduced trade for some of the town's smaller traders.

2.9.10 Measures to discourage car use (reduced/more expensive parking) were perceived to be unsuitable for Banbury, while being suitable in a city such as Oxford.

2.9.11 The prosperity of the older, western part of the town centre was raised as an issue. Concern was expressed that declining trade in this area could adversely affect independent traders, particularly with the opening of Castle Quay. Vacant premises in George St and Broad Street were also noted as case for concern.

2.9.12 **Current and increasing use of the car** was seen as a fact of life. Cars were perceived to be very important household assets "second to a house, a car is the most important thing people own". Restricting their use was not perceived to be generally acceptable.

2.9.13 **Pedestrianisation** of High Street and Parsons Street were suggested.

2.9.14 A brief discussion of **traffic congestion** focused on queuing at Hennef Way. The queues here push traffic on to other routes, encouraging drivers to rat run through surrounding villages. Dualling Hennef Way was suggested to solve this problem. It was noted that the situation will worsen when the new shopping centre is open.

2.9.15 Improving **cycle facilities** was noted as concern. Problems caused by mixing cyclists and pedestrians on the same paths were noted.

New housing areas were praised for having good quality cyclepaths. The problems with providing paths in the town centre and older parts of town were noted. Making cycle bells a legal requirement was suggested. There was also a discussion of the use of cycle bays at junctions which are located in front of the vehicular traffic and give cyclists priority over motorists. Some members felt that these would be a good idea for frequently used cycle routes. Others thought they would cause confusion and slow down vehicular traffic.

2.9.16 Disruption to traffic flows caused by **road works** was an issue which concerned many members. The lack of co-ordination between the utilities (water, electricity and gas) was stated to lead to repeated road works as the same stretch of road is dug up many times.

2.10 *Summary of the key issues*

2.10.1 *Perception of changes over time*

2.10.2 The key factors that consultees noted about changes in travel in Banbury since the 1950s were:

- the growth of the town, both in residential and commercial terms;
- more commuting from the villages to Banbury and more longer distance travel generally;
- increased car use and traffic congestion; and
- declining bus services.

2.10.3 The impact of the M40 was perceived to be mixed with some people feeling it has reduced traffic in Banbury while others felt that the M40 has channelled traffic through the town.

2.10.4 *Key issues*

2.10.5 There were a number of groups of key issues which were raised by the consultation exercises. They are set out below broadly in their perceived order of importance:

- public transport:

- rural buses – the frequency of services, the lack of evening and weekend services and the possible improvements to the allocation of the new rural bus resources;
- town services – the frequency and reliability of services, the lack of evening and weekend services in some areas;
- the bus/rail interchange – the lack of facilities for interchanging between the bus and the train;

- traffic congestion:
  - Hennef Way – congestion at the eastern access to the town on Hennef Way and adjoining streets;
  - congestion caused by giving children lifts to school;
  - the impact of the M40 – different views in terms of reducing congestion and increasing traffic through the town;
- the town centre:
  - encouraging people to live in the town centre;
  - providing appropriate conditions for the town to prosper including providing adequate parking;
  - the need for pedestrianisation of Market Place and Parson's Street;
  - town centre visitors parking in residential streets to avoid parking charges;
- future development of Banbury:
  - designing new development so that it encourages people to walk, cycle or take the bus or train;
  - including local shops and facilities in new residential development; and
  - regenerating the area around the station.

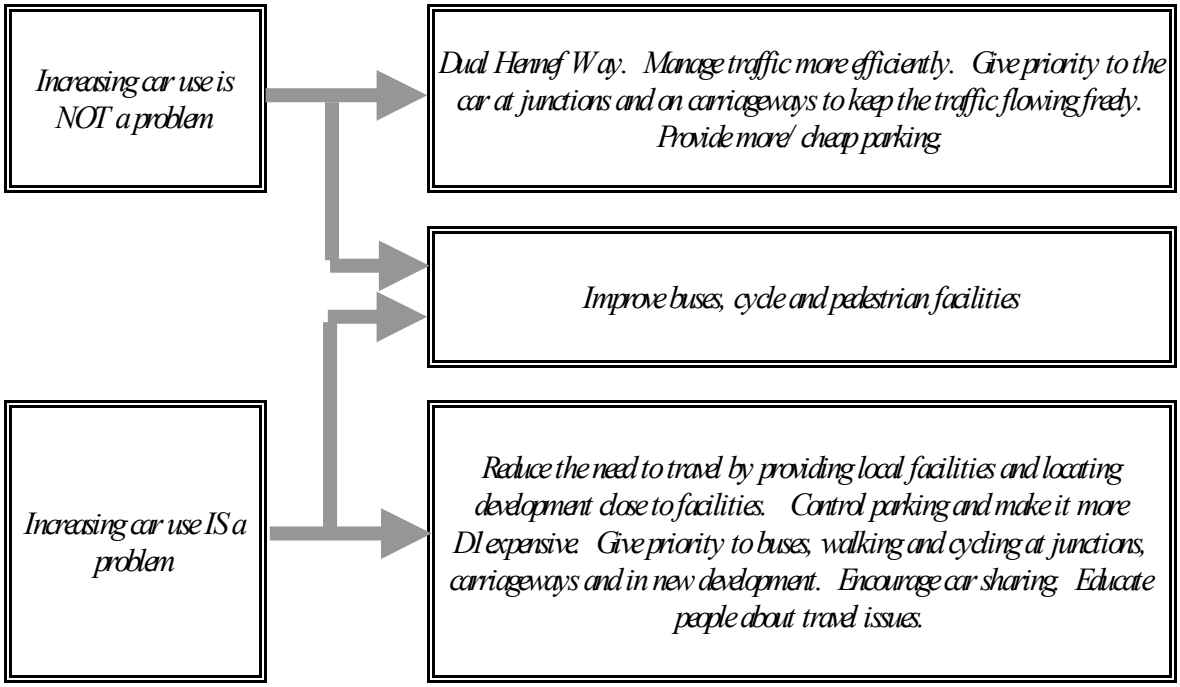
2.10.6 Other issues were mentioned but were perceived to be less important. These included provision of improved facilities for cyclists and pedestrians and safety issues.

2.10.7 Noise and air pollution were generally not perceived to be important issues in Banbury.

2.10.8 ***Solutions***

2.10.9 The consultees suggested a range of solutions to the issues they identified. These fell broadly into two approaches as shown in Figure 1.1.

Figure 1.1: Approaches to solving travel problems



3 *Background Paper - Review of Data, Studies and Current Practice*

3.1 *Introduction*

3.1.1 The purpose of this review is twofold:

- to provide an initial assessment of the problems and issues in Banbury; and
- to enable the study team to identify gaps in the data.

3.1.2 Data sets and documents were assembled by Oxfordshire County Council and Cherwell District Council. A bibliography is appended to this background paper. The key pieces of information, important issues and opportunities for action which the documents highlighted are set out below. The data sets have also been analysed to provide descriptive information about the town.

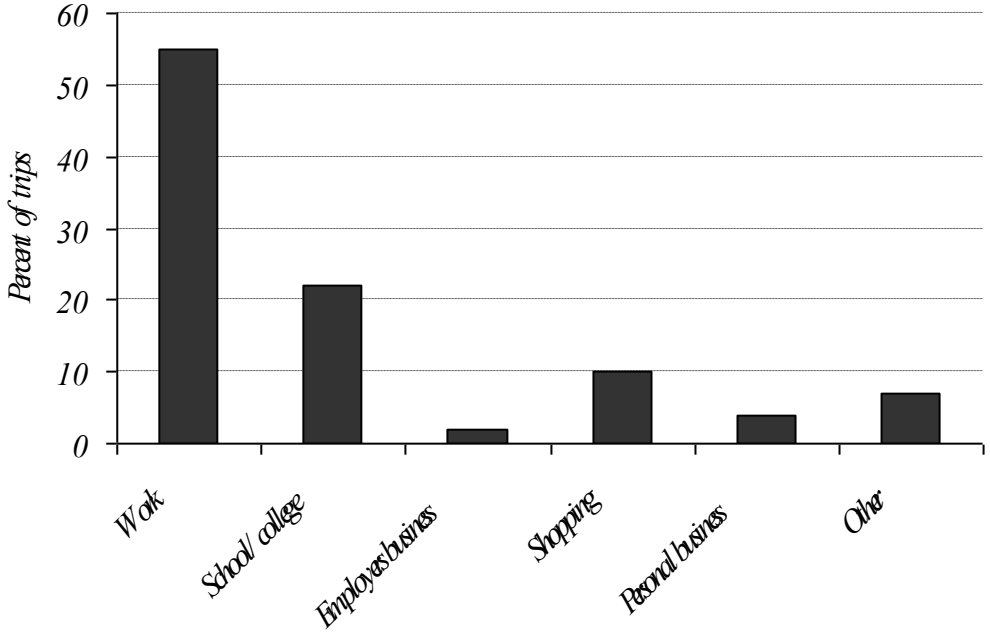
3.2 *Travel in Banbury*

3.2.1 This section reviews the travel data for Banbury. The data available relates mainly to peak hour travel and journeys to work.

3.2.2 In 1993, OCC carried out a household survey of Banbury residents.[1] This survey produced travel information for the peak period. Figure 3.1 shows the proposes of trips made within the peak period by the 3,238 respondents to the survey.

[1] OCC (1993): Data Collection Report

Figure 3.1: Purpose of peak hour trips within Banbury, 1993



Source: OCC, June 1993

Note: 3,238 households took part in the survey, 20% of the total households in Banbury

3.2.3 The majority of trips were journeys to work. These account for over half peak hour travel. Trips to school and college were the next most important types of trips accounting for just over a fifth of journeys. Travel for other purposes such as shopping and personal business was less important.

3.2.4 The 1991 Census provides detailed information about journeys to work in Banbury. Table 3.1 shows how people made journeys to work in 1991. It is important to remember that these travel patterns were recorded in April 1991. This was after the M40 opened and prior to the opening of the Internal Relief Road .

Table 3.1: Journey to work by mode of travel, 1991

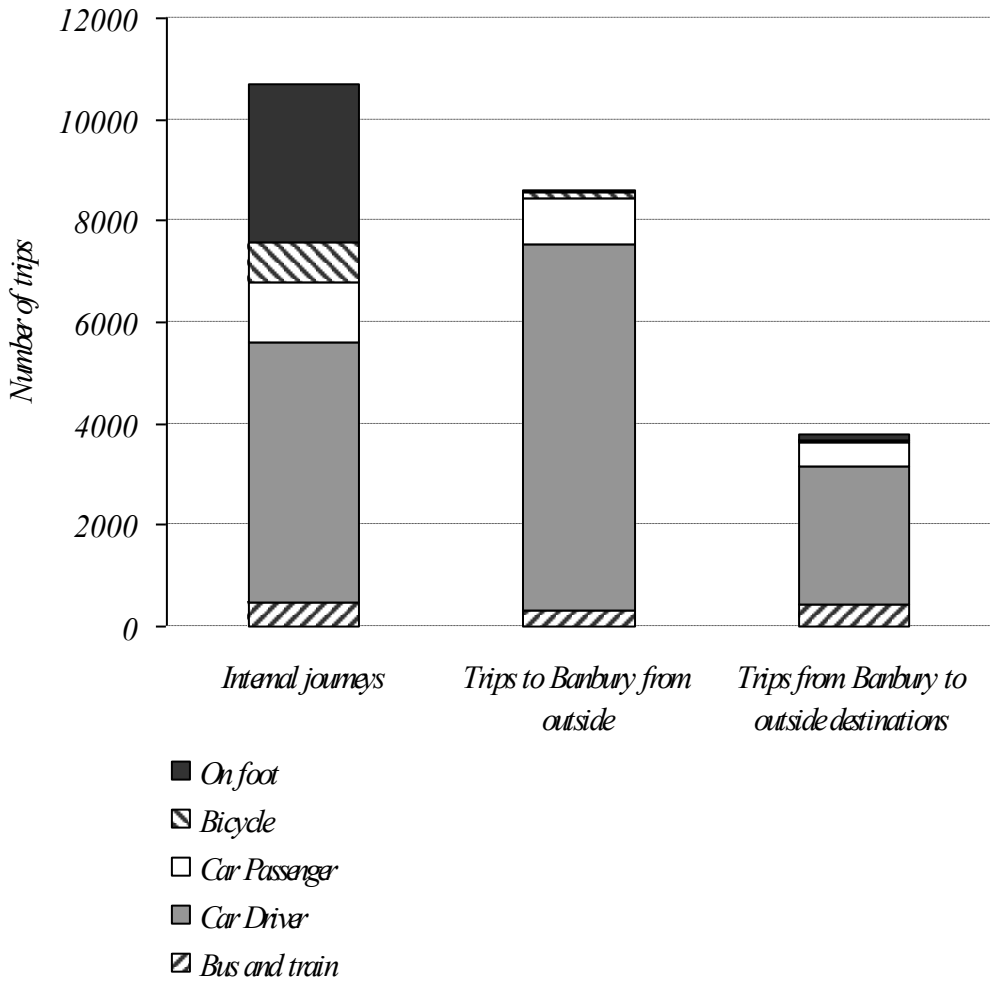
Figures include travel within Banbury, trips to Banbury and trips from Banbury

Mode	Bus	Train	Car Driver	Car Passenger	Bicycle	On foot	Other	Total
No. of trips	240	970	15080	2570	950	3250	680	23740
% of trips	1%	4%	64%	11%	4%	14%	3%	100%

Source: 1991 Census

3.2.5 The car is the most important mode for journeys to work accounting for 17,650 journeys including car drivers and car passengers (75% of trips). Car drivers account for two thirds of the total trips to work. Journeys on foot are the most important of the other modes of travel accounting for 3,250 journeys (14% of trips). The bus, train and bicycles account for less than 1,000 trips each.

Figure 3.2: Journey to work by travel mode, 1991



Source: 1991 Census

3.2.6 Figure 3.2 shows the split of internal and external travel in Banbury in 1991. Internal journeys are the most important type of trip. These are trips which have both origins and destinations in Banbury. They account for around 11,000 trips. While the car is the most important mode of travel accounting for over 6,000 trips (58% of trips), journeys made on foot are also important accounting for over 3,000 trips (nearly 28% of trips).

3.2.7 Journeys to work which involve either commuting to or commuting from Banbury are dominated by the car. The car accounts for 92% of trips to Banbury from external locations, and 82% of trips from

Banbury to external locations. Inward commuting to Banbury is more important than commuting from Banbury to external jobs.

3.2.8 The OCC report contains some useful information on the proportions of Banbury's vehicular traffic which is through traffic.[2] Overall, the OCC figures suggests that over four fifths of traffic on roads into Banbury were travelling to destinations within the town. 18% of vehicles were travelling through Banbury to destinations outside the town. The bulk of the through traffic arrives on Southam Road (136 vehicles on average between 8.00 and 9.00 am), Hennef Way (223 vehicles), Oxford Road (161 vehicles) and Bloxham Road (104 vehicles).

3.2.9 A study of shopping in Banbury was carried out in 1986 for CDC. Although the information is now dated, the survey of 1,700 town centre visitors provides a guide to the types of trips made to Banbury town centre. The town's shopping catchment was defined as stretching as far as Priors Marston to the north, Brackley to the east, Bicester and Barton to the south and Brailes to the west.

3.2.10 The survey showed that over half the visitors to Banbury town centre had come from within Banbury. Nearly 10% of the respondents came from the south and south east area of the town's catchment, whereas 5% or less came from other locations. Most people (1400 out of 1700) were shopping. Over 800 shoppers lived in Banbury. Around 350 of these (44%) walked to the town centre and a similar number either drove or were car passengers. Only 80 (10%) came by bus.

3.2.11 This mode split is very different from that of the 600 shoppers who came from other locations. Not surprisingly, no one walked to the town centre from outside Banbury. More trips were made by car for the residents from further afield, while the proportions of people using the bus was similar or lower (at around 10% or less). The exception was the eastern area of the catchment where nearly a third of shoppers (18 out of 62) arrived by bus.

3.2.12 We would expect patterns of travel to Banbury, the town's catchment and the behaviour of people within the catchment to

[2] OCC (1993): Data Collection Report

undergo considerable change when the Castle Quay shopping centre is open.

3.3 *Vehicular traffic and car parking*

3.3.1 A study of parking in Banbury was carried out in 1989.[3] The study concluded that there was a lack of short stay parking and an excess of long stay parking. The study includes counts of cars parked on a Thursday and Saturday and shows that there was excess supply of parking amounting to around 20% of the peak parking accumulation.

3.3.2 Data provided by Cherwell District Council about the use of Council-owned car parks suggests a steady increase in their use between 1994 and 1997. Table 3.2 shows the number of tickets sold in each of the car parks.

Table 3.2: Daily average number of tickets sold

	1994/95	*1995/96*	*1996/97*	*1997/98*
Market Place	315	351	361	379
Spiceball Mill	71	81	81	105
Spiceball - North	141	142	149	213
Spiceball - New	124	139	135	155
Castle Gardens - Short	920	897	901	1261
Castle Gardens - Lorry	50	49	41	47
North Bar	162	197	263	310
Horsefair	282	296	290	327
South Bar	188	187	199	196
Warwick Road		48	75	144
Calthorpe St	295	254	269	319
George Street	351	371	340	365
Windsor Street	110	112	130	176
Bridge Street	409	447	446	493
Multi-storey	1269	1261	1193	49
Bluebird			27	50

[3] Transport Planning Associates for Cherwell District Council (1989): Banbury Parking Study, Cherwell District Council

Crown House				51
Smiths				74
Total	4687	4832	4900	4714

3.3.3 The total number of tickets sold grew gradually between 1994 and 1997. The closure of the multi-storey car park lead to a significant re-organisation of parking patterns as an average of around 1,200 people per day sought alternative parking. There were higher than normal increases in most of the other car parks. The most dramatic increase was in the Castle Street short-stay car park where the daily average number of tickets bought increased by 350 in 1997. Anecdotal evidence suggests that there was increasing pressure on parking spaces, particularly at the weekend, but that the re-opening of the multi-storey has relieved this pressure. Of course, the opening of the new Castle Quay shopping centre and its additional car parking will have a dramatic effect on parking in the future.

3.3.4 The OCC work in Banbury included a preliminary assessment of the impacts of parking restraint on traffic flows.[4] The analysis used the SATURN model and tested traffic at 1993 levels. A reduction of 2.6% of trips to the town centre and car park zones was tested (the car parks included were the District Council car parks and the car parks at Swan Close and the Tramway Industrial Area).

3.3.5 The model suggested that changes to parking availability reduced the queue length on Hennef Way by 100 vehicles. Of the approximately 500 peak trips restrained in the test, nearly half came from outside Banbury. The report clearly notes that parking restraint can not be applied in isolation and must be used as part of an integrated package of other measures. The diversion effects of parking restraint would need to be considered in terms of time, mode and destination.

3.3.6 OCC's work also included analysis of traffic queues in 1993 using the SATURN model.[5] Queues were noted during the morning peak (8.00 am to 9.00 am) on Hennef Way. The most significant morning congestion was traffic moving west on Hennef Way to the roundabout with Cherwell Street. All the other queues shown on the model were relatively short. These were shown as follows:

[4] OCC (1994): Parking Restrain Assessment

[5] OCC (1993): Data Collection Report

- at the junction of Hennef Way and Cherwell St for traffic going east;
- at the junction of Hennef Way and Southam Road mainly for traffic going east;
- in the Middleton Road/Bridge Street area;
- at the junction of Upper Windsor St and Swan Close Road; and
- at the Oxford Road/Hightown junction for traffic travelling north on Oxford Road.

3.3.7 Roads carrying high levels of traffic were the key arterial routes in and around the town. Some of these roads function as traffic priority routes and have no requirement for frequent crossing points. Development along them is either set back, or is premises for employment uses which do not front the busy roads. Links falling into this category include Hennef Way, the Internal Relief Road, Ruscote Avenue and, to a lesser extent, the Orchard Way/Woodgreen Avenue and Queensway links.

3.3.8 However, some busy routes have development either side of them which has a mixture of uses such as small scale employers, shops, community facilities and housing. People need to be able to cross the road frequently to gain access to these uses. These streets have the form of "mixed priority" routes where traffic needs to get through, but other activities are also important. These routes are:

- the north-south route through the centre of town consisting of the north part of Oxford Road, South Bar Street, the Cross and North Bar;
- the southern end of the Middleton Road to the junction with the Internal Relief Road;
- the eastern end of Warwick Road; and
- the eastern end of West Bar.

3.3.9 OCC investigated the impacts of the M40 and the Inner Relief Road. Changes in flows on the network have been significant since 1991. On some links there is evidence that the new roads attracted traffic from existing links initially, but that traffic levels have returned to pre-M40 and Internal Relief Road levels. Flows on Bankside are an example of this. Reductions in traffic using the railway bridge on Bridge Street were dramatic following the opening of the M40 and

the Internal Relief Road. By March 1993, however, traffic flows had started to rise again.

3.3.10 The traffic flow data for the old route through the town (North and South Bar and through the Cross) shows that it still carries significant levels of traffic. Over 17,000 vehicles used the route over a 12 hour period on a Monday in March 1997. The link remains one of the busiest in the town.

3.3.11 OCC considered the impact of the growth of residential development in Banbury,[6] in particular:

- 500 houses at the Hanwell Fields housing estate to the north of the Hardwick Estate;
- new business zones (between the M40 and Ermont Way, between Daventry Road and the M40, and east of the Alcan works); and
- Castle Quay shopping centre in the town centre.

3.3.12 OCC tested four suggested highway improvements which were listed in the local plan. The tests were run for 2001. The study concluded that there would still be queues on Hennef Way of over 400 vehicles from the Ermont Way roundabout, even with at-grade dualling of Hennef Way. Serious queuing and congestion were evident on various parts of the Banbury network even with the development of a new link between Southam Road and the Old Daventry Road. The report concludes that "if these queues are considered to be unacceptable, alternative travel options will be required…Extensive highway building programmes will only, at best, maintain current levels of delay and parts of the network will still experience severe congestion".

3.4 *Safety*

3.4.1 OCC's Casualty Report 1997 and Road Safety Plan 1998-9 lists Banbury's "Problem sites" areas as follows:

- North Bar – 12 accidents involving injury in five years - traffic calming measures are proposed 98/99;
- Hennef Way West of the M40 roundabout – 13 accidents involving injury in five years – speed cameras were installed in 1998;
- Cherwell St/ Bridge St junction – 10 accidents involving injury in five years – is under investigation; and
- the M40 northbound exit slip to Junction 11 - 10 accidents involving injury in five years.

[6] OCC (1993) Preliminary Forecasting Report

3.4.2 Accidents tend to involve motorists and none had five or more incidents involving pedestrians, cyclists or motor cyclists.

3.4.3 Roads listed with above average rates of injury accidents are:

- North and South Bar with 33 injury accidents between 1995 and 1997;
- the A361 from Banbury to Bloxham with 13 injury accidents between 1995 and 1997;
- the Banbury Inner Relief Road to Bridge Street with 11 accidents 1995-1997;
- West Bar and Broughton Road with 15 accidents 1995-97; and
- Warwick Road between Southam Road and Ruscote Avenue with 11 accidents.

3.4.4 Most of these accidents rates are approximately double the national average rates for these types of roads. Many of the sites and routes with most accidents fall on the "mixed priority" roads with high flows of traffic as set out in 1.3.9.

3.5 *Pedestrian network*

3.5.1 OCC's Draft Walking Strategy includes a plan showing the location of all reported accidents in Banbury including pedestrians.[7] The key problem areas is identified as the north-south route through the town - North Bar, Horse Fair and South Bar. The draft strategy suggests that safety problems are supressing pedestrian flows on these streets. Other areas with high levels of accidents involving pedestrians are George Street, Bridge Street and Middleton Road.

3.5.2 Barriers to pedestrian movement are identified as Queensway, Woodgreen Avenue, Orchard Way, Ruscote Avenue and Cherwell Street.

3.5.3 The study also suggests that walking is not encouraged from many of the town's residential areas where routes to the town centre are not obvious and where there is a lack of information. The priorities suggested by the strategy are:

- preparing a series of core pedestrian route networks including routes to town centres, shops, schools, employment areas, between residential area and to the countryside and leisure

[7] OCC (1998): Draft Walking Strategy

areas – *[*we have undertaken this task as part of our review of the town's travel infrastructure]; and

- development proposals should be subject to a "Checklist for Pedestrian Planning" which seeks to ensure that new development encourages trips made on foot.

3.5.4 The walking strategy also includes targets as follows:

- to increase the proportion of trips on foot to work to 1991 levels by 2001 and to 1981 levels by 2011;
- to increase the overall level of walking by 5% by 2005 and by 10% to 2010 using levels in 2000 as a base;
- to increase the proportion of trips to school by 10% by 2005 and by 20% by 2010 using 2000 as a base; and
- to ensure that there is at least no further growth in accidents.

3.6 *Cycle network*

3.6.1 OCC have also prepared a draft cycle strategy for Banbury.[8] The objectives of the strategy (which the draft document seeks to translate into targets) are to increase the proportion of trips made by bike, to make cycling safer, to provide high quality infrastructure and to improve cycle security.

3.6.2 A cycle network for the town has been sketched out. This network provides a starting point for our analysis of the town's key cycle routes and usefully sets out existing cycle paths. However, the strategy seeks to encourage cyclists to use secondary routes which are not heavily trafficked. These are less direct that the arterial links, often involving complex routes through residential areas. We suggest that the draft cycle network is developed to include the most direct links between residential areas and the town centre and other attractors.

3.6.3 The National cycle network runs to the south of Banbury along Salt Way (which would need to be metalled) and then turns south to Bodicote and Bloxham.

[8] OCC (1998) Draft Cycling Strategy

3.7 *Public transport*

3.7.1 OCC tested the impact of introducing bus priority measures to Banbury using the SATURN model.[9] The measures tested were:

- a bus lane along Hennef Way from the motorway to the Ermont Way roundabout;
- greater provision for buses along Middleton Road, Oxford Road and Bloxham Road;
- re-evaluation of Bridge Street lights and bus priority measures on the Middleton Road approach;
- provision for buses at the approaches to the new bus station;
- making West Bar and High Street are bus-only links eastbound as far as Calthorpe St;
- bus priority measures at the Warwick Road/Castle St junction.

3.7.2 The testing revealed that queues on many links in Banbury are reduced by the bus priority measures. Links benefiting from reduced queues include the residential streets connecting with Middleton Road, the Middleton Road / Bridge St junction, West Bar to the Cross and Warwick Road to the Southam Road junction.

3.7.3 OCC are now developing proposals for a bus priority route on George Street, Bridge Street and Lower Cherwell Street.

3.8 *Awareness campaigns*

3.8.1 The OCC publications "Better Ways to School" and "Better Ways to Work" set out progress to date on campaigns to encourage the use of non-car modes of transport and car sharing.[10] The documents contain ideas about how to encourage people to use these modes including:

- managing car parks;
- reviewing corporate car subsidy schemes;
- car pooling and sharing;

[9] OCC (1994): Review of Bus Priority Measures

- discounts for and information on public transport services;
- measures to encourage cycling such as loans for buying equipment, cycle groups, parking and changing facilities;
- allowing flexibility in working practices; and
- raising awareness of the benefits of walking and providing information on routes.

3.9 *Urban design issues*

3.9.1 CDC commissioned an urban design study which considered a broad range of design issues in Banbury.[11] The study noted a number of assets in the town centre including

- its street structure and urban spaces of exceptional quality such as South Bar, Horse Fair and Market Place;
- good accessibility by road (including well located car parks) and rail;
- the location of the bus station adjacent to the prime shopping area;
- the pleasant environment provided by the pedestrianised area;
- the quality of the shops and low levels of vacancy; and
- clear signage.

3.9.2 The study also raises a number of key issues:

- the "holes" in the town – these surround the historic core and are the result of the "shatter zone" left behind by development over the last 20 years;
- the lack of retail development at the western end of the town and the acceleration of the eastern drift of the key trading areas when Castle Quay opens and the perceived negative impact of this development on traditional retail streets more broadly in the town centre;
- the poor quality of the link between the railway station and the town centre;

[11] Roger Evans Associates and Hillier Parker (1996): Urban Design Strategies: Banbury, Bicester, Kidlington, CDC

- the lack of integration between the bus and rail services;
- junctions on key routes into the town centre (particularly the North Bar/Castle Street junction and the Bridge Street/Concord Avenue junction) which are dominated by several lanes of traffic and surrounded by low value uses; and
- the conflict between Banbury's regional shopping role which suggests a focus on multiples and tourism which suggests more emphasis on specialist shops.

3.9.3 Key elements of the strategy are:

- design guidance for development on the city centre sites;
- reducing the width of carriageways and making crossings easier for pedestrians and cyclists at North Bar/Castle St and Bridge St/Concord Avenue;
- a boulevard treatment for Castle Street and a development strategy with buildings facing on to the street;
- avenue planting on Warwick Road and North Bar with housing development in backland sites, pedestrian crossings on existing links and new links for new development, and improving links to the People's Park;
- development of gap sites on Calthorpe Street for retail or residential development and street trees;
- turn Cherwell St from an inner relief road to a new "East Bar" with boulevard planting (this approach could be extended to Concord Avenue and Hennef Way);
- extend George Street across the canal to the rail station and create a square in front of the station; and
- designate the area to the east of Cherwell Street and south of Bridge Street as a new business quarter, focusing attention on the river and canal.

3.9.4 The strategy identifies key development opportunities at Bolton Road and Calthorpe Street.

3.10 *Policy and practice context*

3.10.1 *National policy*

3.10.2 Central government's approach to transport planning is set out in the recently published White Paper "A New Deal for Transport: Better for Everyone". We will not seek to review the White Paper in detail, but to highlight some key points that provide the policy context for the BITLUS.

3.10.3 Integrated transport policy will be delivered through the preparation and implementation of Local Transport Plans (LTP). These will replace TPPs and will initially cover the five-year period to 2005. An important change from TPPs is the expectation of much closer integration with the local development plan. The way in which the BITLUS work feeds into the production of an LTP and the Cherwell Local Plan Review should therefore be addressed during Stage 2 of the study.

3.10.4 The White Paper focuses on providing choice – making it easier to walk, cycle and improving bus and rail services. The White Paper also emphasises integration between modes, policies and with other disciplines.

3.10.5 Two new forms of measures are available to discourage car use – congestion (or road) pricing and workplace parking charges. Revenue raised must be used for local transport expenditure. Funding will be targeted at managing and maintaining existing infrastructure and local integrated transport measures. However, the intention is to provide enabling powers for local authorities to produce such measures, and legislation to achieve this is unlikely before 2000. The optional nature of charging measures means that local authorities considering their introduction will need to pay close attention to possible diversionary effects, and to the possibility of predatory competition for development by neighbouring authorities.

3.10.6 Even more than before, demand management measures are expected to be part of any package put forward for funding via the LTP process. It should be noted that a local authority will be able to implement employee parking charges ***or*** road user charges, but not both.

3.10.7 ***Local policy***

3.10.8 There are a large number of policies at both the County and District level that are important in terms of the transport and land use study.

Many of these were listed in the Brief for this study and will not be set out here. Instead, some key elements of policy are reviewed.

3.10.9 At the County level, the adopted 1998 Structure Plan focuses attention on reducing dependence on private motorised transport (T1) and making walking, cycling and using public transport more attractive (T1, T2, T3, T4, T5, T6, T7). The County's policies include a commitment to provide priority to non-car modes (T2) and to manage car parking to limit the use of the car (T7). Improved integration between different modes of transport is also mentioned (T6) and Banbury is specifically mentioned in terms of improving the links between the railway station and the main employment areas (T10).

3.10.10 Local Plan policy also emphasises the need to provide genuine alternatives to private vehicles, through provision of effective public transport services, so far as this is possible. The promotion of Quality Partnerships between local authorities and bus operators in the 1998 White Paper provides one mechanism for achieving this.

3.10.11 Policy TR2 seeks to provide cycle and pedestrian networks in the town while minimising conflict between vehicles and cyclists, pedestrians and people with mobility impairments.

3.10.12 Policies TR5 and TR6 require development to provide for highway safety by the accommodation of parking on site, or for commuted payments by developers for off-site provision. Although this accords with typical parking practice, it should be noted that this approach runs counter to PPG13 guidance and may be unacceptable following the revision of regional guidance (RPG9 for the South East).

3.10.13 Policies TR12 to TR15 refer to roadbuilding in Banbury, including dualling of Hennef Way and a northern perimeter road north of Hardwick estate to serve new residential development. New accesses to the Banbury inner relief road are not to be allowed (TR14), but it is assumed that this refers only to motor vehicle accesses. New foot or cycle accesses could be an important outcome of BITLUS.

3.10.14 Policy TR16 includes a commitment to seek the improvement of access to the railway station for buses, cyclists and pedestrians and TR17 seeks the provision of a crossing of the railway and connections either side.

3.10.15 Policy TR17 refers to the creation of a new segregated foot/cycle facility between Grimsbury and the town centre funded from development north of Middleton Road. This policy appears not to have been implemented, however.

3.10.16 The Local Plan also includes housing policy. Investigating the transport impacts of new housing development is a key task for the BITLUS. The housing strategy is currently being reviewed, but current policy focuses on the development at Hanwell Fields, an extension to the existing settlement. There are also many examples of development of sites within the urban area, particularly close to the town centre. A thorough investigation of the potential for urban sites to deliver new housing will be crucial in informing decisions about future development in the town.

3.10.17 ***Practice elsewhere***

3.10.18 ***Public transport*** is likely to figure prominently in BITLUS options. Although there is no prospect of re-regulation of bus services, greater emphasis can be given to the development of Quality Partnerships with bus operators. Some dramatic improvements may be possible given dynamic and responsive attitudes on both sides. Examples of award winning improvements have been seen, for example, in Brighton, Cornwall and Norwich. Improvements include accessible low-floor buses, bus priority schemes, customer care, marketing and information. Integrated rail-bus ticketing is also beginning to feature, for example Connex rail and local buses in West Malling, Stagecoach rail and bus services in Winchester.

3.10.19 Norfolk County Council have acquired their own buses to operate school services as a way of controlling tender costs and of ensuring high quality vehicles. Other rural bus initiatives include the so-called "wiggly-bus" concept which is currently being trialled in Wiltshre.

3.10.20 ***Park and Ride*** is a particular form of public transport that has been growing over the past decade. This attracts support from the DETR as evidenced by recent approvals of call-in applications on green belt sites in both Winchester and York. Research for the DETR by Atkins found evidence of reduced car travel as a result of park and ride schemes, contradicting findings from earlier studies. However, lack of integration with existing bus services can produce problems of people driving to P+R sites in preference to using conventional services that are both less reliable and more expensive. A survey of 32 authorities with P+R (Healey and baker, 1998) found that four out of five had experienced reduce town centre congestion, with the remainder experiencing no change.

3.10.21 ***Traffic restrictions in shopping areas*** are known to increase trade through better environmental conditions for shoppers. Even so, the link is not automatic, and the debate continues to be heated when new schemes are proposed. For example, in Chester-le-Street the Council received 70% of responses in favour of a traffic restriction scheme, yet traders reported a 10-20% loss of trade. Experience in Hertfordshire emphasises the importance of careful planning and implementation in co-operation with local interests.

3.10.22 ***Parking and town centre vitality*** is even more difficult to assess. Studies in Germany indicate that towns with less parking have more

successful centres. Similar claims have been made for some British towns, though the data needed to confirm these claims are poor compared to Germany. Certainly there are examples of very successful centres with restricted parking, such as Cambridge, Edinburgh, Oxford and York. A study for DETR (by MVA and David Simmonds) confirms this view, but also concluded that parking restraint without wider improvements (to alternative access and to environmental conditions) could harm the long-term viability of retailing.

3.10.23 Experience of London's Red Routes has consistently found no adverse effect on trade of the reallocations of roadspace and tougher parking enforcement. It is often misunderstood that the red routes provide more opportunities for legal short stay parking than the "clearway" restrictions that they replaced.

3.10.24 A survey of 132 towns found that increased parking charges (28% over a two year period) had produced no decline in demand for town centre spaces in 80% of cases (Healey and Baker, 1998).

3.10.25 ***Parking enforcement*** is to be transferred to local authorities using decriminalisation procedures, thus providing parking revenues for transport uses locally. A regional committee has been established in East Anglia to facilitate the co-ordination of the process across different authorities in the region.

3.10.26 ***Traffic speeds*** are a common problem, not only in towns but also in rural areas. A survey of 126 parishes in Herefordshire found that speeding is a problem "most of the time", that 50% of respondents had experienced a serious road accident, and that 80% feared doing so. 80% of people reported lorries using inappropriate roads.

3.10.27 The Government is currently undertaking a wide ranging review of traffic speeds. Meanwhile it may be noted that physical traffic calming measures are becoming widespread in Britain, and have now almost certainly exceeded (in extent if not quality) those found in the Netherlands and Germany where the concept first developed. A TRL study found that 20mph signs by themselves are ineffective at reducing speeds. However, signs only have been effective when backed by rigorous random police checks, as in Heidelberg in Germany.

3.10.28 A possible new form of traffic calming in Britain (though ironically similar to the original form of Woonerf in the Netherlands) is the "***Home Zone***" concept where pedestrians would have priority over motor vehicles in all respects. This would require maximum speeds of below 10 mph and is being promoted by a group of MPs, and is being piloted in Leicester.

3.10.29 ***Green Transport Plans*** increasingly are featuring in both local development plans (e.g. Leicester, Nottingham, Edinburgh) and in development planning applications (e.g. for Stockley park and Kings Hill business parks). All Government departments are now required to produce such plans for their own staff and for visitors. The general view at all levels is that local authorities should implement plans at their own offices and depots before attempting to coax action amongst other employers in their areas.

3.10.30 ***Walking and cycling*** is being promoted through national strategies, and taken up in various ways at local level. There are now a number of good practice design guides available. ***Safe Routes to School*** is a particularly form of promotion which has found favour in many local authorities.

3.11 *Summary and key issues*

3.11.1 The review of data has raised a number of key issues. These can be summarised as follows:

- travel in Banbury
    - travel to and within Banbury is dominated by the car and this dominance is increasing. This is less true of trips made within the town, where walking accounts for a significant proportion of journeys. Use of the train, buses, motorcycles and bicycles account for very limited proportions of travel in the town;
    - commuting into Banbury for work is more important than commuting out of Banbury. Through vehicular traffic accounts for less than a fifth of peak hour traffic;
- vehicular traffic:

- traffic congestion is most serious in peak hours on Hennef Way and is a less significant problem at junctions of arterial roads thoughout the town. Many of these routes are older roads lined by mixed use development which should function as "mixed priority" roads rather than as traffic routes as they do at the moment. These are also the routes where many accidents occur;

- traffic relief provided by the M40 and the Inner Relief Road is being eroded by growth in car travel and flows on some links have returned to their earlier levels. The current high flows on the town's north-south route (North and South Bar and through the Cross) show that this key historic route has not benefited from the new roads;

- modelling of forecast traffic growth to 2001 showed that dualling Hennef Way will do little to relieve queues on this route;

- national transport policy is developing rapidly and measures to reduce car use are increasingly emphasised;

- parking:
  - use of the town centre car parks has grown steadily in recent years. Traffic modelling suggests that parking restraint in the town centre could lead to reductions in traffic queues throughout the town. The test assumed that the restrained trips would be replaced by trips by other modes such as park and ride from the M40 junction;

  - provision of parking for new development is being reviewed at the regional level and may mean that the Council's approach needs to be revised;

  - the relationship between provision of town centre parking and economic vitality is difficult to assess. There are evidence many examples of successful towns and cities with restricted parking. Increases in parking charges do not appear to put off town centre visitors;

- public transport:

    - modelling suggests that introducing bus priority measures in the town could have a significant impact on reducing traffic queues;
    - Quality Partnerships with bus operators can lead to dramatic improvements to services;
- public awareness campaigns are key parts of an integrated approach to tackling transport issues. Safe routes to school schemes and green commuter plans are important mechanisms for raising awareness. CDC could lead the way in implementing a green commuter plan;
- Banbury's urban design study included some useful ideas about treatment of key routes and strategies for "mending the holes" in the town centre; and
- investigation of the potential for developing housing on inner urban sites will be a key part of the Council's exploration of the most suitable locations for new housing.

4 *Background Paper - Household Questionnaire Methodology*

4.1 *Introduction*

4.1.1 This background paper sets out details of the aims of and method for the questionnaire survey of households with Banbury's catchment area. Completed questionnaires are currently being returned analysed and the results will be available by mid-January 1999.

4.2 *Aims*

4.2.1 The household survey was carried out primarily to provide information on travel patterns to and within Banbury. Existing data provides information on peak hour travel and journeys to work (see Chapter 3). The survey was designed to collect complete travel information at all times of day and for all purposes.

4.2.2 The household survey provided the opportunity to explore a key aspect of people's travel behaviour – the scope for switching car journeys to other modes (walking, cycling or the bus). The questionnaire was designed to allow us to find out which trips could be switched to other modes and to explore people's perceived level of car dependence.

4.2.3 We also used the survey to investigate people's perceptions of travel in and to Banbury both now and in the future, and their key concerns.

4.3 *Method*

4.3.1 *Identifying the Banbury's key catchment area*

4.3.2 We identified a key catchment area for Banbury, building on previous work in the town.[12] The area identified is approximately a 10 mile radius from Banbury Cross which we adjusted to follow Parish and Ward boundaries.

4.3.3 *Sampling within the catchment*

[12] Llewelyn-Davies Planning and Development Analysts Limited, 1986

4.3.4 The survey sample was split in half between Banbury residents and residents of the outlying catchment area. CDC provided addresses for 2,500 households in Banbury selected from the electoral role. This amounted to an approximately 15% sample of Banbury's 17,350 households.

4.3.5 There are around 24,000 households living in the key catchment area outside Banbury. We selected three quarters of the identified parishes in the catchment area and sent questionnaires to 15% of the households living with these parishes. Addresses were selected from the electoral roles of Cherwell District Council, South Northamptonshire District Council and Stratford Upon Avon District Council. The selected parishes are listed in Appendix C.

4.3.6 Each selected household was sent two copies of the questionnaire. We did this to encourage a range of types of people to fill out the questionnaire, rather than just the head of the household.

4.3.7 *The questionnaire*

4.3.8 The questionnaire was drafted and designed in-house. It was designed as a simple, fold out leaflet and was accompanied by a map of Banbury showing travel zones. A copy of the content of the questionnaire and map are appended. The questionnaires were produced in colour as concertina leaflets.

4.3.9 It was piloted by 25 employees of Cherwell District Council. The questionnaire was modified in light of their comments. Officers from OCC and CDC also made comments about the draft questionnaire, and changes which were incorporated into the final version.

4.3.10 The questionnaire was distributed on 21st November 1998 and included a £200 prize draw to encourage people to participate in the survey.

4.4 *Publicity*

4.4.1 To publicise the study and encourage people to complete the questionnaire we contacted the Banbury Guardian, Fox FM and Thames Valley Radio. They made announcements and printed an article about the study.

4.5 *Response*

4.5.1 To date the response rate has been slightly disappointing. On 8th December we had received responses from 660 households, 13% of the sample. In order to make the most effective use of the survey, the representativeness of the responses will be checked against the Census and other data. Decisions will then be made as to the statistical validity of the factual and attitude components of the total response.

5 *Background Paper – Survey of Banbury's Travel Infrastructure*

5.1 *Functional classification of roads*

5.1.1 The function of Banbury's roads was reviewed in terms of the development fronting on to them and the transport and other functions the roads do, or could, fulfil. The purpose of this review, in conjunction with the other surveys, was to highlight areas:

- where different types of users or modes of travel currently conflict;
- where some users have inadequate provision; and
- where the current organisation of space and traffic speeds do not reflect the potential users of the roads. Banbury's roads were classified into four types on the following basis:
  - **Traffic Areas**: sign-posted major access and through routes where traffic function takes priority but other users are protected (see Figure 5.1);
  - **Mixed priority areas**: through routes with a need for frequent crossing points along a length like shopping areas, areas near schools, health centres, etc. (see Figure 5.2);
  - **Collector areas**: roads linking residential areas and residential areas with the town centre carrying mainly local traffic, not desirable as through routes (see Figure 5.3); and
  - **Living areas**: residential or commercial areas with no through traffic where walking, cycling and other living functions have priority over motor vehicles (see Figure 5.4).

5.1.2 The classification of roads is included in Appendix D.

Figure 5.1: "Traffic priority area" – Inner Relief Road

Figure 5.2 "Mixed priority area" – South Bar

Figure 5.3 “Collector area” – Causeway

Figure 5.4: “ Living priority area” – Grimsbury

5.2 *Provision of cycle facilities*

5.2.1 *Aims and Method*

5.2.2 The purpose of the survey was to assess the quality of facilities for cyclists in the town. Conditions for cyclists on key routes were reviewed and places where new links could improve the cycling network were considered. The survey identified the types of problems which cyclists encounter in the town classified into the following categories:

1 conflict with vehicular traffic where vehicular traffic makes cycling unsafe or unpleasant;

2 conflict with pedestrians where cyclists and pedestrians use the same space;

3 junctions which are problematic for cyclists;

4 inconvenient crossings;

5 poor surface quality on roads or cycle paths;

6 hilly routes;

7 obstruction to cyclists;

8 secluded path;

9 route not indicated.

5.2.3 Cycle parking provision for cyclists in the town centre and at other selected locations was reviewed.

5.2.4 The survey covered the key routes on the cycling network. These are the most direct routes between housing areas and the town centre, employment areas and other attractors.

5.2.5 Facilities for cyclists in areas of new housing development were surveyed through surveys of a sample of residential areas (see below).

5.2.6 The draft cycling network is included in Appendix D.

5.2.7 *Issues on key cycling routes*

Conflict with vehicular traffic

5.2.8 There are a number of the main arterial routes into the town centre where vehicular traffic poses a problem for cyclists. Middleton Road is a notable example of this as it has a relatively narrow carriageway and is a busy route with no formal provision for cyclists. Figure 5.5 illustrates this.

Figure 5.5: Vehicular traffic makes cycling difficult on Middleton Road

Conflict with pedestrians

5.2.9 As also highlighted under the section on pedestrian routes, parts of Oxford Road and Causeway are areas of conflict between cyclists and pedestrians as is Hennef Way due to the shared priority on relatively narrow pavements. This is not an ideal situation for either pedestrians or cyclists and can prove hazardous for both. In many of these areas provision could be made for cyclists on the carriageway or by providing cycle lanes separate from foot ways on

space currently taken by grass verges. This could provide the solution to this potential conflict on part of Oxford Road.

Hilly routes

5.2.10 Much of the housing in Banbury is built on hills especially west of the river Cherwell. Broughton Road, Warwick Road and South Bar/Oxford Road are particular examples of a hilly main routes. This tends to preclude cycling as a mode of travel for a number of people particularly as it is up hill from the town centre when one is most likely to be laden with shopping. Figure 5.6 illustrates this.

Figure 5.6: Cyclist walks her bike up a hill

Problem junctions

5.2.11 Few junctions in the town centre are problematic for cyclists if they are cycling on the carriageway although large, busy junctions where right turns are required are always difficult especially if there is no filter light. Within the town centre, the junction of Calthorpe Street and Marlborough Road with High Street is particularly difficult to negotiate. Figure 5.7 illustrates this.

Figure 5.7: The layout of the junction makes it difficult for cyclist to negotiate

Inconvenient crossings

5.2.12 Inconvenient crossings occur particularly where cyclists and pedestrians share priority on pavements and side and major roads then have to be crossed. This is both inconvenient to cyclists and potentially hazardous. The roundabout at Causeway and Ermont Way is an example of this.

Obstructions

5.2.13 Obstructions to cyclists in Banbury are largely caused by parked cars along cycle routes. This is particularly the case along Manor Road, Broughton Road, Causeway and at the railway station. Other obstructions occur with barriers and bollards such as at the subway where the Banbury Fringe circular Trail passes at Warwick Road. Figures 5.8 and 5.9 highlight these issues.

Figure 5.8: Parked vehicles obstruct cyclists

Figure 5.9: Obstruction to cycle route

Secluded path

5.2.14 The Banbury Fringe Circular Trail at Hardwick is particularly secluded with an uninviting underpass and a path lined with high shrubs and trees. Also the path that runs through the Grimsbury housing development is not very well overlooked although it gives an impression of being more open as the planting is quite far from the path itself. However, the cycle route that runs from the "Tesco's" roundabout on Hennef Way to Old Grimsbury is probably the most secluded as there is no housing overlooking it and it is remote from other traffic. Figure 5.10 illustrates this.

Figure 5.10: Path with no overlooking and little activity

Route not indicated

5.2.15 Cycle routes are generally well sign-posted. However the town centre route that runs from Old Grimsbrury down Manor Road runs out of signposts at Gibbs Road causing confusion for people using this route who are not familiar with the town.

Poor Surface

5.2.16 Although surfaces are generally in good condition, reinstatement works in some places cause discomfort for cyclists. Areas of particular poor surface are on the cycle route adjacent to Hennef Way and at the Railway Station.

5.3 *Provision and quality of foot ways*

5.3.1 *Aim*

5.3.2 The purpose of the survey was to define and build up a description of Banbury's key pedestrian network. A desk top review was undertaken of the following:

- **attractors** - buildings and areas that people walk to like the town centre, employment areas, shops, schools and churches;
- **key pedestrian links** - the routes that are likely to be used most frequently;
- **other links** – other important links on the pedestrian network; and
- **least safe streets** – streets with the highest numbers of accidents involving pedestrians were highlighted.

5.3.3 *Method*

5.3.4 A physical survey was used to verify the desk top classification and to assess the quality of the key pedestrian links. These were assessed using the following "5 C" criteria:

- **connected** - a strategic and local level review of the network to find out if it is possible to walk between different areas of town, and to identify gaps in the network;
- **convenient** - an assessment of the convenience of routes in terms of if routes are direct, if transitions between surfaces at kerbs smooth or if they involve a step, if crossings are provided and are direct and easy to use and if pedestrians have to wait more than 10 seconds to cross roads;

- **convivial** - assessment of how attractive and safe routes are to use considering factors like how well routes are lit, if they are overlooked and if there is variety along the street;
- **comfortable** - review of how comfortable pedestrian links are in terms of the quality of the foot way surface, width of the foot way, proximity to traffic, obstructions and micro-climate; and
- **conspicuous** - assessment of how easy routes are to find and follow and if destinations are clear considering factors like how obvious the beginning of a path is, surface treatments to guide pedestrians and signs at crossings.

5.3.5 *The key pedestrian network*

5.3.6 The key pedestrian network was established based on the most direct routes from residential areas to the town centre. Generally, these are routes are based on the Banbury's main roads and converge at the town centre. The key routes that have been identified are broadly within a ten minute walk of the town centre and are in the region of 800m to 1km long.0

5.3.7 A secondary network of routes is also identified, comprising links that are less well used but are important to the local network. These provide links to employment areas, schools and local centres. Finally, routes to the countryside and recreational routes have been identified.

5.3.8 The identified routes are in draft form and are the results of our initial appraisal. We expect to develop the network as the study progresses. The network is included in Appendix D.

5.3.9 *Issues on key pedestrian routes*

5.3.10 The survey looked at these key pedestrian routes and identified issues along them. It also looked at the provision of crossing facilities. Issues of concern noted were:

1 conflict with vehicular traffic where vehicular traffic makes walking unsafe or unpleasant;

2 conflict with cyclists;

3 junctions which are problematic for pedestrians;

4 inconvenient or problematic crossings;

5 poor surface quality on foot ways;

6 narrow or obstructed foot ways;

7 path secluded or requires improved lighting if it is to feel safe at night; and

8 route not indicated or paths difficult to find.

5.3.11 Each of these issues is discussed briefly below. Examples of each issue are given.

Problematic junctions

5.3.12 Our survey shows that the most difficult junctions for pedestrians are those at the intersections of the town centre and the main traffic routes that lead to them. These are important because they are the pedestrian's gateways to the town centre.

5.3.13 The junction of Cherwell Street and Bridge Street/Middleton Road close to the railway station is an example of a problematic junction which is difficult for pedestrians to cross. North Bar/Southam Road and Castle Street/Warwick Road are also junctions which cause problems for pedestrians. The junctions are traffic light controlled, but none have pedestrian lights. Figures 5.11 and 5.12 demonstrate these issues.

Figure 5.11: Pedestrians are faced with wide expanses of tarmac and many lanes of traffic

Figure 5.12: There is no indication of when it is safe for pedestrians to cross

5.3.14 There are also junctions where pedestrian facilities have been provided, but these are not conveniently located and therefore are not regularly used. Figure 5.13 shows an example of this.

Figure 5.13: A pedestrian walks straight on rather than deviating their route to use the crossing at the junction of Oxford Road and Upper Windsor Street

Conflict with cyclists

5.3.15 Parts of Oxford Road and Causeway are examples of spaces where there is a shared priority between pedestrians and cyclists on relatively narrow pavements. Encouraging pedestrians and cyclists to share the same space can make both types of travel unsafe and uncomfortable. Provision for pedestrians could be improved by allocating road space to cyclists or providing separate cycle lanes from wide foot ways and grass verges as is the case along parts of Oxford Road. Figure 5.14 shows this.

Figure 5.14: Pedestrians and cyclists are encouraged to share the same space which can make both feel unsafe

Conflict with vehicular traffic

5.3.16 There are a number of examples of streets where the walking environment is negatively affected by vehicular traffic. Parson's Street in the town centre is an example of this. The pavements are less than a metre wide and pedestrian flows are heavy. Figure 5.15 highlights this issue.

Figure 5.15: Pedestrians compete with vehicular traffic for road space

Inconvenient crossings

5.3.17 There are a number of roads with relatively fast flowing or heavy vehicular traffic with poor crossing facilities for pedestrians. An example of this is on Oxford Road at The Hawthorns which is a sheltered residential scheme. The nearest crossing point is at Sainsbury's supermarket and elderly people are crossing this busy road with no crossing facilities. Figure 5.16 shows this.

Figure 5.16: A pedestrian hurries across Oxford Road which has fast flowing traffic and no convenient crossing facilities

Narrow and obstructed foot ways

5.3.18 Many of Banbury's footways are generous, but there are examples of narrow paths which make it difficult for pedestrians moving in different directions to pass each other, particularly if they are carrying bags or have push chairs or wheelchairs. There are also a number of obstructions in the foot way caused by street lighting and furniture and railings designed to discourage cyclists from using paths. Examples of this are found on the Middleton Road which is a particularly busy road and a key pedestrian route to both the station and the town centre. Figures 5.17 and 5.18 show examples of these types of problem.

Figure 5.17*:* Obstructions in the foot way on Middleton Road. The foot way is made more difficult for less able people to negotiate by the combination of a slope and bubble paving

Figure 5.18*:* Railings to discourage cyclists obstruct pedestrians off Gatteridge Street

Poor surface

5.3.19 Many of the pavements throughout the key pedestrian network are of tarmac and have been patched making the surface uneven and difficult for less able people to negotiate. There are also areas especially on Middleton Road where bubble paving has been located at crossing points and due to the width of the pavement and the sloping nature of it means that this could proved difficult to negotiate. Figure 5.19 shows an example of this.

Figure 5.19: Poor surface quality allows water to collect on the foot way

Path not overlooked/secluded

5.3.20 There are a number of examples of paths that are not overlooked and can feel unsafe, particularly after dark. In some of the newer developments, paths are constructed to provide links through housing areas which are not well overlooked. While lighting is provided, the lack of activity along them makes it unlikely that they will be regularly used, particularly after dark. The path is shown in Figure 5.20.

Figure 5.20: Poorly overlooked footpath in housing development in Grimsbury

5.3.21 Parts of the Banbury Fringe Circular Walk at Hardwick are particularly secluded. While this is to be expected as part of a recreational countryside route, the inclusion of an underpass in the route makes this part of the walk feel unsafe at all times of the day. Figure 5.21 shows this issue.

Figure 5.21: Uninviting underpass on the Banbury Fringe Circular Walk

5.4 *Public transport and further studies*

5.4.1 Banbury is served by two main groups of bus services, town and village links, and by rail services calling at Banbury station. The main rail destinations are London, Birmingham and Oxford.

5.4.2 The quality of public transport is vaiable. Some basic points are:

- Bretch Hill services are the most frequent and best used in Banbury;
- Several town routes operate more frequently than hourly during the day, but services are poorer or non-existent in the evenings and at weekends;
- Village buses are generally infrequent and do not comprehensively cover all the settlements, The services have limited hours and days of operation;Increased rural bus frequencies have been implemented following the availabilityt oof the Rural Bus Grant, but these are reportedly little used, perhaps partly due to limited marketing of the new services;
- The relocation of Banbury bus station to the east end of castle Quay centre will bring about a major restructuring of bus operation in the town centre. On-street stands in Bridge Street will be used as well as the new bus station. It will be necessary to study further how best use can be made of the limited bus routing opportunities in the town centre following the closure of Castle Street;
- There is no direct interchange between rail and bus services in Banbury, and no coordination of bus and rail timetables. Pedestrian links between the railway station and bus services is extremely poor;
- Many buses operating in the Banbury area are more than 5 years old and offer poor standards of access and comfort;
- Bus routes in some cases do not offer direct routes, and deviate to serve roads that are not well configured for bus operation;
- Some new housing developments have layouts that are unsuitable for being conveniently served by bus;
- rail services to and from Banbury are generally good, though punctuality of trains has deteriorated in recent months.

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5.4.3 Overall we would judge the quality of public transport in and around Banbury to be poor, and certainly of insufficient quality to attract people who have access to a car.

5.4.4 Further studies will be made of the pattern and use of current services, and the major changes that will be occasioned by the bus station relocation. Insofar as it will be possible to acquire, data on patterns of passenger use will be collated.

5.4.5 These studies will inform the possible scenarios for public transport improvements, bearing in mind the limitations of local authority influence in this area.

5.5 *Summary of key issues*

5.5.1 The key issues highlighted by the infrastructure survey were:

- many of the "mixed priority areas" on the arterial routes to and through the town currently give priority to motorised traffic and other activities in these spaces are treated as secondary;
- the draft cycle network is based on the most direct links from the residential areas to the town centre. There are steep slopes on routes to many of the residential areas from the town centre. Cycling in these hilly locations is unlikely to be an important mode. Investment in cycle infrastructure should focus on the flatter areas where cycling is most likely to be comfortable for a wide cross section of people. Key issues on the cycle network were identified as being:
  - conflict with traffic on arterial routes;
  - conflict with pedestrians on routes where these two modes share space; and
  - lack of provision for cyclists at junctions to the town centre and within the town centre.
- the key issues on the pedestrian networks were identified as being:
  - junctions on the edge of the town centre which are inconvenient, uncomfortable and present an unattractive gateway to the pedestrian;

- the lack of crossing facilities on busy routes with fast flowing traffic;
- conflict between traffic and pedestrians particularly in the town centre; and
- poorly overlooked foot paths in new housing development areas.

- Public transport services are of variable but generally poor quality, with the following points being of particular importance:
  - No interchange between bus and rail;
  - Bus services with inconvenient routes;
  - Bus services infrequent on most routes, and operating on limited days to villages;
  - Service poor or absent at evenings and weekends;
  - Poor quality of Banbury rail station, due to be refurbished;
  - Limited options for bus routing in town centre following closure of Castle Street;
  - Poor quality of many vehicles operating in the Banbury area;
  - Lack of information and marketing of public transport services.

Appendix A – List of Focus Group Invitees and Letter of Invitation

Appendix B – Bibliography

Appendix C – Sample of Households, Questionnaire Content and Map

Appendix D – Road Classification, Cycle Network and Pedestrian Network