Llewelyn-Davies
with
GIBB Ltd

Witney Integrated Transport and Land Use Study

Draft Final Report

Stage 3

for

Oxfordshire County Council,
West Oxfordshire District Council
and Witney Town Council

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Executive Summary

Stage 3 of the Study develops the preferred option (identified in Stage 2) into implementable and practical measures. Taken together, these measures comprise the transport and land use strategy for Witney for the next ten years. The set of identified schemes and measures is related to a programme for implementation, and funding implications are discussed. A set of procedures for monitoring the achievement of the study objectives is set out, focusing on key targets which the strategy is designed to aim for.

The work in Stage 3 involved further traffic modelling of traffic impacts (especially in relation to proposed road closures, and the future inclusion of the West End Link road), consultations with officers of the local authorities, bus operator, and emergency services, and sketch designs and costings for town centre enhancement and other recommended schemes.

The work reported here will be taken forward in two ways: the preparation of a public exhibition of the recommended strategy, and the preparation of a bid for Transport Policy and Programme "package" funding.

The recommended strategy has been developed in response to the conclusion accepted in earlier stages of the Study, that declining accessibility and environmental standards would result from attempting to provide for unrestrained traffic growth in Witney. The strategy presented here is designed to manage demand for travel in ways that will provide substantial safety, environmental and access improvements in the short term, and encourage the use of alternatives to the car as a way of avoiding the problems of future traffic growth in the town.

The recommended strategy includes a range of schemes including new and improved infrastructure for all categories of road user, traffic and parking management, town centre enhancements, and so-called "soft measures" to influence travel behaviour.

The various measures are set out under headings which reflect their priority, and the sequence of implementation. An overview is provided in Section 3, while fuller descriptions are given in sections 4 - 7.

Short term schemes are those which are recommended for implementation within the first 3-5 years in order to bring about major safety and environmental benefits in the town centre, and to minimise the adverse environmental impact of the planned expansion of the town and general traffic growth. They can be implemented prior to any new road building in Witney (see Section 3.2 and Section 4).

The main impetus should be in creating a car-reduced town centre in which pedestrians and the other non-car modes have priority. This is to be achieved using the concepts of "drive to, not through", and "preferential routing" for pedestrians, cyclists and buses. The benefits of less vehicles in town centre streets can then be exploited through repaving and other enhancements to the environment. Implementation will need to be phased for practical and financial reasons.

Traffic management measures are needed to avoid the creation of new "rat runs" and to ensure safety on the main traffic network. Also important in the short term will be the implementation of a parking management strategy to achieve efficient parking at a lower level of overall demand. Mode shift will also be the main objective of the recommended "Mobility Centre", an innovative scheme which develops the Travelwise initiative at the local level.

A start should be made in the short term in the implementation of the improved network of pedestrian and cycle facilities and traffic calming, though full completion of the target networks is likely to require action over the 10 year strategy period. These measures (see “unconstrained schemes described in Section 3.3. and Section 5) are expected to bring cumulative improvements in road safety and reduced accident levels.

In the medium term, the established Cogges Link and North East Distributor Road proposals will be taken forward in conjunction with new development in the north east of Witney. These new roads can offer environmental traffic relief on Bridge Street and its approach routes, provided that traffic management measures are taken to secure it. Recommended measures are set out in Sections 3.4 and 6.

In addition, “framework” measures are recommended (see Sections 3.5 and 7) which are complementary to the specific recommended schemes. These mostly relate to the town as a whole, and can be applied on a continuing basis. Included are suggestions to guide land use planning decisions, especially in the town centre to strengthen the pedestrian network, and “soft measures” including the Witney Mobility Centre, and “Quality Partnership” agreements with bus operators.

The strategy includes a number of innovative concepts, and these are explained in Section 2.

The various schemes and policies which make up the programme are intended to work together in an integrated way rather than as a series of separate measures. While it is necessary in this report to describe schemes individually, their recommendation stands only if they are pursued together as a package of related or complementary measures.

The recommended strategy represents considerable planning and construction activity in Witney over the coming years, involving public and private sector resources, and the means of funding are discussed in Section 9. The public sector requirement could amount to the equivalent of around £600 per Witney

household, though only a small proportion of this will need to be met from the households themselves. This scale of expenditure is thought to be reasonable in relation to the benefits to be achieved. About 60% of the public sector costs should be eligible for funding through Government and County channels (the Transport Policy and Programme process), with the remaining 40% requiring funding from local sources. The strategy itself includes a major revenue earning component through the parking management strategy, and this is expected to be important for implementing town centre enhancement measures and the Mobility Centre.

Overall this report offers a programme of action which combines the vision, practicality and financial realism necessary for the achievement of the agreed Study objectives.

PART 1: BACKGROUND

1 Introduction

1.1.1 This report is the output from the third stage of the Witney Integrated Transport and Land Use Study (WITLUS) which has been commissioned from Llewelyn-Davies and GIBB Ltd by Oxfordshire County Council, West Oxfordshire District Council and Witney Town Council.

1.1.2 The first stage of the Study involved a review of relevant policy, literature and data, as well as a number of surveys and two public consultation exercises. This information was used to produce the Stage 1 report which set out the objectives for the Study.

1.1.3 The second stage of the Study refined the Study objectives in the light of further public consultation. It reviewed traffic forecasts for Witney, identified the potential for change in the town and set out a basic approach for the Study from this information. Within this approach, Stage 2 developed options which consisted of packages of measures which could be used to meet our objectives. These measures were tested to find out how well they would perform against the objectives, how easy they would be to implement, and if they had any undesirable side effects. Finally, the measures were packaged into integrated options.

1.1.4 This report sets out the details of the measures developed as the preferred package in Stage 2. It begins with a brief summary of the findings so far and sets out the basic approach as defined in Stage 2. The second part of this report sets out the proposed schemes and their priority, and explains how they work together. The report ends with consideration of the funding, implementation and monitoring of the schemes. Stage 3 included consultations with some key groups and individuals, and these are set out in Appendix A.

1.1.5 This report marks the end of the WITLUS. The results of the Study will be taken forward in two ways. Firstly there will be a public exhibition to inform the general public about the results of the Study. Secondly, we will prepare a TPP package submission for funding from the DoT.

2 Basic Approach and Targets

2.1 *Introduction*

2.1.1 This third stage of the Study concentrates on the development of the preferred strategy (identified at the conclusion of Stage 2) into a package of schemes and measures, together with an implementation and review programme.

2.1.2 The twin emphases are on a vision for the future of Witney, and the practicality of realising it. This chapter summarises the issues and objectives which the strategy is intended to address, explains the overall approach and its intended benefits and effects, and includes specific targets to aid the monitoring of objective achievement during the implementation period.

2.1.3 The Study objectives are concerned with improving the vitality and viability of the town, especially the town centre, and reducing the adverse impacts of motorised travel on the quality of life in the town. In short, the strategy is expected to help create a successful and "liveable" town for residents and others. The full list of agreed objectives is as follows:

1 *Reduce the adverse impact of motorised traffic within the town as a whole, especially the most sensitive parts including the Conservation Area.*
2 *Protect and enhance the vitality and attractiveness of the town centre.*
3 *Improve accessibility to facilities within the town, especially those within the town centre, for all people including those whose mobility is limited.*
4 *Create a better environment for people on foot and good conditions for people whose mobility is limited.*
5 *Promote safer, more pleasant and more convenient conditions for cycle traffic, and for bus passengers.*
6 *Improve accessibility to Oxford.*
7 *Improve accessibility between Witney and the surrounding countryside for recreational purposes.*
8 *Promote the efficient operation of all types of traffic and related activity, including parking.*
9 *Reduce road danger throughout the town, and reduce the number and severity of road casualties.*

2.1.4 Four key issues emerged from the earlier stages which have shaped the final strategy:

1. traffic and environmental conditions in Witney will deteriorate in future unless counter action is taken, especially in the light of further population growth in Witney and elsewhere in West Oxfordshire;
2. the building of new roads currently proposed will not in itself bring about substantial or lasting improvements, and their ability alone to divert substantial traffic volumes away from sensitive locations is valuable, but limited;
3. lasting improvements in both access and environmental conditions requires a breach of the trend of traffic growth, and this can only be achieved by people making less use of the car, and making a larger proportion of their journeys by alternative modes; and
4. major improvements to the town centre and areas to the west of centre can be implemented in advance of any further road building, providing appropriate adjustments are made to transport infrastructure.

2.1.5 The recommended strategy consists of a set of measures which, taken together, are expected to bring substantial benefits to the town. When all objectives are considered, these benefits are judged to far outweigh any disbenefits to particular groups.

2.1.6 It is important to stress the integrated character of the various strategy elements. The integration has the following dimensions:

- integration of measures relating to different modes of travel;
- integration of environmental, safety, economic and access objectives;
- integration of land use and transport measures;
- integration of physical, fiscal, policy and other measures;
- compatibility of short and longer term measures; and
- comprehensiveness of approach to benefit all user groups.

2.2 *Explanation of key strategy elements*

2.2.1 Some aspects of the strategy deserve further explanation.

Mode switch from car to non-car modes

2.2.2 This is seen as the only way of meeting the Study's environmental and safety objectives in the town as a whole. It is recognised, however, that people coming to Witney from outlying villages will be unlikely to make less use of the car, in view of the poor alternatives currently available, and the difficulties of improving them. The strategy therefore, emphasises mode switch potential for trips by residents of Witney, residents of nearby villages where

better walk and cycle facilities can be provided, and trips to Oxford, Carterton, Brize Norton, Curbridge and Eynsham, where bus services are already good, and can be further improved.

Preferential routing

2.2.3 One way of encouraging people to make less use of their car is to increase the relative attractiveness of the alternative modes of travel. The strategy therefore incorporates the concept of "preferential routing" whereby the routes for pedestrian, cyclists and buses are more convenient or more direct than routes for car users. In the town centre this will be achieved by allowing access only to the non-car modes. The concept can also be applied elsewhere in the town, for example using selective bus priority, traffic calming or partial road closures to favour buses and non-motorised traffic. The concept is illustrated in Figure 2.1. Routes treated in this way may also be referred to as "green routes".

"Drive to, not through"

2.2.4 Interference with commercial and social activity in the town centre by motor traffic can be reduced by ensuring that drivers do not traverse the centre, but instead select the car park nearest to their starting point, and then walk to their destination. The removal of through traffic in the town centre will achieve this aim, while at the same time maintaining accessibility by car to the town centre using well-managed car parks at the edge of the pedestrian priority area. The concept is illustrated in Figure 2.2.

Parking management

2.2.5 It is neither financially feasible, nor environmentally acceptable to cater for full unrestrained demand for car use. Car use, which accounts for the great majority of traffic and traffic growth, therefore has at some point to be limited. Although the use of alternatives to the car can be encouraged by better bus, cycle and pedestrian facilities, this has been shown in numerous towns to be insufficient to reduce car use. Direct restraint of car trip ends through controls and/or charges is currently the most effective way of influencing car use. In the longer term, other techniques such as road tolls and pricing may be available, but these lie outside the scope of this study.

2.2.6 Control of scarce parking space can produce important benefits, such as discriminating in favour of users with higher-value trips to the town centre, and discriminating in favour of visitors from

outside Witney who have less choice of mode. The use of parking charges can generate revenue for the local authority which can be used creatively to further the objectives of the transport and land use strategy, as well as to assist with parking enforcement costs, or indeed the funding of other services.

The Witney Mobility Centre

2.2.7 It is considered important to inform people of the objectives of the strategy, and to raise awareness not only of general issues, but also of the specific measures that will be taken to improve travel and accessibility. The innovative Mobility Centre will be charged with the task of securing the necessary mode switch away from the car, and ensuring that people make maximum use of the new opportunities for using the more environmentally sustainable forms of travel. This remit is based on the recognition that decisions to use cars begin not in the minds of transport planners, but in the minds of the people who live in and visit the town. Raising awareness in a direct and positive way will, it is believed, increase understanding of the various changes that will take place, and hence increase acceptance of them.

Town centre enhancements

2.2.8 The success of the strategy depends not only on reducing traffic impacts in the town, but in securing the benefits of less traffic for the enjoyment of residents and others. Whilst there are many such benefits which the strategy aims to deliver (including safer and more pleasant conditions for getting about on foot or bicycle), the most significant and dramatic changes will be experienced in the town centre. Quite apart from the desirability of a more attractive and welcoming town centre environment in its own right, there will be important commercial and social benefits which can be exploited. The town centre offers enormous potential to offer a more diverse range of facilities and activities, and thereby to gain a competitive advantage compared to other towns in the region.

Road safety enhancement

2.2.9 The package of measures is expected to result in greater safety for all road users, but especially vulnerable road users. Fewer and less severe accidents and casualties are expected, due to the removal of many traffic conflicts in the town centre, and lower vehicle speeds on town distributor and residential roads.

2.2.10 A reduction of severe casualties of at least 50% should be achieved once the speed management measures have been fully implemented.

Innovative measures

2.2.11 The measures set out in Part 2 of this report are regarded as both feasible and practicable. But they also include measures which may be regarded as a fairly bold attempt to achieve a switch of mode away from the car, and to reclaim important parts of the town as “people places”, in contrast to their present character as simply “traffic places”.

2.2.12 This boldness is considered to be justified on three grounds. First, experience of towns and cities elsewhere suggests that encouraging the use of the non-car modes is insufficient in itself to achieve a “trend breach” of motor traffic levels. Second, funding via the Transport Policy and Programme is most unlikely to be approved unless the strategy includes measures which act directly to limit use of the car. Third, only by achieving traffic reduction can many of the key environmental objectives be met in the longer term.

2.2.13 Where possible, we have drawn on best practice and innovative concepts from other parts of the country, and other parts of Europe. Examples of such “leading edge” approaches incorporated in the strategy are:

- promoting pedestrian activity by increasing the extent of high quality traffic-free spaces (drawing on experiences reported from Danish and other cities);
- "drive to, not through” the town centre (drawing on historic towns experience, and developed in the consultation process of the Study);
- preferential routing for non-car traffic, and the creation of “green routes” through the town (developed and applied in Dutch towns);
- whole-route bus-priority measures (most focus on individual congestion points);
- “queue relocation” using signal and highway design techniques to reduce congestion at sensitive locations (as first developed in London in the 1980s);
- a network approach to walking and cycling improvements to secure mode share increases (as successfully applied in Delft for cycling, and as recently advocated in London for walking);

- area-wide speed management and traffic calming (as developed following research in Britain and elsewhere, and building on Oxfordshire's experience with casualty reduction);
- Britain's first “Mobility Centre” to work directly with people to encourage more sparing use of the car, and to raise awareness locally of traffic and environmental issues (similar to schemes being piloted in Germany); and
- the use of targets to reinforce the objectives-led approach to evaluation and monitoring (as increasingly being advocated and applied in British and other towns).

2.3 *Targets*

2.3.1 The measures proposed are intended, in combination, to secure progress towards the objectives agreed in the first stage of the Study. It is important that such progress can be monitored and quantified, in order that any appropriate strengthening or modification of particular actions can be identified.

2.3.2 This means that some qualitative or quantitative yardsticks must be developed from the broad objectives. Taken to its logical extreme, this could result in identifying numerous specific targets for every aspect of transport and environmental change (including individual air pollutants, noise, pedestrian delays, community severance, paving quality, bus waiting times, ease of parking, journey times by different modes, and so on). Such an approach would, we believe, be onerous in terms of both target definition and monitoring survey requirements. We recommend instead a more limited set of targets which will focus attention on key objectives, and will use various “proxy” measures for ease of monitoring. The specific targets, their achievability, and the monitoring surveys required to assess progress are set out in Table 2.1.

2.3.3 To be workable, targets must have a timescale attached, and these vary between the different targets to reflect the periods needed for schemes to be implemented, and to take effect.

2.3.4 In view of the importance of mode switch away from the car, a key target is to reduce the mode share of car trips by Witney residents from 62% (1990) to 50% by the year 2005, and increase the share by non-car modes from 38% to 50% over the same period. This scenario, which may be referred to as the 50/50 scenario (50% of trips by car, 50% by other modes), would result in car trips generated by residents being stabilised at 1990 levels after allowing for a 25% population increase.

2.3.5 Which of the non-car modes is increased is not particularly important from an environmental viewpoint, but it is important that increased bus, foot and cycle traffic is transferred from the car, and not just caused by a switch between the non-car modes. An increase in cycling is felt to be important to provide a stronger presence of cyclists which can aid their safety, and will build on the popularity of cycling in Witney, which is already around three times the national average rate for small towns.

Table 2.1 Targets of the integrated strategy

Target	Justification	Monitoring
Switch 50% of Witney to Oxford car commuters to bus by 2005	This is achievable according to our residents survey.	Repeat of Wooton Jeffrey's household survey (small sample).
Reduce the proportion of Witney residents' trips by car from 62% to 50% of all trips by 2005.	See above.	Repeat of Wooton Jeffrey's household survey (small sample).
Increase the proportion of Witney residents' non-car trips from 38% to 50% of all trips by 2005.	See above.	Repeat of Wooton Jeffrey's household survey (small sample).
Reduce car driver share of all work trips to Witney employment areas from 61% to 46% by 2011.	This is achievable if trips to work are converted at the rate theoretically possible for Witney residents to all destinations.	2001 and 2011 census.
Reduce motor traffic levels on roads with significant frontage development to not more than 5,000 vehicles per day, and 500 vehicles in the peak hour by 2005. [This is not achievable on routes shown as through routes on Figure 6.1]	This is the volume of traffic consistent with the effective implementation of traffic calming schemes. This target also reflects concerns about road traffic noise and pollution, where no baseline indices currently exist.	Automatic traffic counts.
Increase pedestrian intensity in the town centre by 10% every five years .	An indicator of increased town centre vitality.	New survey to be devised and carried out from 1998.
Ensure 10% spare capacity in parking spaces at all times by 1999.	This is the minimum spare capacity required to promote the efficient turnover of space.	Parking survey.
Reduce serious and fatal road casualties by 50% from the average for 1991-1996 by 2006-2011.	The annual average is 1 fatal casualty and 4 serious accidents. Reductions are within 20mph zone expectations.	Accident statistics.
Ensure 85% of motor traffic stays within the designated speed limit, by 2011.	The target is generated from standard use of the 85th percentile.	Speed counts.
Remove all impediments to users of wheeled pedestrian vehicles by 2001 in the area shown as town centre and upgrade sites on Figure 4.4.	Problems highlighted in 1996 survey by local group (TRYARDS)	Physical survey in consultation with representatives from disabled groups.
Remove all significant delays to bus, cycle and pedestrian traffic (a maximum wait time of 45 seconds in living areas and the town centre is suggested) by 2001.	This is important to encourage mode shift from private cars to other modes. 45 seconds is chosen as the maximum wait time as longer times encourage people to cross roads unsafely.	Physical survey.

Figure 2.1
The Concept of Preferential Routing

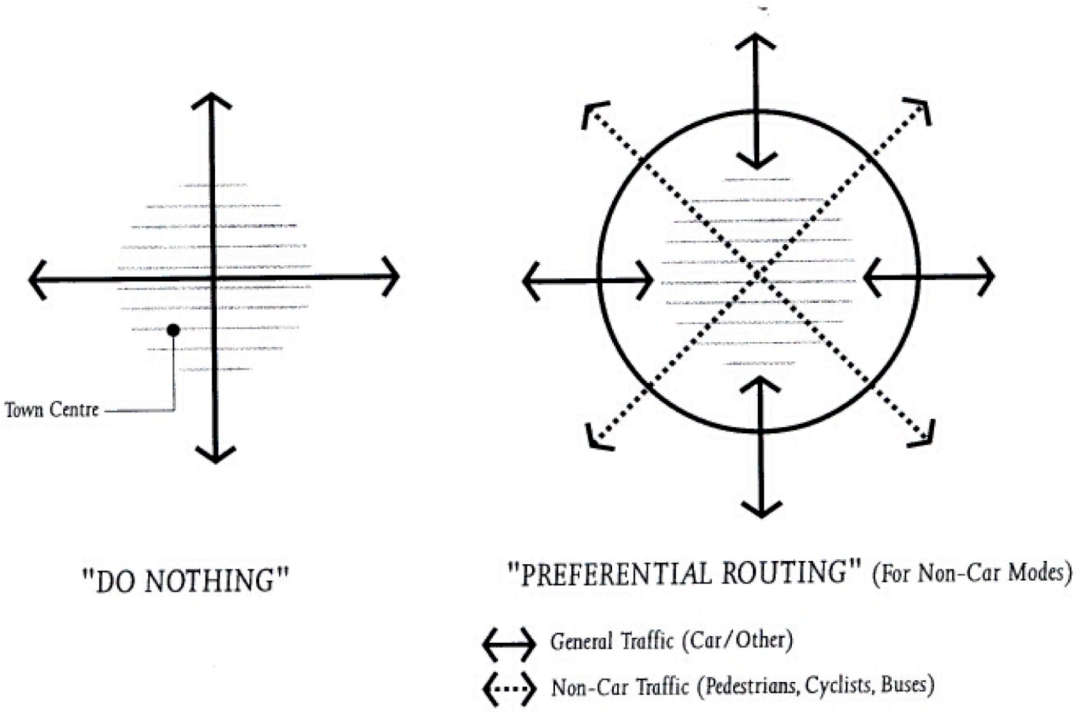
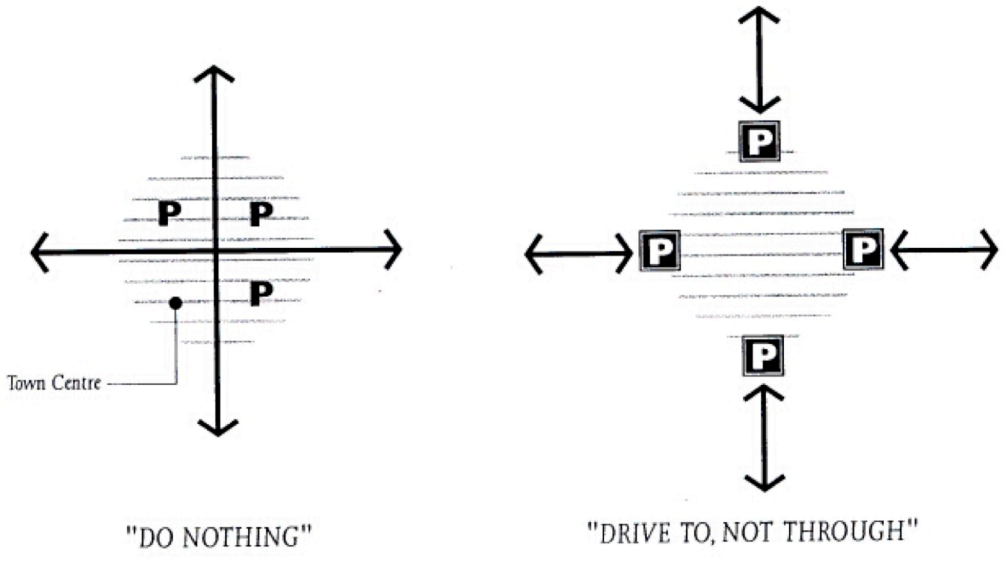


Figure 2.2
The Concept of "Drive to, not through"



PART 2: SCHEMES

3 Summary of Schemes

3.1 *Overview*

3.1.1 This section provides a summary list of the individual schemes which make up the integrated package, under four headings relating to their phasing and implementation. This is followed by a more detailed discussion of the individual schemes in chapters four to seven.

3.2 *Short term schemes* *(Section 4)*

3.2.1 These are schemes intended to start in the first three years, and prior to the opening of the Cogges Link.

3.2.2 **Pedestrianisation of the town centre:** *(4.2)*

- closure to general motor traffic of High Street (south of Witan Way),
- Market Square, Buttercross and Corn Street (east of Holloway Road), and Welch Way (east of car park access roads); and
- re-design of public realm in these areas, including hard and soft landscaping;

(for costs, see 4.2.22 and Table 4.1; for traffic impacts see 4.3; for phasing see 8.3)

3.2.3 **Traffic management support schemes:** *(4.4)*

- Moor Avenue closure;
- Langdale Gate to become one-way westbound, linked to;
- Church Green (east) to become one-way southbound;
- Gloucester Place and Puck Lane, traffic calming and "access only";
- crossing facilities on Tower Hill, Burford Road, Station Lane, Witan Way; and
- traffic calming measures on Windrush Valley Road.

3.2.4 **Mode shift support schemes:** *(4.5)*

- parking management scheme, town centre and adjacent streets;
- Mobility Centre - office with remit to encourage less car use in Witney;
- cycle provision - various schemes;

- footpath and footway improvements - various schemes; and
- bus priority schemes, ("green routes") High Street, Newland. (The proposed A40 bus lane is seen as desirable and complementary);
- preferential routing and "green routes", Curbridge Road and town centre.

3.3 *Unconstrained schemes* *(Section 5)*

3.3.1 These are desirable schemes which are in theory capable of being implemented in the short term, and which are not tied to other schemes in terms of their programming. The extensiveness of the work, however, will require schemes to be implemented over a period of 5-10 years.

3.3.2 **Residential traffic calming:** *(5.2)*

- all residential areas/eventually to become 20 mph zones (see Figure 5.1). A trial area could be established in the short term;
- physical measures on collector roads;
  - West Witney: Valence Crescent, Edington Road, Raleigh Crescent, Thorney Leys, Apley Way, Windrush Valley Road, Mirfield Road, Burwell Drive, Abbey Road;
  - Curbridge Road to be included as a collector road with 20 mph speed limit and possible future closure to be considered;
  - East/North Witney: Cogges Hill Road, New Yatt Road, Farmers Close, Earley Road; and
- West End environmental improvement scheme.

3.3.3 **Near-village foot/cycle routes :** *(5.3)*

- safe crossings of town perimeter roads - various schemes;
- upgrading footpaths/bridleways for cycle as well as pedestrian use between Witney and nearby villages, with a trial project initially to Ducklington or Crawley;
- Minster Lovell to Witney cycle path; and
- village links to provide circular routes.

3.3.4 **Park and Ride:** *(5.4)*

- park and ride for West Oxfordshire to Oxford City via A40.

3.4 *Cogges Link and related schemes* *(Section 6)*

3.4.1 These are schemes for complementing and supporting the Cogges Link and North East Distributor roads, to be implemented at the same time as, or shortly after.

3.4.2 **New roads:** (6.2, 6.3)

- Cogges Link and North East Distributor road;
- West End Link.

3.4.3 Control of flows on Bridge Street routes *(6.4)*

3.5 *Framework schemes and policies* *(Section 7)*

3.5.1 These are measures designed to complement the physical schemes, and to maximise their benefits. Monitoring is included here.

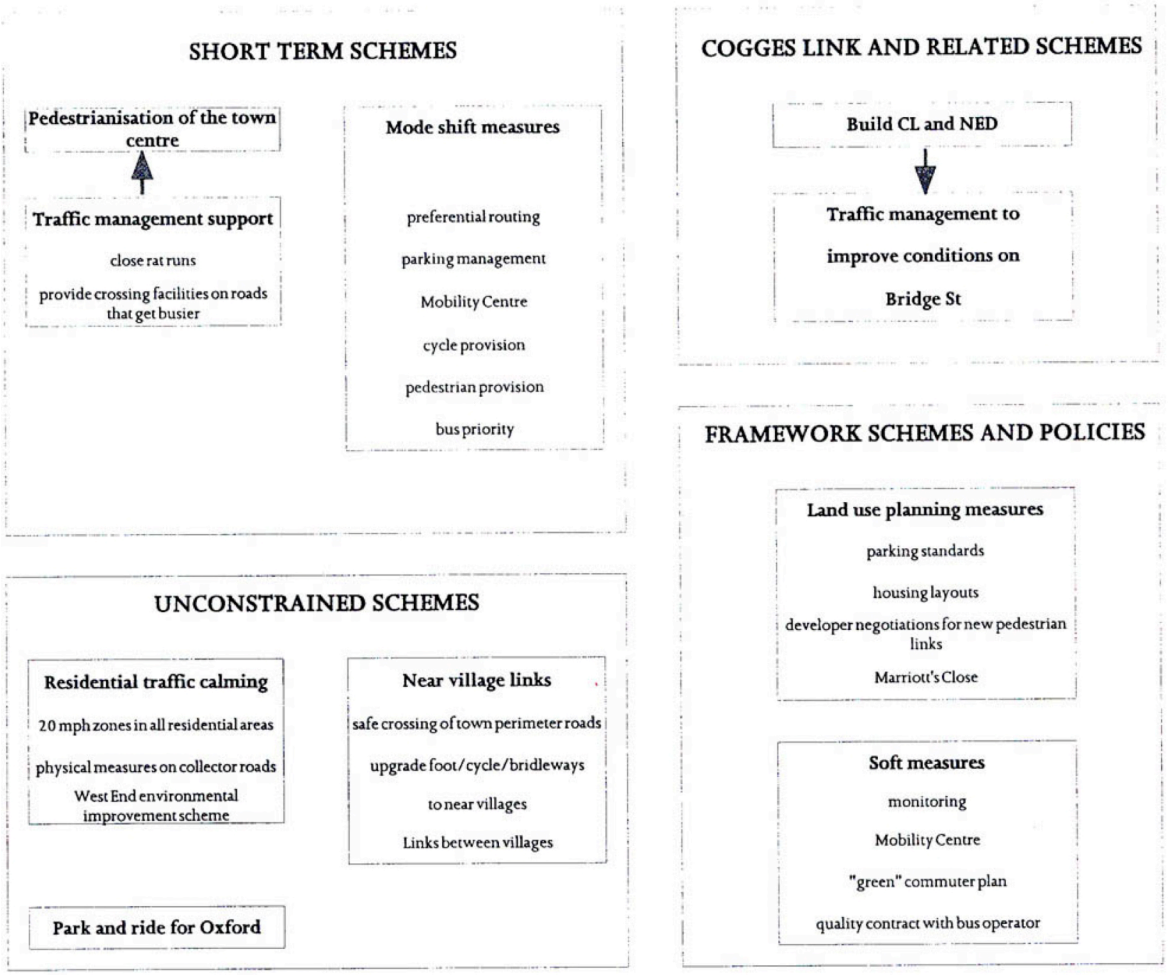
3.5.2 **Land use planning:** *(7.2)*

- parking standards in new developments;
- housing layouts to favour non-car modes (development briefs);
- owner/developer negotiations to secure new High Street pedestrian links; and
- considerations for Marriott's Close comprehensive development area).

3.5.3 **"Soft measures":** *(7.3)*

- monitoring;
- Mobility Centre activities (see "mode shift support" schemes);
- Local Authority "green commuter plan" (demonstration); and
- County Council/Thames Transit "Quality Partnership" contract.

Figure 3.1: Overview of schemes



4 Short Term Schemes

4.1 *Introduction*

4.1.1 Having summarised the schemes comprising the overall strategy, we now discuss each component in more detail, beginning in this section with those that are recommended to be started in the initial three years.

4.1.2 The short term programme is recommended to give priority to town centre pedestrianisation and enhancement, together with traffic and parking management measures which are necessary for the overall efficiency of the project. Also in the short term it is desirable to initiate the "Mobility Centre" and to make a start with the programme of improvements to bus, cycle and pedestrian infrastructure. The target networks for these modes are also illustrated in this section.

4.2 *Pedestrianisation of the town centre*

4.2.1 This is based on a vision for an economically successful and lively town centre. While it is the shopping and other services which provide the primary reason for people to visit the town centre, it is the quality in terms of both the range and quality of facilities, and the attractiveness of its buildings and landscape, that determines how long people stay. The aim is to increase the diversity of facilities, and to enhance the quality of “the Witney experience” so that more people visit to the town, and more often, and that when they do, they choose to stay and enjoy themselves. In this way, the vision for the town centre is that it will grow away from being just a shopping centre, to become the real "heart" of Witney, and indeed of West Oxfordshire.

4.2.2 The proposed schemes and designs are to be judged against this overall vision, and not simply on the basis of individual considerations. Even so, we have tried to take account of the many different interests and factors involved. The illustrative plans and sketches *(illustrations 4.1 to 4.11)* show indicative designs.

Extent and management of pedestrianisation

4.2.3 **General motor traffic will be excluded from: (implementation may need to be phased, see Section 8.3).**

- High Street south of Witan Way junction, see illustrations 4.1, 4.2 and 4.3;

- Welch Way east of the car park access, see illustrations 4.2 and 4.8;
- Market Square, see illustrations 4.1 and 4.6;
- Buttercross and the square west of Buttercross, see illustrations 4.1, 4.4 and 4.5;
- Corn Street east of the junction with Holloway Road.

4.2.4 **Vehicles allowed with restrictions:**

- buses: allowed at all times, but restrictions on speed (10 mph) and waiting to be agreed between the local authorities and the bus operators;
- taxis: allowed at all times, entry restricted to Welch Way and Langdale Gate and subject to engines being switched off while standing;
- cycles: allowed to be ridden at all times on carriageways only;
- delivery vehicles before 10.00am and after 5.00pm; entry restricted to Welch Way and Langdale Gate; and
- vehicles accessing private car parks, displaying permits.

4.2.5 **Vehicles allowed without restriction:**

- vehicles belonging to the Police, Fire and Ambulance Services;
- local authority road maintenance vehicles;
- statutory undertakers' vehicles; and
- security vehicles.

4.2.6 **Vehicle infrastructure within pedestrianised area***: (see illustrations 4.1-4.3)*

- carriageway generally 6.5 metres in width, demarcated from other areas in a way which is both visible, and detectable by those with visual impairment;
- delivery vehicles will use bays at footway level;
- deliveries mainly from existing rear access facilities. Some property owners may wish to improve and make more use of such facilities. High Street (north) currently has less rear servicing provision, but this should be increased as development of backland occurs;
- taxis have dedicated bays at carriageway level, in Welch Way and Market Square, and additional waiting areas in Langdale Gate and/or Woolgate car park;
- additional cycle parking to be provided in Welch Way (NatWest bank), outside Post Office, Market Square (east side), War Memorial square, High Street (north); and
- three bus stops are proposed: High Street (north), Town Hall and Welch Way (east). Shelters with facilities to be provided

except at Welch Way (which is a set-down only), and funded as part of environmental enhancement works.

4.2.7 **Management of the pedestrianised area:**

- vehicle speeds restricted to 10 mph (except emergency services) through "quality partnership" (or "code of conduct" agreements as in Oxford City Centre) agreements with bus operators;
- taxis' engines should be turned off while waiting (voluntary agreement); If this is violated, taxis may be excluded altogether;
- buses will follow existing routes, and use designated bus stops in the pedestrianised area (i.e. the current "hail and ride" policy will not operate in this area);
- no parking is allowed in the pedestrianised area, with the exception of exempted vehicles in designated spaces. In adjacent streets, including Church Green, on-street parking will be mostly for residents only, but bays for orange badge holders should be included. Some pay and display public parking could be provided in Corn Street west of Holloway Road. Car parking will be provided as now in Welch Way, Woolgate and Langdale Hall car parks, and special bays for orange badge holders should be provided at the nearest parking bays to the shops;
- market traders' vehicles can be left (market days only) in bays provided for the purpose in Langdale Gate; and
- consideration can be given to opening Buttercross and Corn Street for westbound traffic only during the evenings (after 6.30pm). This is to minimise loss of trade for take-away and other food outlets, and also to attract extra activity into the area after shopping hours.

4.2.8 **Urban enhancement of the town centre** will involve the creation of a series of 'places' at key locations from Bridge Street to the War Memorial:

- Bridge Street (illustrated in 4.10 and 4.11, but not included in short term programme.)
- Witan Way (illustration 4.9)
- Kernahans (illustration 4.2)
- Waterloo Walk (illustration 4.2)
- Welch Way (illustration 4.2)
- the Woolgate (illustration 4.1)
- the Corn Exchange (illustrations 4.1 and 4.6)
- the War Memorial (illustrations 4.1 and 4.5)

Redesign of the public realm

4.2.9 The series of cross routes linking car parks with High Street is to be augmented by the creation of a pedestrian passage to the North of Waterloo Walk. This will strengthen the northern part of High Street, especially with potential development likely to take place in the football ground area west of High Street (Marriot's Close) *(see illustration 4.2)*.

4.2.10 A mix of treatments will break up the amount of route surface to be pedestrianised. This will be achieved by using a consistent palette of materials, street furniture, and traditional materials such as local stone. Patterns should be established (herringbone, circular, etc.) to emphasise particular areas, and a strong overall theme should be established. There is potential for an artist to be involved in designing the floorscape. Materials should be durable and non-slip.

4.2.11 The scheme should be designed so that it is suitable for use by people with mobility impairments. There will be a level surface with no kerbs in key pedestrian areas. The design will use colour, and texture as appropriate.

4.2.12 It is suggested that a sample of the intended paving materials be laid in advance of the scheme in a prominent area of the High Street for the purpose of public consultation.

4.2.13 Details of the measures for particular areas are set out below, and are shown in *illustrations 4.1 to 4.11.*

4.2.14 **Bridge Street and High Street north (for implementation in the longer term):**

- carriageway narrowed and raised to footway level where pedestrians cross;
- lights on bridge pillars to be reinstated and used as a lighting theme throughout the scheme;
- islands to be built more substantially of stone with lights responding to bridge;
- a central "monument" to be located within specially treated area (this may not be feasible until Bridge Street traffic reductions are achieved);
- pedestrian crossings; and
- bus stops designed to allow easy re-entry to the traffic stream.

4.2.15 **Witan Way junction (illustration 4.3 and 4.9)**:

- roads narrow and raised to footway level;
- traffic directed away from pedestrianisation High Street;
- pedestrian and cycle crossings;
- tree planting; and
- substantially built stone island with "bulge" lights.

4.2.16 **Kernahans/Waterloo Walk (illustration 4.2):**

- new "place" created;
- carriageway narrowed and raised to footway level;
- lighting intensified;
- special treatment to prioritise pedestrian movement and cross links between east and west car parks; and
- new information pole;
- bus stop shelters and facilities.

4.2.17 **Welch Way (illustrations 4.2 and 4.8):**

- carriageway of High Street narrowed and redirected towards Welch Way;
- Welch Way enhanced as entry to High Street by semi-mature tree planting (boulevard);
- opportunity for sitting areas at Halifax Building Society and enlarged pedestrian area associated with pedestrian link to car park;
- space outside cafe can now be used for "spill out";
- opportunity for public art; and
- lighting intensified.

4.2.18 **Woolgate (illustration 4.1):**

- Lloyds Bank/Boots to the War Memorial (including High Street, Market Square and Buttercross) will be of the same level and treated as shared surface;
- grass verge on the west side of High Street will be reinstated to break up "hardness" of the area;
- the area to be animated through the use of awnings, spill out activities etc.;
- new "formal" steps down from the raised pavement on the west side of High Street;
- area set aside for taxi parking; and
- new information point.

4.2.19 **Corn Exchange (illustrations 4.1, 4.6 and 4.7):**

- area from the Bank (west side of Market Square) to Corn Exchange treated as one space;
- wheelchair ramp from the raised pavement on the west side of High Street to Market Square;

- opportunity for bandstand;
- area to be animated by the market, use of awnings, spill out activities;
- lighting intensified;
- bus stop improved with shelter, seating and other facilities;
- area at Town Hall to be specially treated with lighting and seating;
- Buttercross to be lit and used as focus for market and other activities and the area around to be specially treated;
- vehicular routes from Langdale Gate and Corn Street narrowed and raised, and vehicles constrained by bollards;
- market vehicles parking at Langdale Gate.

4.2.20 **War Memorial (illustrations 4.1, 4.4 and 4.5):**

- parking replaced by tree planting in area paved with compacted gravel - so that on special occasions the possibility of parking beneath trees to be considered;
- vehicular access to War Memorial and Eagle Industrial Estate via Church Green; and
- area to be animated - spill out, "awnings".

4.2.21 **Key issues:**

The benefits of pedestrianisation will be compromised if it is not accompanied by an integrated approach to the improvement of the urban environment. The following complementary measures are recommended:

- establishment of town centre management function in partnership with private sector interests to be considered;
- relaxation of regulations associated with animation, spill out and public art;
- relaxation of highway lighting standards in order to improve overall design including new lights, lighting bollards, and flood lights. (Safety will improve with fewer vehicles and low traffic speeds enabling less stringent requirements);
- relaxation of highway signing and marking standards to achieve integrated street design;
- encouragement of in-fill residential and other development to reinforce town centre; and
- encouragement of the market to expand southwards to Buttercross and Church Green. Encouragement to include special twin markets - i.e. strengthening links with twin towns Le Tourget and Unterhaching with an Easter, Autumn and Christmas German Market. All part of making Witney a destination.

Costs of town centre enhancement

4.2.22 Estimates of the costs of environmental enhancement have been made, based on the sketch designs which follow this section of the report. The costs have been calculated separately for 8 sub areas within the overall scheme as shown in Figure 4.1.

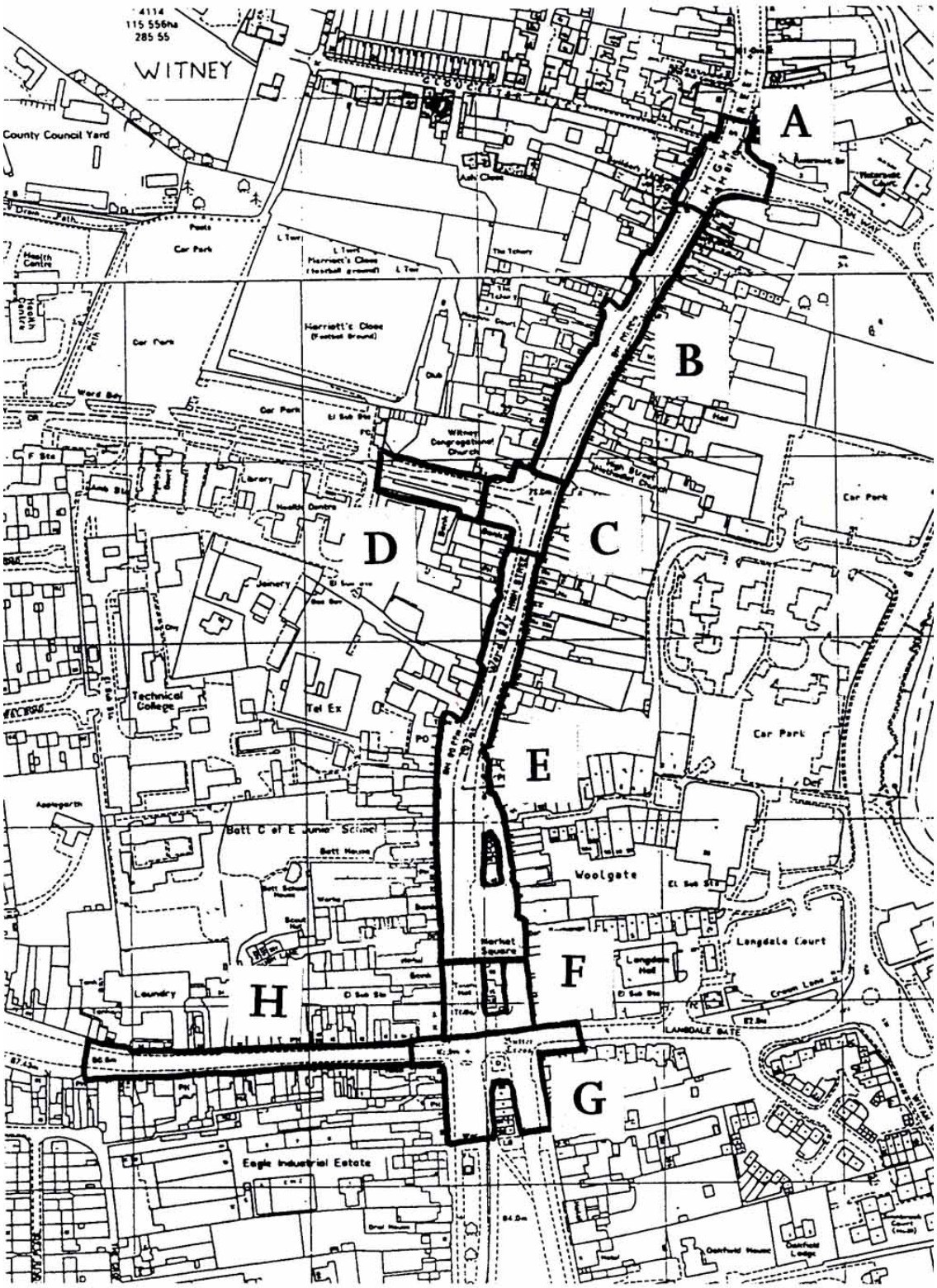
4.2.23 The estimates in Table 4.1 include the following assumptions:

- bollards £300 each;
- small unit paving (tegular concrete setts) vehicle areas £50 per m2 (alternative materials of asphalt, rolled aggregate and granite sett trim would have a similar cost);
- small unit paving (regular concrete setts) pedestrian only areas £35m2 ;
- wrought iron balustrade £300 per m2;
- retaining wall in stone £300 per m2;
- upgrade lighting £10 per m2;
- planted areas £25 per m2;
- York stone £110 per m2;
- benches £500 each;
- the "high quality" figures relate to paving in York stone in pedestrian only areas; and
- a 15% contingency is included in the basic price (except for the York Stone upgrade).

4.2.24 A provisional amount of £35,000 should be added for signage for the whole scheme, and a further £15,000 if the final traffic arrangements are achieved in two stages rather than one.

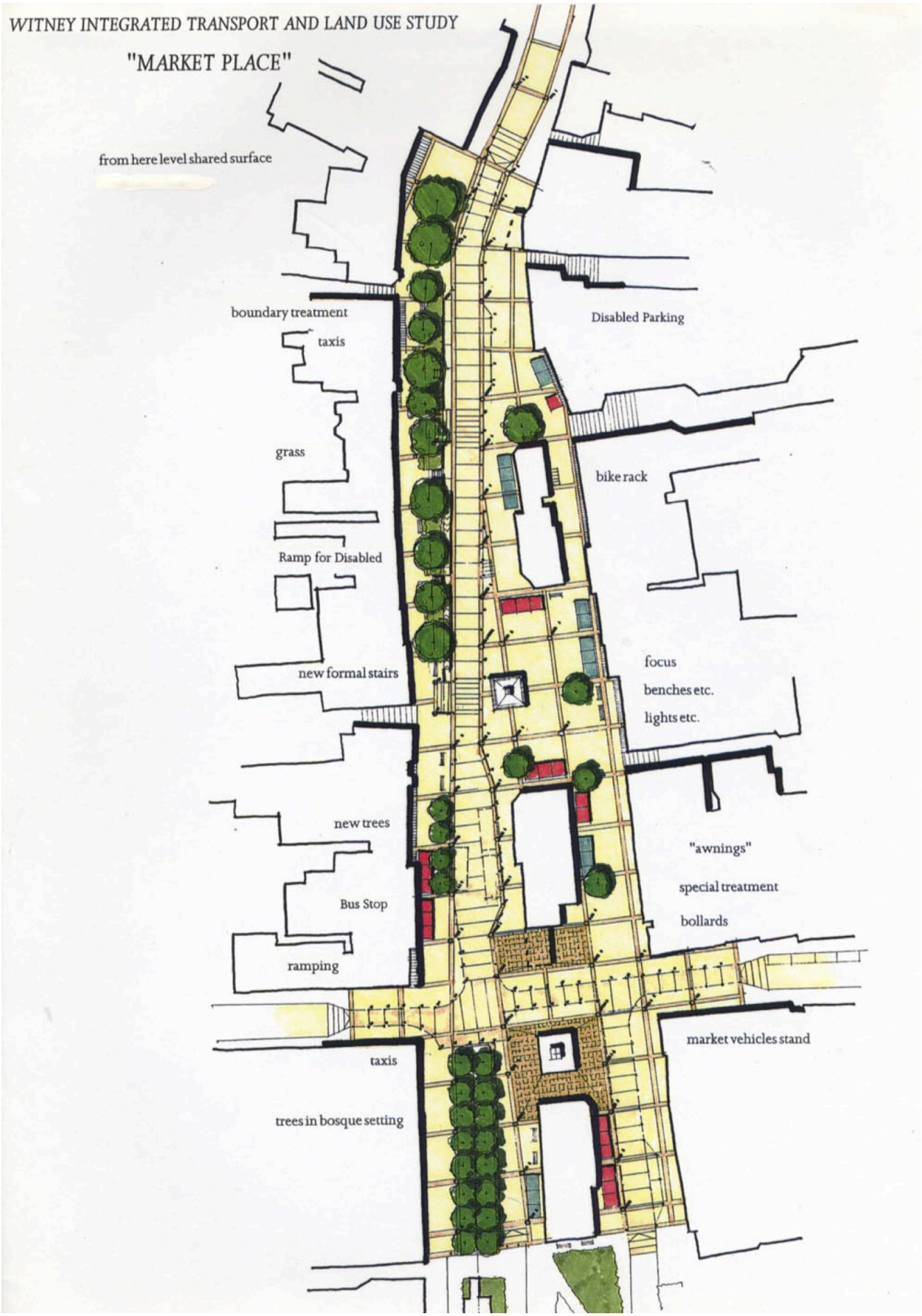
4.2.25 The figures are for environmental upgrade only. No allowance is made for services or drainage alterations or repairs, nor for highway works, legal, procedural or administration costs. Such items can add significantly to the overall scheme costs, and an independent survey should be undertaken to establish the likely extent of services works required.

Figure 4.1: Areas separately costed for environmental enhancement



WITNEY INTEGRATED TRANSPORT AND LAND USE STUDY

"MARKET PLACE"



WITNEY INTEGRATED TRANSPORT AND LAND USE STUDY

WITNEY INTEGRATED TRANSPORT AND LAND USE STUDY

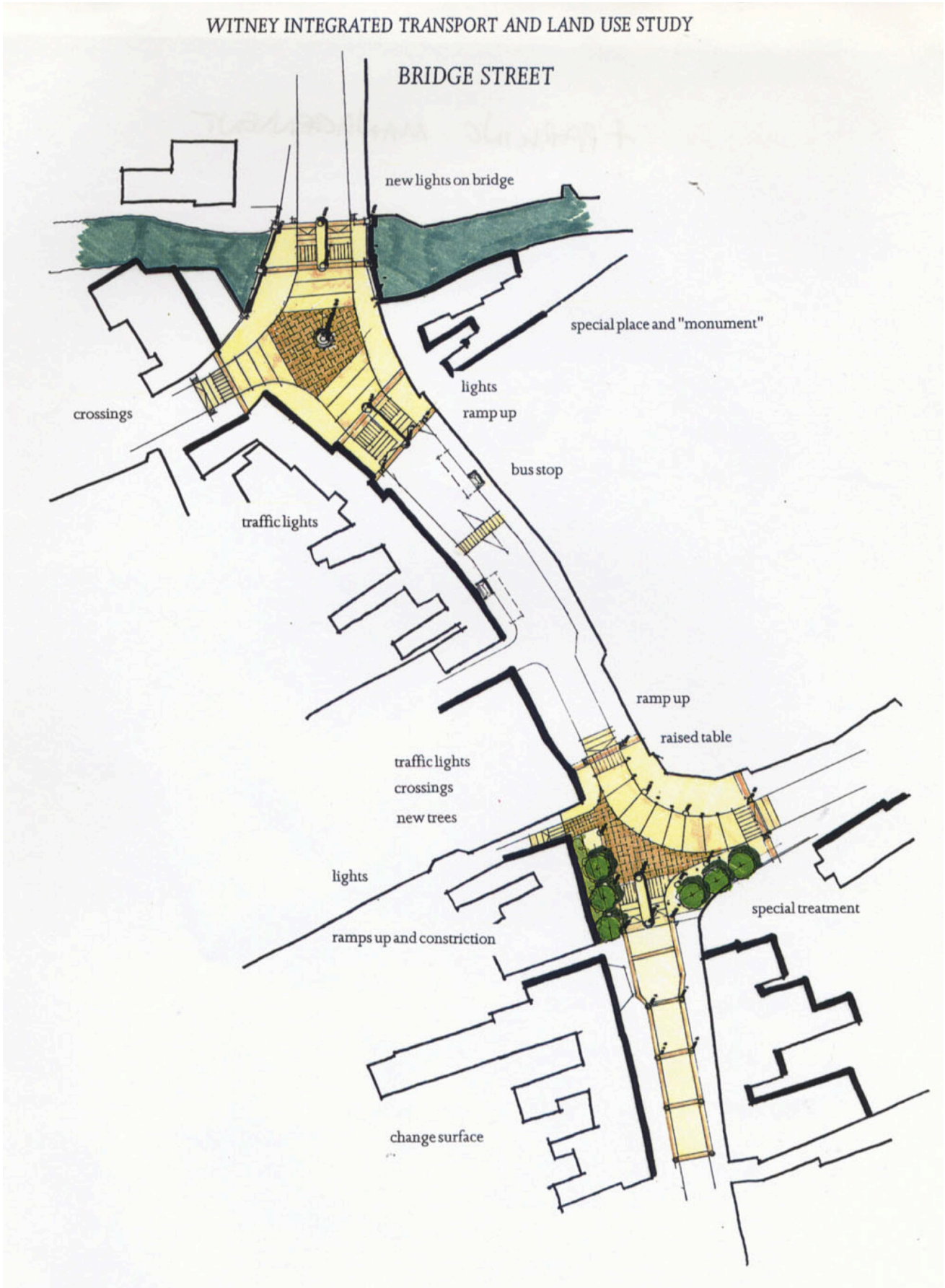
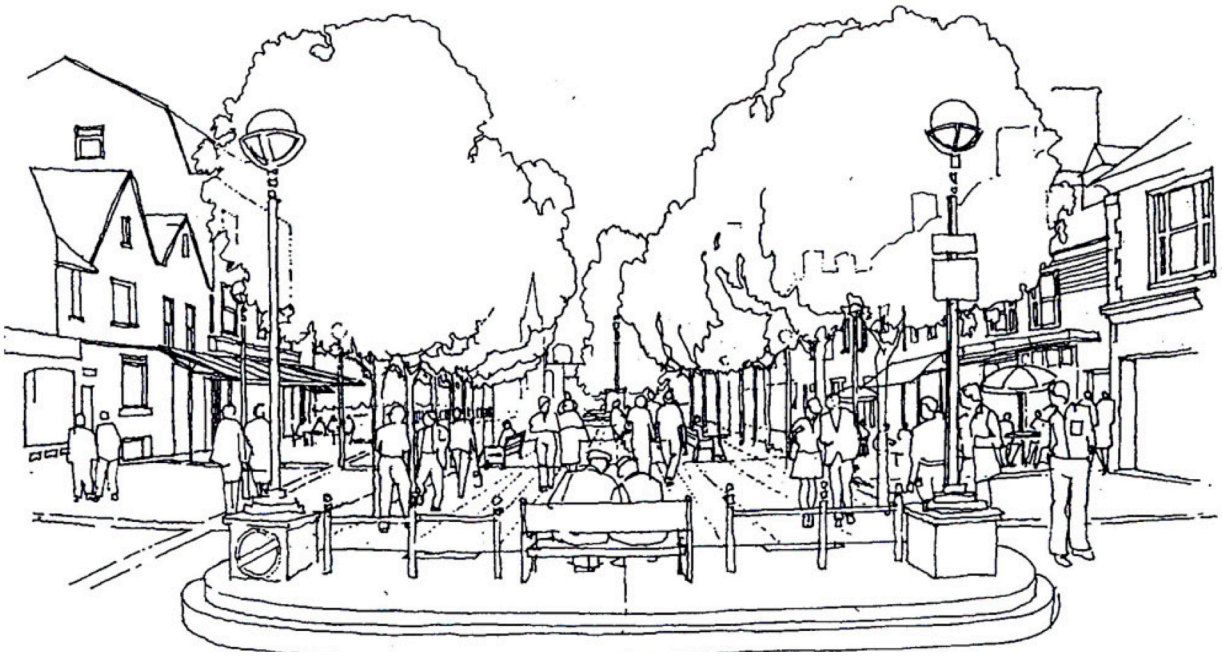


Illustration 4.4
Butter Cross

How it could look

How it is today (1997)

Illustration 4.5
Towards The Memorial



Above: How the setting could be improved

Below: How it is today (1997)

Illustration 4.6
Market Square

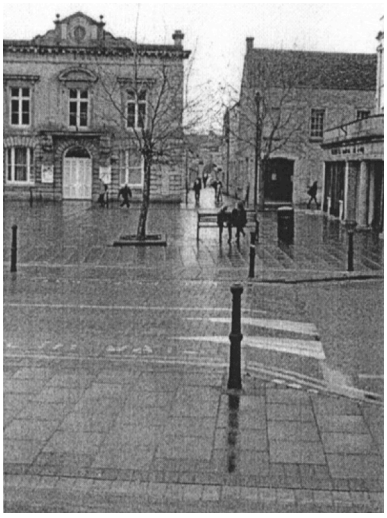


Illustration 4.7
Disabled Access

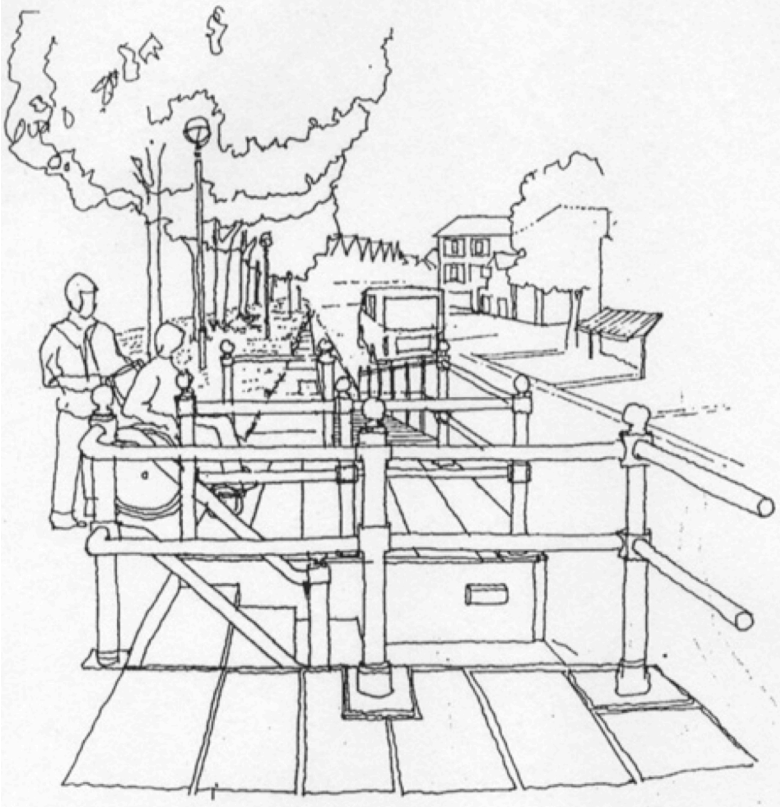


Illustration 4.8
Welch Way Junction

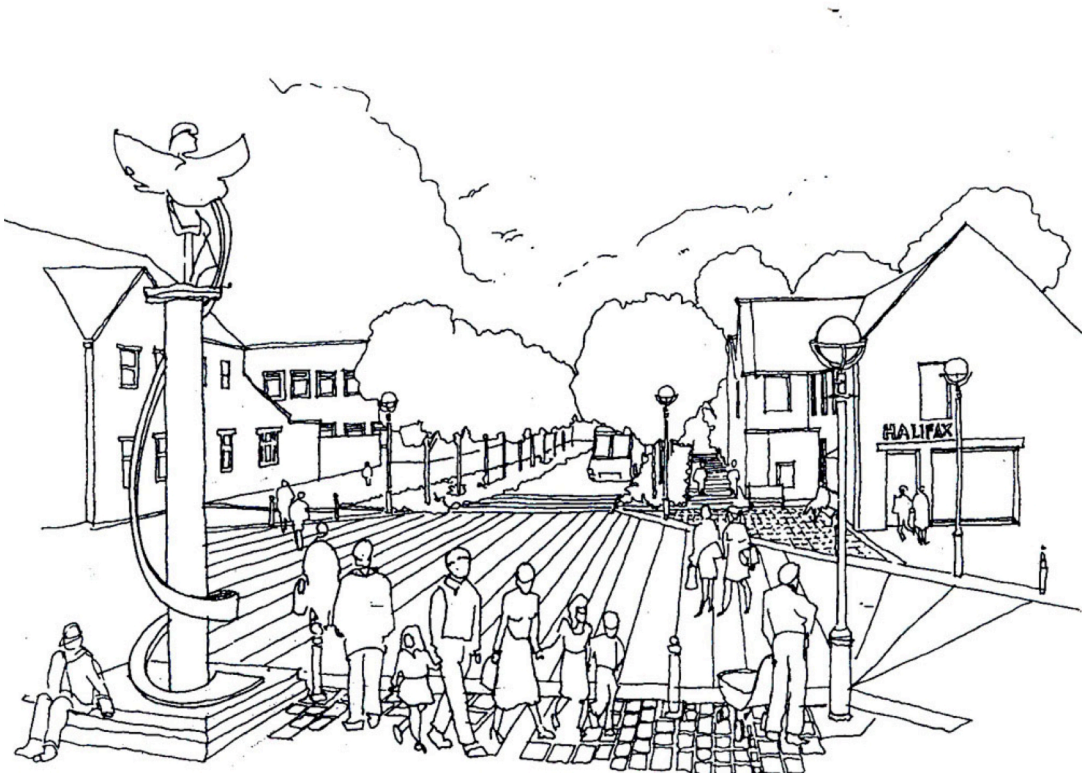


Illustration 4.9
Witan Way Junction

Illustration 4.10
High Street Looking North

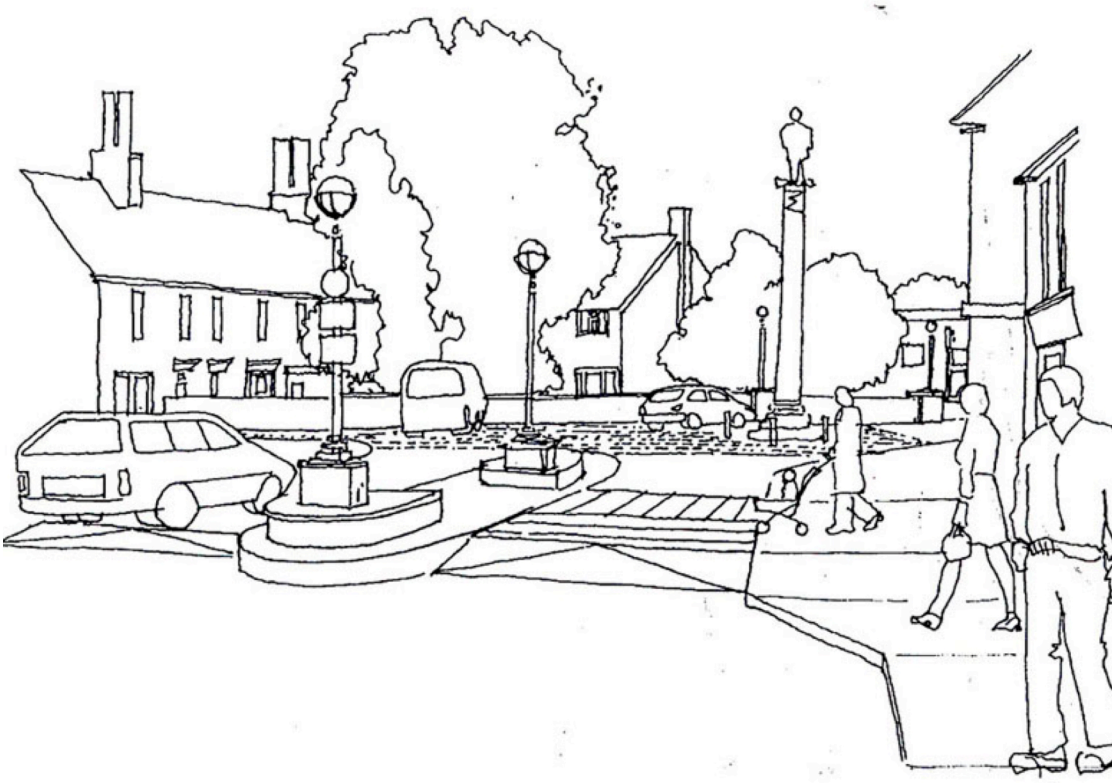


Illustration 4.11
The Bridge

Table 4.1: Cost of town centre environmental enhancement

(Areas shown on Figure 4.1)

Area	Description	Area m^2	Quality Scheme Cost £	High Quality Scheme Upgrade (Natural Stone) Additional Cost £
A	High Street/Witan Way Junction	1,555	110,000	45,000
B	High Street (north end)	3,565	230,000	165,000
C	High Street/Welch Way Junction	1,505	90,000	70,000
D	Welch Way "boulevard"	1,330	80,000	75,000
E	High St. south end and Market Place	6,995	500,000	380,000
F	Town Hall	1,715	95,000	80,000
G	Buttercross	3,640	250,000	190,000
H	Corn Street	2,540	150,000	110,000
Total Scheme		**22,845**	**1,505,000**	**1,115,000**

Note: The estimates are for environmental works only; see paragraph 4.2.25.

4.3 *Traffic impact of town centre pedestrianisation*

4.3.1 The pedestrianisation and other measures proposed in the short term result in considerable modifications to the road network available for use by private motorised traffic. The traffic impacts of these changes have been assessed in detail, with the aid of the County Council's computer traffic model of the Witney area. A commentary on the results of the computer tests is given at Appendix B, but the main conclusions are summarised here.

4.3.2 The traffic modelling work has highlighted the vulnerability of certain routes to traffic increases following the pedestrianisation closures. The location and likely scale of traffic changes have been reviewed for:

wresidential streets within the town;
wdistributor and through routes in the town; and
wthe wider network of rural and village roads.

4.3.3 The residential roads which will be at risk from "rat run" traffic increases are Moor Avenue/Dark Lane/Moorland Road, and Gloucester Place/Puck Lane. It is essential that measures are

taken in advance of pedestrianisation to prevent these traffic increases. Holloway Road will no longer form part of any through route, and management measures to restrict traffic volume are not required unless a new road connection between Welch Way and Mill Street is built.

4.3.4 With these potential rat-runs unavailable for through traffic, vehicle movement between Bridge Street and parts of Witney west of the Windrush will use routes via Witan Way, or via Mill Street/Burford Road/Tower Hill. The model indicates traffic increases on both these routes following the town centre road closures. Tower Hill and Mill Street are shown to become as busy as Welch Way is today which, though manageable in terms of traffic capacity, would cause a deterioration in environmental conditions. Safety measures in the form of new crossing facilities are therefore regarded as essential *(see 4.4.6 and 4.4.7).*

4.3.5 The traffic increases shown by the traffic model on the Mill Street/Burford Road/Tower Hill route are likely to represent the "worst case", and there are four reasons why traffic increases in practice will be smaller than predicted in the model. First, traffic generated from the Welch Way locality is known to be overstated in the model. Second, some drivers who at present enter the town via Bridge Street, and park in Welch Way car park will switch to Witan Way car parks when direct access to Welch Way is closed; the model does not take account of this change in choice of destination. Third, experience of closures in other towns suggests that reductions in the road network have a suppressing effect on traffic volume, and this, also, is not represented in the model. Fourth, the WITLUS strategy is designed to bring about traffic reduction due to mode switch away from the car.

4.3.6 Increased traffic on Witan Way is of less concern from an environmental and safety viewpoint, though a new crossing at Langdale Gate is required *(see 4.4.7).*

4.3.7 The revised road network is judged to be capable of handling the traffic volumes expected following the implementation of the town centre pedestrianisation scheme. Overall, the benefits to the town of the town centre improvements are judged to far outweigh any disbenefits arising on a limited number of roads in the town. It is essential, however, to moderate the impact of traffic on the remaining through routes through the mode switch, safety, and traffic management measures set out in this section of the report.

4.3.8 The traffic model suggests that the town centre and rat-run closures will have only a limited impact on roads in the wider network of rural and village roads surrounding Witney, as described in Appendix B.

4.4 *Traffic management support schemes*

4.4.1 Moor Avenue will be closed to vehicles between Dark Lane and Moorland Road junctions. Cycles will be exempt. The existing town shopper bus route (No. 15) will need to be diverted, unless exemption from the closure (i.e. bus gate) can be provided, but this would be difficult to enforce without barrier equipment. This will need further consideration with the bus operator. This scheme may also help to deter car escort trips to Tower Hill School in Moor Avenue.

4.4.2 The potential rat-run via Gloucester Place/Puck Lane should be prevented. This could be achieved either by closure of the southern portion of Puck Lane, or by traffic calming measures (entry treatments at Mill Street and High Street junctions, speed humps, two-way operation) with or without “access only” legal restrictions. Parking will be for residents only.

4.4.3 As a precaution, Windrush Valley road should be considered as an early candidate for traffic calming, in order to avoid its use as a rat run.

4.4.4 Access for residents and traders is to be provided via Langdale Gate and Church Green, but this is not intended to be for general vehicle access to the town centre. Consequently, Langdale Gate is to become one-way westbound, and re-designed with a narrow carriageway (3.25 metres to prevent illegal parking). Parking for market traders’ vehicles and taxis can be provided in special bays. Langdale Gate also becomes an important town cycle link, and a two-way cycle path should be provided, linking via a new crossing at Witan Way with the Cogges Path.

4.4.5 Church Green (east) to become one-way southbound. The carriageway can be narrowed (to 3.25 metres) at intervals, and provided with tree planting to screen parked vehicles on the east side. Parking will be for residents only, and hotel guests. Delivery space can also be earmarked.

4.4.6 Crossing facilities as follows:

- Tower Hill at Windrush Valley Road;
- Burford Road at Tower Hill (cycle and pedestrian);
- Burford Road at Moor Avenue; and
- Witan Way at Langdale Gate (cycle and pedestrian).

4.4.7 These crossing facilities serve the dual purpose of interrupting the flow of traffic towards the Bridge Street junction, and of making safer provision for pedestrians. The Tower Hill pedestrian crossing will serve children attending Tower Hill Primary School, the catchment of which extends west of Tower Hill. The Burford Road crossing at Tower Hill forms part of the proposed foot and cycle link from Witney to Crawley, which at this point intersects with the Burford Road foot and cycle link to the Windrush industrial estate. The crossing therefore will need to provide for cycles as well as pedestrians. The new Witan Way crossing is on a route taking potential diverted traffic from the town centre, and is required to link the pedestrian and cycle network of the town centre with the Cogges path.

4.5 *Mode shift support schemes*

4.5.1 The pedestrianisation and town centre enhancements will operate more effectively if some demand for car use can be diverted to other modes. It is recommended that schemes are implemented both to encourage use of the alternative modes and to discourage use of the private car. It is important that car use for the great majority of purposes will not be prevented. Instead it is intended to change the relative advantage of the car and non-car modes, in order to favour use of the latter. A combination of schemes is recommended, which as a package can secure a significant switch of mode. Some schemes deter car use directly, some encourage the use of other modes, while others (like bus priority) tend to have both "push and pull" effects. Additional analysis of the town centre visitors survey and the impact of mode shift on the town centre are included in Appendix C.

Parking management scheme, town centre and adjacent streets

4.5.2 Demand management through control and pricing of parking is likely to be a key element in securing the necessary mode switch away from the car for trips to the town centre. It is therefore also important for the purpose of attracting funds for the package of measures as a whole.

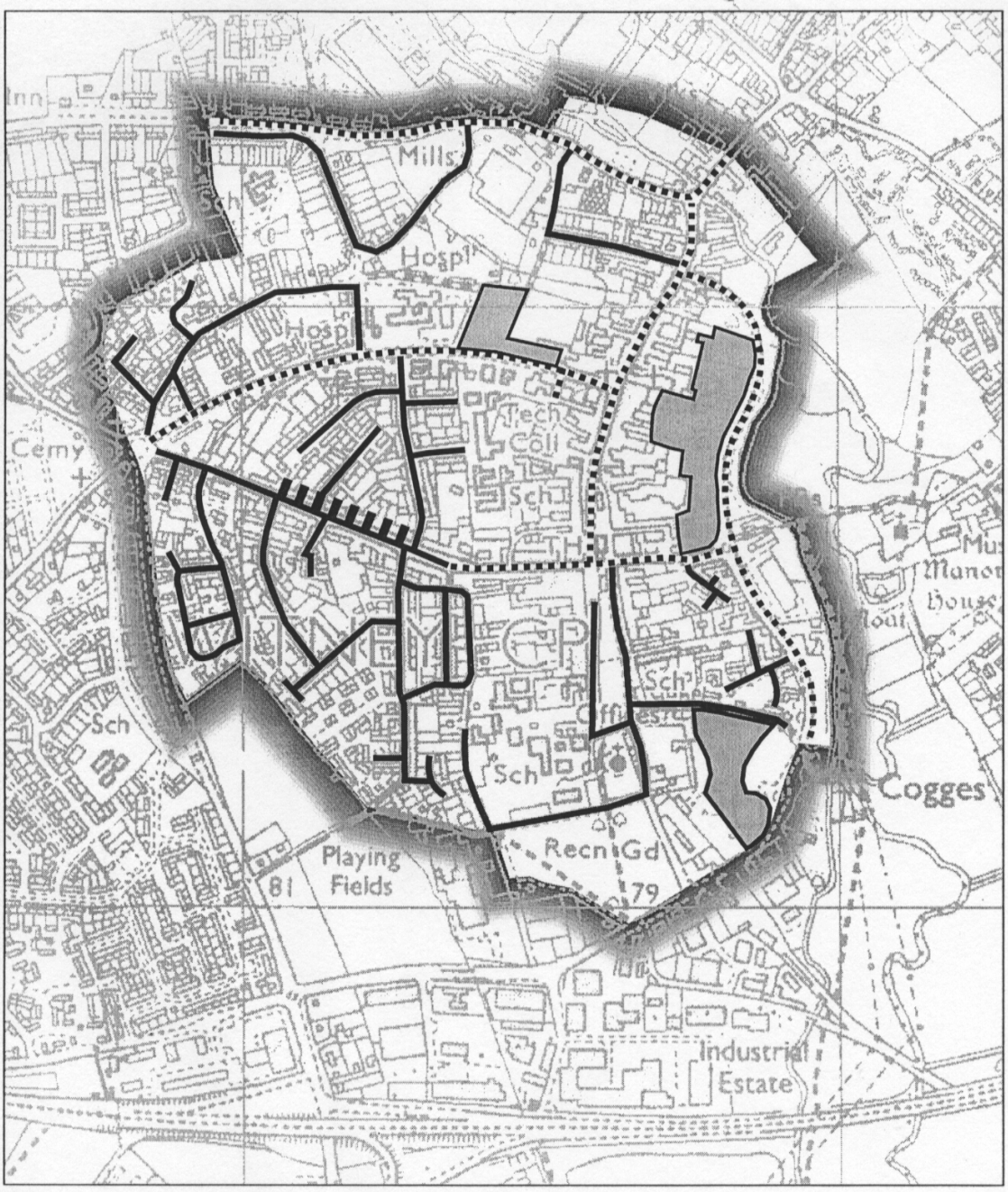
4.5.3 A combination of a reduced on-street parking supply, and effective parking management in public off-street car parks (Welch Way, Woolgate and Langdale Hall) is recommended, in order to achieve efficient and convenient parking within a controlled level of demand. Increasing economic vitality of the town centre can be achieved by efficiently managing and guiding parking demands. The aim is to attract more people to Witney town centre, and for more of them to spend longer there, but for a larger proportion of people to choose alternatives to the private car. Some spaces currently occupied by commuter parking will become available for shoppers and other visitors.

4.5.4 The parking management recommendation has the following main elements:

- time controls and parking charges to be applied in the public car parks;
- on-street parking to be removed from the pedestrianised areas of the town centre, and parts of Church Green; and
- a residents-only parking “buffer zone” to be introduced in all streets around the town centre streets. Residents should initially be able to park free of charge. Special bays to be provided for orange badge holders (also free of charge), and for residents' visitors (limited to 2 hours stay).

4.5.5 The measures are shown on Figure 4.2. Fuller details and justification of this recommendation are given in Appendix D.

Figure 4.2
Parking Management Strategy



KEY

- Parking management area
- Car park
- Residents parking only (some time-limited exemptions)
- Possible pay & display
- No parking (exemptions in some locations)

Llewelyn-Davies

Mobility Centre for Witney

4.5.6 It is recommended that an office is established in the town centre with the remit of encouraging less car use in Witney. This could be known as the “Witney Mobility Centre”.

4.4.7 This office will co-ordinate a number of different schemes and programmes to raise public awareness of the environmental, health and safety issues of motorised transport, and to encourage more sparing use of private cars. The Centre will have an important role in publicising the new and more environmentally-friendly travel opportunities that will be opened up, following improvements to facilities for walking, cycling and using the bus.

4.5.8 While the precise range of functions and priorities will be a matter for the Centre in partnership with the local authorities and other bodies, some pointers are given below:

- priority should be given to working with residents east of River Windrush, to encourage less car movements through Bridge Street, which will continue to be the area most sensitive to the impact of motor traffic;
- co-ordinate County Travelwise campaigns for Witney;
- co-ordinate Safe Routes to School projects, in conjunction with local schools;
- “Green Commuter” plans in conjunction with local employers, preferably starting with local public employers, both to gain experience, and to set an example for private sector employers;
- promote shop delivery services with major retailers in the town;
- establish an information service (including posters, leaflets and perhaps telephone on-line) about travel possibilities;
- promote non-car activities and possibilities, including recreational walks, cycle rides and public transport excursions; and
- encourage and co-operate with independent research into the impact of the Centre’s activities on mode split and other indicators.

4.5.9 The Centre will require an office and core paid staff. An aim should be to work with local groups who can provide voluntary support. Funding of the Centre is a crucial issue, with rent and staffing forming the great majority of total costs. While capital (start-up) costs can be included in the TPP package, this likely to be a

relatively small element. Running costs will need more permanent funding.

4.5.10 It is recommended that the staffing and other running costs of the Witney Mobility Centre be funded from parking revenues. Costs of specific activities could possibly be met using funds from other sources negotiated by the Centre itself. As an innovative scheme, there should be possibilities for funding from elsewhere, especially for research and monitoring.

4.5.11 There is an important psychological benefit to funding from parking charges, in that the Centre can publicise its aims in the car parks (e.g. promotional messages on parking machines and tickets) thus automatically targeting the key client group. It is important that such advertising or publicity rights should be retained for the Mobility Centre, and not released for general commercial use.

4.5.12 There is little research evidence to date on the impact of "soft measures" such as provided by the recommended Mobility Centre. In the German town of Kassel, however, a group of residents with high levels of car use (63% of all trips, similar to the Witney average) who were targeted with a promotion to switch to public transport, reduced their car use from 63% to 48% of trips in the test month, and even without further actions being taken, the level had risen to only 55% fours years later. (Source: Social data, Munich). Kassel is a large town, where public transport is well provided, but the important point is that mode switch was achieved without any infrastructure changes.

4.5.13 Mobility centres have been planned in Germany, and a pilot project has been started in the town of Schopfheim (Baden-Wurttemberg), with a population similar to Witney (25,000). The expectation was a reduction in car use of 5%. The initial results are partly encouraging. In the period 1994-1996, the share of trips by car was reduced for some journey purposes (journeys to work down by 11%, leisure journeys down by 5%, but shopping journeys up by 2%). Assuming no change in the other trip purposes, this would mean an overall reduction of the share of trips by car of around 5%. (Source: Correspondence with Prognos Consultancy, Basel).

Cycle provision improvements

4.5.14 A target cycle network is shown in Figure 4.3. Cycling will become safer and more pleasant as a result of various schemes, including:

- town centre pedestrianisation, including cycle rack provision;
- Moor Avenue closure;

- Langdale Gate and Church Green redesign to provide two-way cycling (other traffic one-way);
- Burford Road, Witan Way and Station Lane crossings;
- Curbridge Road “green route”;
- traffic calming and 20 mph zones in residential areas;
- New Yatt Road closures, cycle exemptions;
- possible Station Lane-Ducklington Lane junction improvements.

4.5.15 There are, however, specific schemes to improve cycling conditions in the town which are recommended for implementation in the short term. These are briefly described below:

- Cogges Path - Newland new cycle path and crossing;
- Church Lane - Oxford Hill upgrade for cycles and new crossing;
- Cogges Path - Langdale Gate crossing at Witan Way;
- "Fiveways" roundabout redesign (east end Curbridge Road) to reduce vehicle entry speeds, and provide separate lane for cyclists in line with recent Dutch practice;
- Ducklington link (under A40);
- Burford Road - Windrush Industrial Estate route upgrade;
- Ducklington Lane - Henry Box School route upgrade;
- reinstatement of bridge (upstream from Bridge Street) and provision of a new cycle/footway link between West End and Puck Lane; and
- new and additional cycle parking at public buildings in town centre, e.g. the public library and the post office *(see Figure 4.3*).

4.5.16 Elsewhere, schemes can be implemented over a period of years as the opportunities arise, in order to progressively achieve the network shown in Figure 4.3.

Footpath and footway improvements

4.5.17 A target pedestrian network is shown in Figure 4.4. Pedestrians will also benefit from the various schemes described under other headings, especially the town centre pedestrianisation. There are additional schemes which are recommended for the short term which will create better conditions for walking throughout the town.

4.5.18 It is important to emphasise that the schemes must be designed to provide for those with physical or visual impairments. The principle should be that footways which are suitable for people with impaired abilities are automatically suitable for people of all abilities.

4.5.19 A further principle should be that carriageways should be made safe for cycle use. Where this is not possible, separate cycle paths are to be provided. If this is not done, then improved footways and paths will be used by cyclists, to the serious detriment of pedestrians. Footway upgrading therefore has to be an integral part of overall highway design. Within the town, pedestrians should not share paths with cyclists, except where site conditions make this necessary. On rural routes, shared paths may be appropriate. In every case, pedestrians should have priority over cyclists.

4.5.20 Implementation of footway upgrades will inevitably take several years to complete, and should take advantage of street and services maintenance work.

4.5.21 The aim in design terms should be for the quality of all footways and paths to respect the "Five Cs" as set out in London's Pedestrian Strategy (London Planning Advisory Committee, "Putting London back on its feet", 1997):

- connected;
- convenient;
- comfortable;
- convivial; and
- conspicuous.

4.5.22 Certain additional schemes are considered particularly important for implementation in the short term. These are:

- Welch Way "Boulevard", creation of continuous-level footways on both sides of the carriageway, requiring nine entry treatments at vehicle access cross-overs (i.e. carriageway raised to footway level);
- Corn Street entry treatments (eight);
- improved crossing of Witan Way at High Street;
- provision of new footway on north side of Curbridge Road (eastern end); and
- entry treatments and footway realignments in Newland and Oxford Hill.

4.5.23 Additional information on design specification is included at Appendix E.

Bus priority "green route" - High Street, Newland *(see Figures 4.5 and 6.2)*

4.5.24 The main opportunity for mode switch to public transport is seen as trips between Witney and Oxford. Schemes are recommended to ensure that buses operating routes to Oxford are as far as possible protected from delays and irregularities due to congestion. In

addition, the retention of buses in the pedestrianised High Street, and the preferential routing afforded by this and the Curbridge Road "green route" will increase the advantage of bus use relative to car use. Possible future Park-and-Ride for trips to Oxford is discussed in Section 5.4.

4.5.25 The pedestrianisation and "green route" schemes include bus-only gates (as described) at High Street (Witan Way junction), Welch Way boulevard, and Corn Street.

4.5.26 The following additional schemes are appropriate for implementation in the short term:

- new bus-priority bus stops at the north end of High Street, allowing buses to rejoin traffic queues without delay;
- new combined pedestrian crossings and bus stops in Newland and Oxford Hill, designed to retain the position of buses in traffic queues, and to provide safer crossing opportunities.;
- possible bus transponder-activated traffic signals at:
  - High Street - Witan Way;
  - High Street - Mill Street (possibly to await Cogges Link opening);
  - Staple Hall;
- bus stop shelters and other facilities on the Oxford routes, and negotiate the with the bus operator replacement of the "hail and ride" facility for these routes with bus stops. Bus stops should be located to maximise the walking catchment for these services. Bus stops are considered important both to reinforce the presence of bus services to non-regular users, and to ensure that buses stop only in safe locations.; and
- bus stops should also become a focus for other facilities such as local information and telephone kiosks, and at certain secure locations, cycle parking to encourage cycle and ride. The Newland/Staple Hall bus stops should be considered for this purpose since residents of North Witney could thereby gain access to frequent buses to Oxford.

Preferential routing and "green routes", Curbridge Road and town centre

4.5.27 Curbridge Road is to become a "green route", with bus-friendly traffic calming measures taken to encourage the non-car modes, and to discourage through movement by private motor vehicles. In the longer term, consideration should be given to the closure of Curbridge Road.

4.5.28 Benefits will include safer and more attractive access to the town centre by all non-car modes for residents west of Tower Hill and Ducklington Lane. In addition, residents of Curbridge Road will benefit from less traffic passing their doors. Traffic calming measures should result in lower traffic volumes, and the speed of remaining traffic will be lower.

4.5.29 Preferential routing acts to discourage (but not prevent) car use by Witney residents more than by residents of other places. This is because the increased car distances are disproportionately greater for short trips. For example, the increased trip distance could be 50-75% for a resident of West Witney, but only about 20% for a resident of Brize Norton. Thus non-Witney residents, who are more dependent on their cars, will experience less disadvantage (it should be noted that the town centre pedestrianisation scheme will also create preferential routing for buses, cycles and pedestrians through the town centre).

Figure 4.3 Target Cycle Network

< NORTH

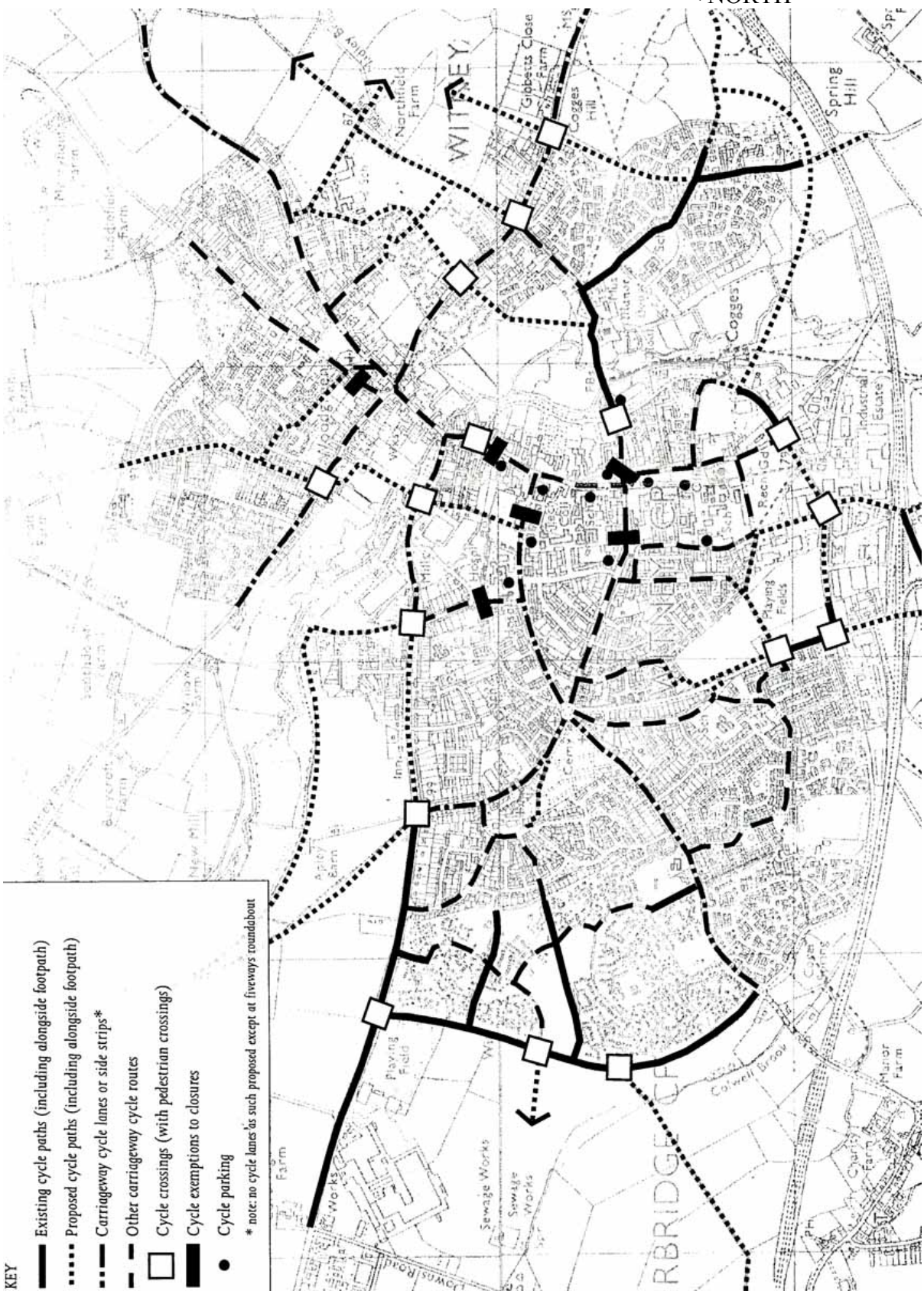


Figure 4.4 Target Pedestrian Network

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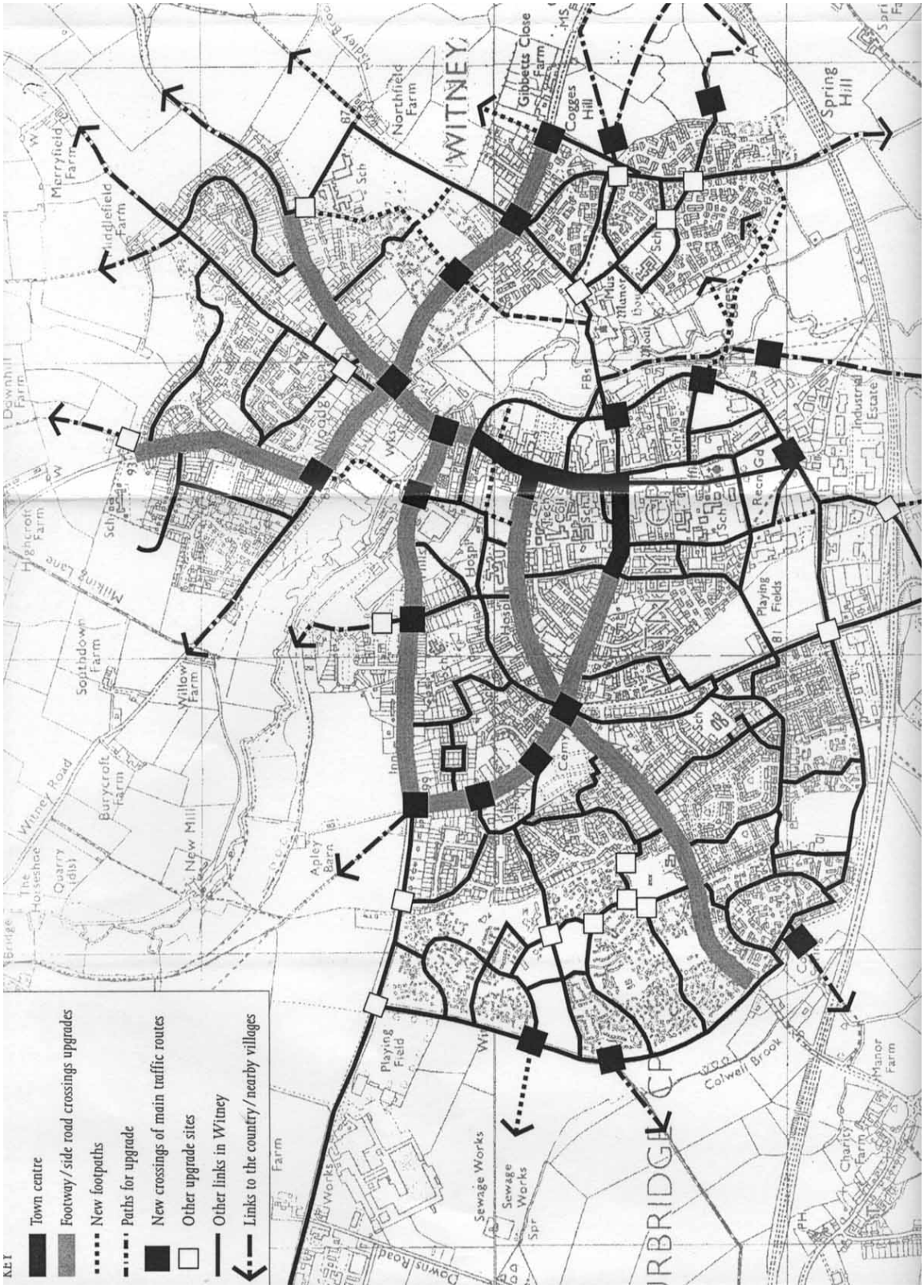

Figure 4.5 Public Transport Concept map

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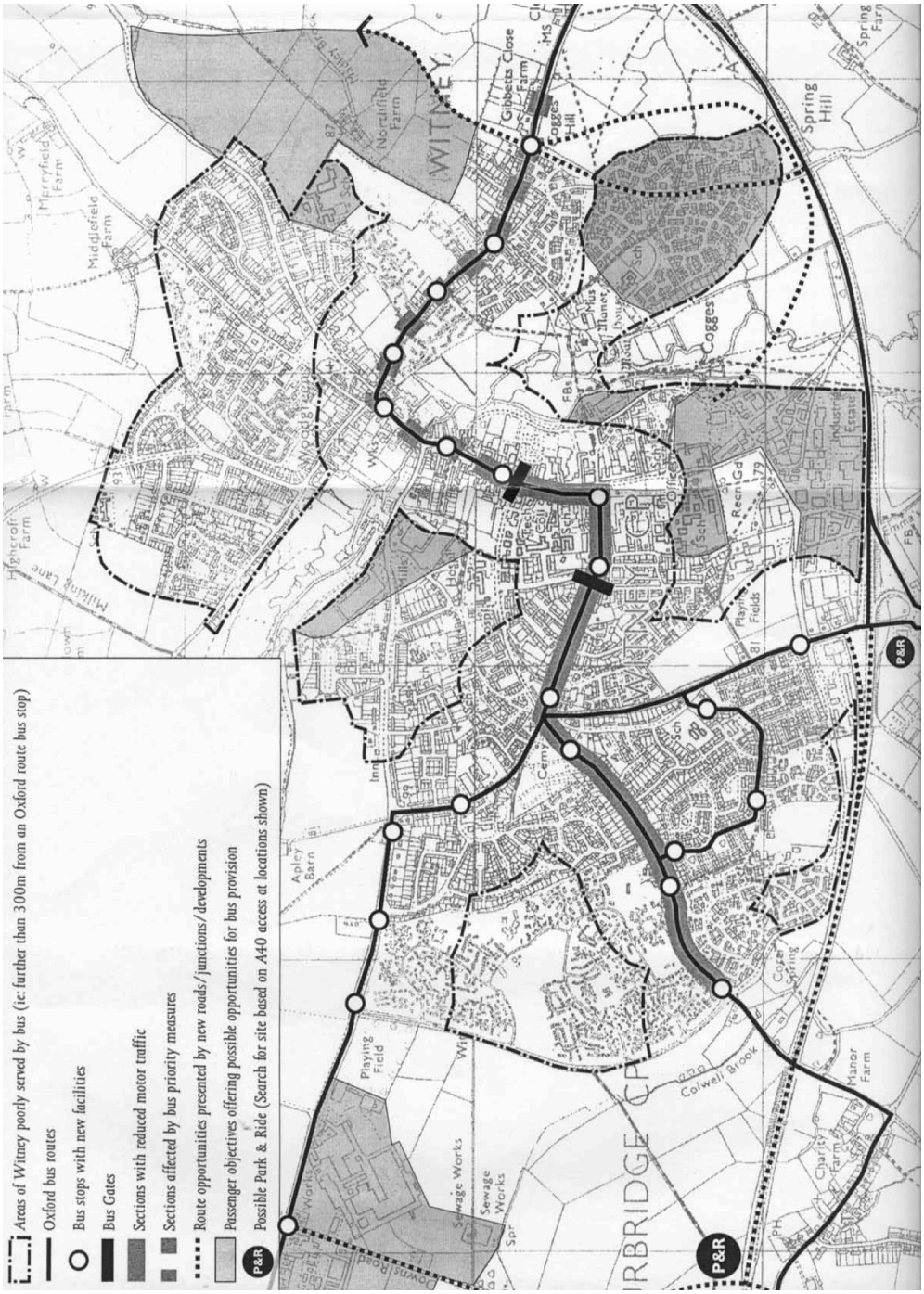


5 Unconstrained Schemes

5.1 *Introduction*

5.1.1 Desirable schemes not dependent on new roads or town centre pedestrianisation for their programming, are discussed below. It is stressed that limited funds will mean that implementation of all schemes will need to be spread over a period of 5 - 10 years. It is felt important to set out the schemes and the concepts behind them in order to ensure that opportunities to create improvements are not missed, as they sometimes have been in the past. New developments, maintenance and repair programmes all offer opportunities, for example to improve road design, and create better foot and cycle paths.

5.2 *Traffic calming*

5.2.1 The road network in Witney should be developed in accordance with the speed management strategy shown in Figure 5.1. In this way, most roads in the town will be subject to a 20 mph speed limit, which is more compatible with safe movement on foot and bicycle.

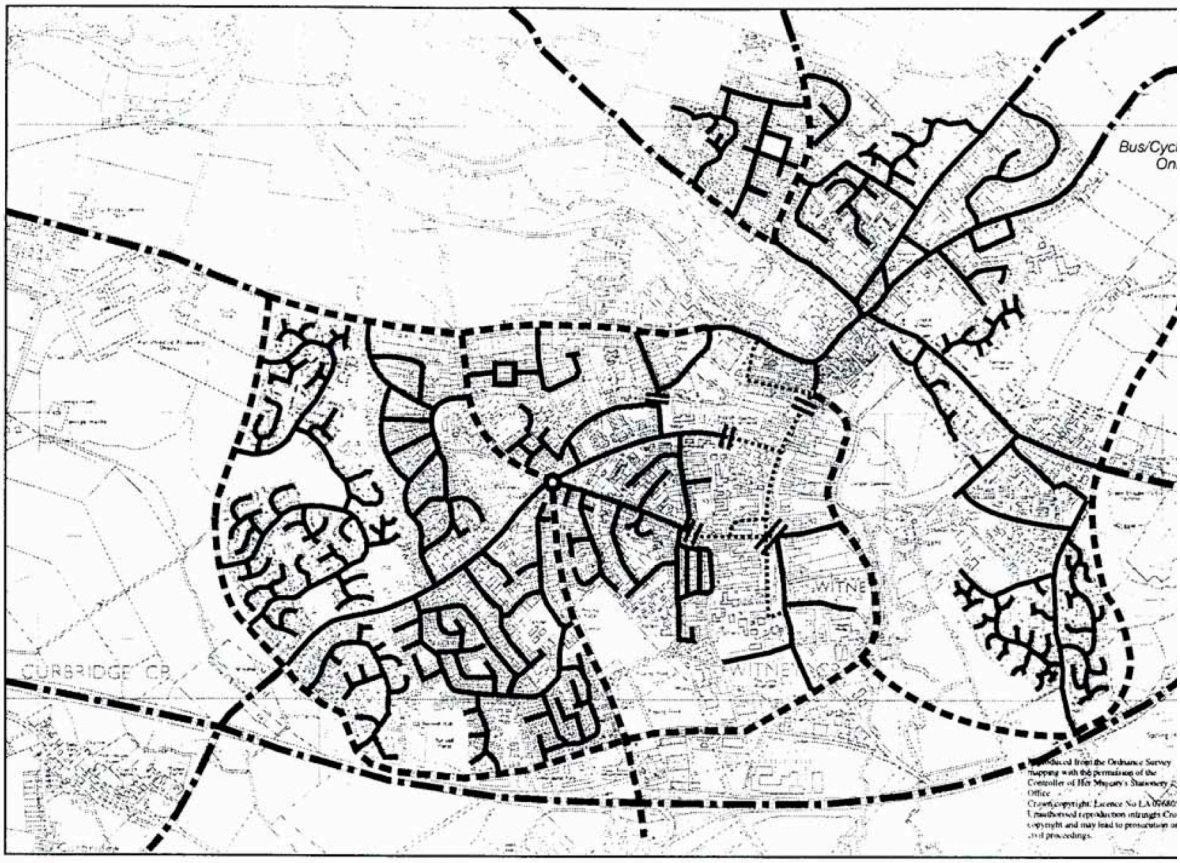
5.2.2 Current regulations state that no part of a 20 mph zone should be more than 1,000 metres from a road with a 30 mph or higher speed limit. The zones implied in Figure 5.1 will for the most part leave no part more than 500 metres from a higher limit road.

5.2.3 The aim is to increase safety (i.e. to reduce risks and intimidation due to motor traffic) and to reduce personal injury accidents especially to vulnerable road users. A further aim is to shift in the mode shift objectives, and to increase the freedom and independence of children for school and other journeys on foot.

5.2.4 Physical traffic calming measures will be required on many roads to ensure self-enforcing average speeds of 20 mph or less, which is a requirement of current zone regulations. There may in future, however, be more flexibility in the regulations, if speeds can be reduced to reasonable levels by other means.

5.2.5 Many residential roads in Witney are short and/or laid out in cul-de-sac patterns. Physical traffic calming measures are unlikely to be required in many of these roads. The Mobility Centre will be able to include public education on the speed issue in its activities.

Figure 5.1
Speed Management Strategy



KEY

····· 10 mph

—— 20 mph

– – 30 mph

– · – De-restricted

═══ Road Closure (whole or partial)

5.2.6 Physical traffic calming measures are recommended, however, on the following residential collector roads and the design approach could be developed using trial schemes:

- West Witney: Valence Crescent, Edington Road, Raleigh Crescent, Thorney Leys, Apley Way, Windrush Valley Road, Mirfield Road, Burwell Drive, Abbey Road; and
- East/North Witney: Cogges Hill, New Yatt Road, Farmers Close, Early Road, as well as on new residential roads in North East Witney.

5.2.7 Curbridge Road is currently an important traffic route into Witney, but is recommended for "green route" treatment whereby physical measures are deployed to improve conditions of non-car traffic. A similar approach should be taken on West End, Newland, Oxford Hill, Bridge Street and Mill Street, but timetabled for implementation with the Cogges Link and North East Distributor Road. Suitable measures will include widened footways, bus-friendly calming measures, and landscape improvements.

5.2.8 Ramps and other vertical carriageway deflections should be avoided on bus routes, except where bus design allows the use of speed cushions (e.g Burwell Drive and Curbridge Road.

5.3 *Near-village foot/cycle routes*

5.3.1 The concept for Witney's hinterland has two principal aims:

- First, to maximise the potential for mode switch away from the car for residents of the 10 settlements located within 5 kilometres of Witney town centre (5 kilometres being an important threshold for cycling). These residents account for one quarter of all visitors to Witney town centre and about 13% of all Witney employees, and currently these journeys are made mostly by car.
- Second, to provide safe and enjoyable walking, cycling and horse-riding routes for residents and visitors to the area, both as an asset in their own right, and to reduce car use for recreation purposes.

5.3.2 The overall concept, as illustrated in Figure 5.2 (see also Figure 4.4), is to use a combination of upgraded paths and bridleways and "quiet lanes" as advocated by the Countryside Commission, in order to achieve the following:

- develop direct routes for non-motorised traffic between the near-villages and Witney;

- develop routes which connect conveniently to the developing foot and cycle networks within Witney itself (the subject of specific proposals in the Witney Study);
- develop direct routes between the near-villages. These have two purposes, first to serve residents of the villages themselves, and second to link the Witney radial routes, thus creating a large number of circular recreational routes;
- develop routes linking with or forming part of longer-distance recreational routes, such as the Oxfordshire circular walks, and the National Cycle Network (these are not shown on Figure 5.2).

5.3.3 The priority for achieving the near-village link improvements is to provide safe and convenient crossings of the town perimeter roads, to link the in-town and out-of-town routes. The following are recommended in addition to those already described *(see Figure 4.4):*

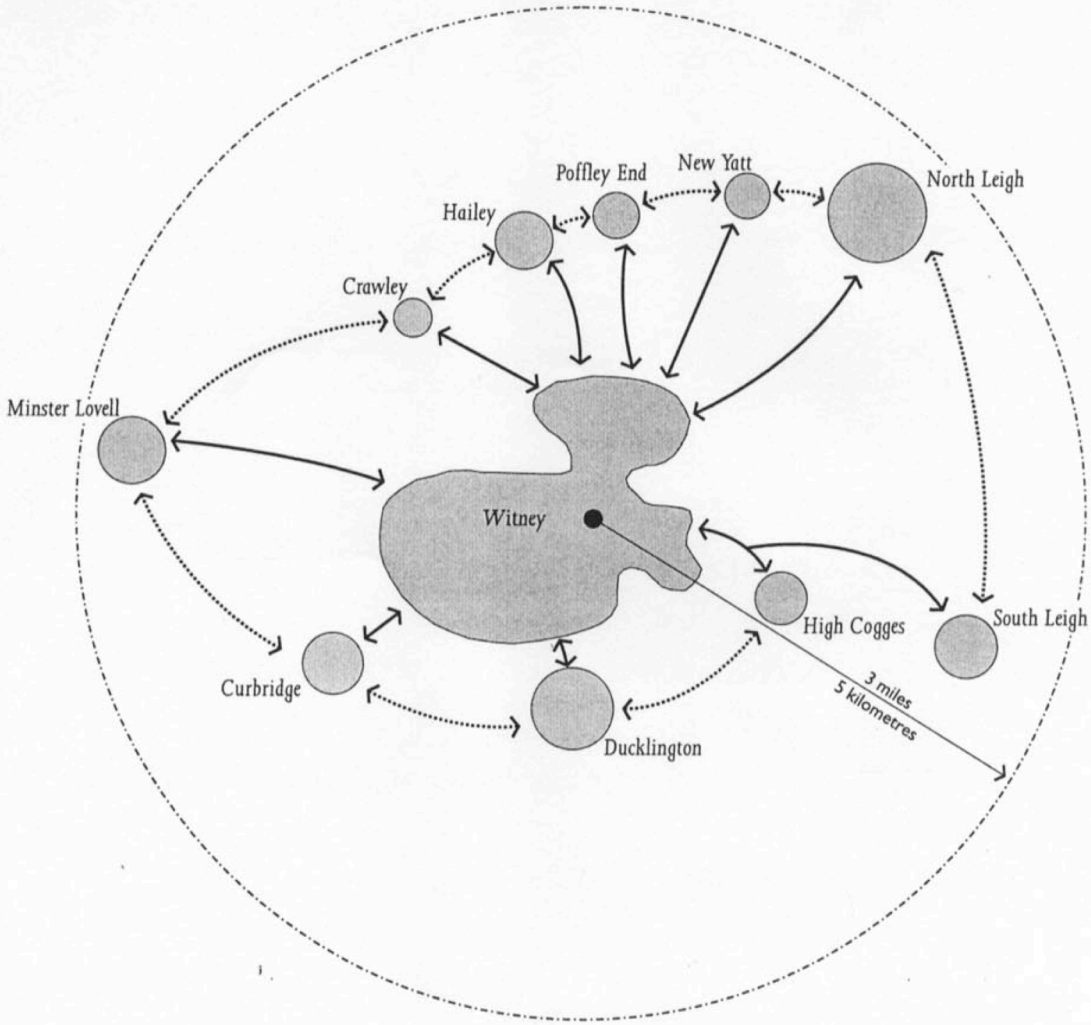
- Deer Park Road crossing for West Oxfordshire Circular Walk;
- Deer Park Road crossing for Thorney Leys - Curbridge Road link; and
- Deer Park Road crossing for new foot/cycle route to Windrush Industrial estate.

5.3.4 Priority for upgrading the near-village links themselves should be given to those between Witney and Crawley, Curbridge and Ducklington. Footpaths and/or bridleways should be upgraded for use also by bicycle traffic. A new and upgraded link should also be established between Witney (Burford Road) and Minster Lovell. The Crawley or Ducklington links are suitable for early development as a trial scheme.

5.3.5 In addition to the links between Witney and the nearby villages, it is recommended that potential links between the villages themselves should be explored for their ability to provide (when developed as a network) circular recreational routes for walkers, cyclists and horse riders.

5.3.6 In each case, the routes would be developed mainly from existing rights of way, though short new sections might be desirable in certain locations. The target network (as shown on Figure 5.2) can be used to provide the overall planning framework, and the route development will then undertaken on the basis of detailed route investigation and local consultation and negotiation. Various types of action will be needed depending on existing provision, opportunities and constraints, and it is important to stress that a combination of actions will be used to achieve the desired result. It is not proposed that an entirely uniform pattern of paths be created - this would be both very costly and difficult to implement, and probably undesirable.

Figure 5.2
Recreational routes/near village links concept diagram



⟷ Links Witney - nearby villages

⟷ Links between villages

5.3.7 The following are examples of what might be undertaken:

- closure or traffic calming of classified roads to reduce motor vehicle volumes and/or speeds;
- redesign of roads at path crossing points for safety and convenience of vulnerable users;
- upgrading existing footpaths;
- widening and surfacing paths to accommodate cycles;
- providing separate paths for cyclists and horse riders;
- converting footpaths to bridleways;
- installing access control measures (e.g. for pedal but not motor cycles);
- removing obstacles (such as gates and stiles);
- comprehensive and environmentally sensitive route signing;
- upgraded lighting of the urban sections of the network; and
- new path sections alongside or separate from major roads.

5.4 *Park and ride*

5.4.1 Park and ride for West Oxfordshire to Oxford City via A40 is a future possibility. As far as Witney residents are concerned, buses to Oxford should be accessed primarily on foot, and possibly by cycle (i.e. "Walk and Ride, or "Cycle and Ride") *(see 4.5.26)*. It is not recommended that park and ride facilities be provided within Witney, because of the disbenefits arising from additional land given over to parking, and from additional traffic attracted into or through the town. There is a real danger that people will be encouraged to drive to the bus, instead of accessing it on foot. This view is supported by the fact that 90% of current bus passengers to Oxford own at least one car (25% own two or more), and future passengers whom it is hoped will transfer from car are, of course, already car owners. At present a number of people use the town centre car parks as an informal park and ride but parking management measures in the town centre will seek to reduce this.

5.4.2 There may, however, be scope for a park and ride service designed to fulfil a need in the wider area of West Oxfordshire. For this purpose, a site would need to be found preferably to the west of Witney (to minimise park-and-ride in place of walk and ride by Witney residents).

5.4.3 A park and ride service so far from Oxford seems unlikely to prove attractive unless current delays on the A40 (or other routes) can be

avoided, that is unless the A40 bus lane (currently under study) is successfully implemented.

5.4.4 The most likely sites for consideration (in the longer term) are in the vicinity of Downs Road and its possible future interchange with the A40 (see Figure 4.5). Another possibility is Curbridge Road west of Deer Park Road (which could benefit from the recommended bus priority measures in Witney), but attention should be drawn to the potential detrimental impact on the local landscape. A site near the Ducklington Lane interchange could be also be considered, but the impact on traffic at Station Lane/Ducklington is likely to be problematic.

5.4.5 In the short term, there is no compelling case for park and ride in preference to walk and ride or cycle and ride *(see 4.5.26*), and the issue should be regarded as one deserving further consideration. The priority in the short term should be to secure the removal of traffic delays to buses in the Oxford route. It is not intended to recommend the inclusion of any park and ride scheme in the 1997 TPP submission.

6 Cogges Link and Related Schemes

6.1 *Introduction*

6.1.1 These are schemes for complementing and supporting the Cogges Link and North East Distributor roads, to be implemented at the same time as, or shortly after, the opening of the new roads.

6.2 *New roads - the Cogges Link and North East Distributor roads*

6.2.1 These schemes are put forward as included in earlier reports and in the Local Plan. It is recommended, however, that these schemes should provide new links for foot and cycle traffic, as well as motorised traffic. The scheme designs should therefore include foot and cycle paths alongside or nearby the carriageway, and proper crossing facilities should be provided for foot and cycle routes leading into the surrounding countryside. It will be important to ensure that the new roads do not create new barriers to foot and cycle movement. Figure 6.1 shows the measures for private motorised transport.

6.2.2 The Station Lane/Ducklington Lane junction is known to cause concern from a safety viewpoint, and further study of this junction is recommended to identify appropriate remodelling.

6.2.3 Similarly, the junction of Cogges Link with Witan Way will become one of the busiest junctions in the town. Traffic signal control will be required in the vicinity of the roundabout to provide crossing safety for pedestrians and cyclists.

6.3 *West End Link*

6.3.1 The Local Plan includes safeguarding for a new road link between West End and Welch Way, and the role of this link has been reviewed in the context of the Study objectives and the overall strategy for meeting them. Results of further modelling of the traffic impacts are contained in Appendix B.

6.3.2 In Stage 2 of the Study, the option of closing Bridge Street/High Street to general traffic following the opening of the Cogges Link (CL) and North East Distributor (NED) roads (Option 3, Stage 2 report) was examined. Although this option was found to reduce traffic levels in large areas of the town,

concerns were raised about possible diversion of traffic through Crawley and other outlying areas, and about the traffic impact on West End, Newland and Oxford Hill. The addition of the West End Link was found to offer both positive and negative traffic impacts. However, further work is necessary to investigate how the benefits of a West End Link can be achieved whilst controlling the "draw" of additional traffic to the centre and at the same time providing protection for Crawley village, West End, Newlands, Hailey Road and Farmers Close.

6.3.3 In view of the mixed effects, some possibilities for the West End Link (WEL) have been considered, and the following conclusions can be drawn:

(i) It remains unclear whether the closure of Bridge Street should be regarded as dependent on the construction of the WEL, mainly because of the ambiguous effect of the WEL on surrounding roads.

(ii) With the closure of Bridge Street the WEL would draw traffic into the town away from rural routes. Whilst this has the benefit of reducing demands through villages like Crawley and possibly assisting elements of the "drive to, not through" strategy for access to Welch Way parking, the potential to draw additional traffic into the northern edges of the town centre would need to be strictly controlled.

(iii) The addition of the West End Link without significant capacity reduction (eg. northern section of High Street and Bridge Street) would create additional central highway capacity, have no merit within the context of the strategy, and seems likely to lead to a significant induction of traffic growth.

6.3.4 Consideration has also been given to building only the northern section or only the southern section of the West End Link.

6.3.5 The prupose of building the northern section (between West End and Mill Street) would be to close Bridge Street/Mill Street/High Street to general traffic, thus bringing major safety and environmental improvements to these sensitive areas, but see 6.3.3 above. Complementary traffic management and calming would be needed to provide traffic relief on Newland, Oxford Hill, Hailey Road and Farmers Close and on West End itself, with continuing difficulties in providing bus priority at the critical Staple Hall junction.. The impact of the road on the environment in the vicinity of the Windrush would need to be investigated. The scheme would be reasonably consistent with the “preferential routing” and “drive to, not through” principles of the strategy.

6.3.6 From a traffic impact viewpoint, the southern section (between Mill Street and Welch Way) would be likely to reduce traffic on Tower Hill and Burford

Road and could thus be seen as being complementary to the pedestrianisation of the northern part of High Street. At the same time, however, it would increase traffic on Welch Way. This would be beneficial if it were simply a matter of traffic switching routes. There are, however, other factors which need to be considered.

6.3.7 First, this link would encourage through movement from North Witney via Welch Way and Curbridge Road, which could reduce the benefits of traffic relief once the Cogges Link and North East Distributor Road are open. Strict capacity controls are recommended to mitigate these problems. Traffic calming of Woodstock Road and New Yatt Road would assist, while closure of these roads would have a greater effect. (In either case, traffic calming of villages north of Witney would be needed to avoid rat-running traffic.)

6.3.8 Second, the link would increase the attractiveness of Welch Way car park (relative to the Witan Way car parks) for drivers entering the town from the north and demands at this car park may require suppression with more stringent parking control and charges.

6.3.9 Third, unless traffic calming and other measures were taken on surrounding roads to reduce its attraction as a through route, the Mill Street - Welch Way link would serve to increase through route capacity in the town, and thus bring the danger of increased traffic.

6.4 *Control of flows on Bridge Street*

6.4.1 Measures are needed to secure traffic relief benefits from the Cogges Link and North East Distributor roads. These benefits are especially needed on Bridge Street and the routes leading to it (West End, Woodstock Road, New Yatt Road, Oxford Hill, Newland, Mill Street and High Street). These traffic management measures, are designed to provide relief to Bridge Street and its approach routes, while stopping short of full closure of Bridge Street.

6.4.2 The aim is to control Bridge Street routes to:

- provide priority for buses, especially on High Street/Bridge Street/Oxford Hill;
- reduce traffic on Bridge Street and approaches; and
- limit potential for traffic to build up on these routes in the years after the opening of the new roads.

6.4.3 It should be noted that there is limited scope for reducing traffic on Bridge Street without closure to general traffic. The measures below are designed

to mitigate existing problems, and are unlikely to provide sufficient traffic reduction to meet the environmental capacity target on the Bridge Street routes. In the longer term, closure of Bridge Street, as discussed in Option 3 in the Stage 2 Report, should therefore be considered. In any case, traffic and environmental conditions on West End, Newland and Oxford Hill are likely to require further stringent restrictions.

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6.4.4 All measures described below relate to motorised traffic travelling towards Bridge Street (i.e. all measures apart from closures need only to be uni-directional). Two techniques are suggested:

- traffic valves and road closures to control the rate of arrival at Staple Hall and Mill Street/Bridge Street junctions; and
- queue relocation away from the most sensitive areas and bus routes (note that this does not affect network capacity).

6.4.5 The individual measures are shown on Figure 6.2. and are:

1 Oxford Hill/Cogges Link junction: traffic signals with approach for buses and transponder-activated green for buses in both directions. Bus lane in the centre of the carriageway (no bus stop constraints).

2 Newland/Oxford Hill: bus stops in divided carriageway (integrated with new pedestrian/cycle crossing facilities) to prevent overtaking of stationary buses, hence maintaining the position of buses in the traffic stream. Three of these measures are proposed between Cogges Link and Staple Hall junctions *(see Figure E5 at Appendix E).*

3 Closure of New Yatt Road and Woodstock Road near town boundary and/or traffic calming of these roads within the boundary (see paragraph 6.3.7): Since Bridge Street will continue to provide the most direct route between north Witney and the town centre and Burford Road, there is a need to discourage use of this route by motorised traffic. If this is done by traffic restrictions on Woodstock Road and New Yatt Road, it will be necessary to implement measures in New Yatt, Poffley End and Crawley, and on Hailey Road to avoid traffic diverting onto these roads and to ensure that traffic from Woodstock Road direction uses the North East Distributor Road and (depending on destination) the Cogges Link. Buses and cycles will be exempt from the Woodstock Road and New Yatt Road closures. Both these roads can then become "green routes".

4 Signals at Crawley Road/Hailey Road junction: to provide pedestrian and cycle access between Hailey Road and the proposed new path across the river. These lights will interrupt the eastbound flow on West End towards Staple Hall. Traffic calming on these roads would also assist in this respect.

5 Crawley village protection: further measures may be necessary in the longer term to prevent or discourage diversion of traffic from the Bridge Street route, to the alternative routes via the village of Crawley. Traffic calming measures in the village itself would assist with this, and in addition would reduce the impact of all traffic in the village. Width restrictions could also be employed, with appropriate advance signing.

6 Closure of New Yatt Road between Woodgreen and West End ("Narrow Hill"): this will funnel traffic into the southern end of Woodstock Road, thus helping to balance inbound and outbound capacity at Staple Hall junction.

7 Traffic signals at Witan Way/High Street junction: these to be modified to relocate queues of northbound traffic from High Street to Witan Way (away from bus route and away from properties suffering from noise and pollution). This is to be achieved by providing guaranteed pedestrian phases at no more than (say) 45 second intervals, and interruptions of the northbound flow to allow southbound buses and cycles to enter the (pedestrianised) High Street. Buses to activate this phase with transponders.

8 Burford Road/Tower Hill: new junction signals timed to control eastbound flow on Burford Road. This is also a location of new pedestrian /cycle crossing of Burford Road.

9 Other measures to break and control flow on Burford Road / Mill Street are: timing of lights at Deer Park Road and new crossing facilities at Moor Avenue and at proposed new pedestrian / cycle path between West End and Puck Lane.

10 Bridge Street / Mill Street junction: the present mini-roundabout can be replaced with new signals, allowing control of Bridge Street / High Street flows, and a bus-activated green phase north and southbound. Timing of the signals should give preference to the High Street (northbound) flow to minimise delays to buses.

11 Staple Hall: possible new traffic signal junction with left-turn bus lane (filter) from Newland into Bridge Street, with bus-activated green.

Figure 6.1 Measures for Private Motorised Transport

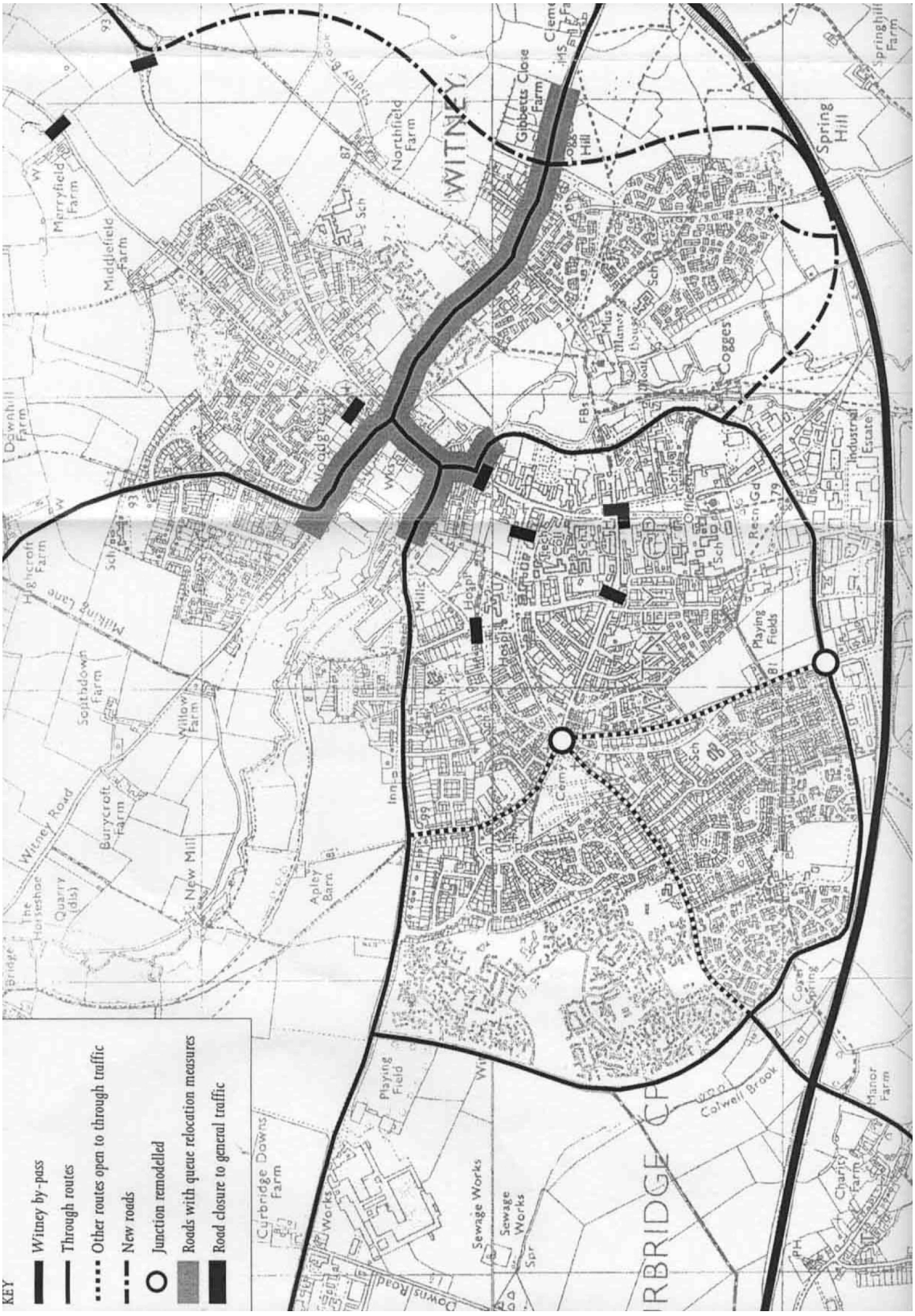
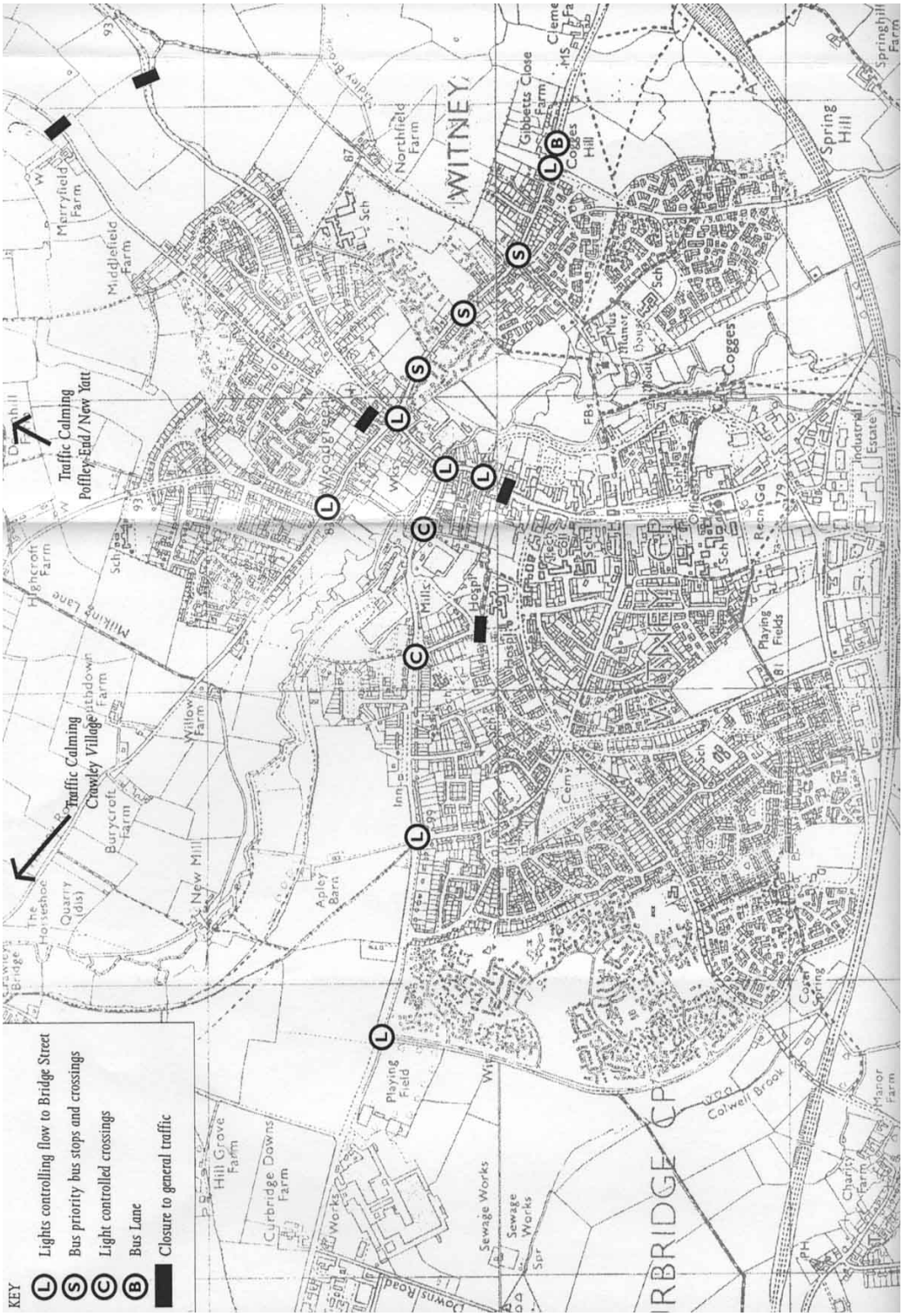


Figure 6.2 Bridge Street Measures



7 Framework Schemes and Policies

7.1 *Introduction*

7.1.1 These measures are designed to complement the physical schemes, and to maximise their benefits.

7.2 *Land use planning*

7.2.1 Many policies in the Local Plan contribute to reducing the need to travel. These should continue in the future, focusing on the following:

- reduce the need to travel by concentrating new development close to existing facilities and employment;
- increasing land use diversity in the town centre, encouraging multi-purpose trips;
- increasing housing in the town centre and living over the shop schemes;
- retaining the FE college in the town centre, where it is easily accessible by non-car means, and where ancillary facilities are available within walking distance;
- designing new housing areas in a compact form, and with a layout which favours travel on foot, bicycle and by bus;
- provision of communal rather than private parking, with standards appropriate to location and land use; and
- plan for the maximum of new housing in West Oxfordshire District to be located in Witney, rather than villages.

Parking standards

7.2.2 The target for reducing the proportion of trips made by car will, if achieved, reduce the need for multiple car ownership. As a consequence, residential parking standards could be revised downwards, thereby allowing gains in residential density without any loss of environmental quality. Such revision is best undertaken at County level, but opportunities for lower level of provision can be sought by the District for individual development proposals. Further study is recommended to determine standards for each type of development, and possibly for different locations. The following two paragraphs are intended as interim suggestion.

7.2.3 Parking standards in new developments would be consistent with the WITLUS targets if they were set as follows:

- **Residential:** in new residential development, a maximum provision of one car space per dwelling (two for larger dwelling units) should be applied, to be provided in communal parking areas off the street, or in on-street bays. For infill development, parking should be catered for in public parking areas, either on or off-street. In the town centre, such provision should avoid the need for access via the pedestrian-priority area.
- ***Non-residential:*** a maximum rather than minimum parking standard should be applied in all new private non-residential developments. The actual provision should be decided on the basis of the intended mode split for access to the development, and developers should be required to demonstrate what means they propose to limit the car share. For example, the intended mode split is that for commuters and visitors to employment locations in Witney, no more than 50% should arrive by car.

7.2.4 All parking associated with new private non-residential development should be in spaces available for public use, or multiple private use. This is to minimise the overall parking space requirement while allowing efficient operation. No new parking involving access via the pedestrian-priority areas of the town centre should be permitted.

Housing layout to favour non-car modes

7.2.5 Development briefs for new housing areas should be prepared which include layout and design consideration to encourage the non car modes. Such features consistent with the strategy for Witney will include:

- "preferential routing", whereby access between housing areas and other facilities (shops, schools, employment and leisure facilities) is more direct by foot and bicycle than by car;
- bus priority routing, whereby bus routes serving the area are direct, have bus stopping places convenient for potential users, and are protected from potential delays due to traffic congestion;
- bus, cycle and footways to be incorporated to a high standard of design as an integral part of the layout from the outset. Pedestrians and cyclists should be provided for on separate paths or ways throughout the development;
- where a new development increases the burden of foot and cycle traffic on adjacent or nearby paths or ways, consideration should be given to funding the upgrading of said routes by the developer, using Section 106 agreements; and

- new housing should incorporate secure cycle storage for all dwellings, providing a minimum of 2 cycle spaces per dwelling.

Owner and developer negotiations to secure a more successful pedestrianised town centre

7.2.6 New pedestrian links should be sought between the north end of the High Street and the public car parks to the rear (Welch Way and Witan Way car parks). Potential for such links has been identified on the sketch plans of the pedestrianisation scheme *(see illustration 4.2)* and should receive close consideration in relation to the development of the Marriotts' Close site.

Development brief for Marriott's Close and related development

7.2.7 The following factors should be considered in relation to the future development of Marriott's Close:

- comprehensive development of the areas identified in the West Oxfordshire Local Plan will not be prejudiced by the implementation of pedestrianisation of the High Street and related traffic management measures. Appropriate development of these areas will compliment and strengthen the town centre enhancement concept as set out in this report;
- retail development in the town centre should be focused on the High Street, and the new pedestrian activity routes recommended to extend economic and social vitality to the northern part of the High Street. Mixed use development will need to be of a suitable scale, and well related to the pedestrian links intended between High Street and the car parks;
- any activity which generates large volumes of car traffic will reduce the effectiveness of the car-reduced town centre as recommended in this report and should be resisted;
- a new road link between Mill Street and Welch Way would reduce traffic pressure on Tower Hill, but traffic management and calming will be necessary to minimise the potential to draw more traffic into the town centre, resulting in higher levels of traffic overall (induced traffic);
- new development on the site does not automatically require the construction of a new road link between Welch Way and Mill Street (i.e. the southern portion of the West End link). Vehicle access can be by an access road from Mill Street via new development on the former mills site; and consideration could be given to connecting the

Welch Way car park to this access road (and closing access from Welch Way);

- development in this vicinity should provide for a pedestrian/cycle link between Mill Street (connecting with a path across the river to West End) and Welch Way "boulevard", as an alternative to the northern part of High Street.

7.3 *"Soft Measures"*

Monitoring surveys

7.3.1 Following implementation of the various schemes recommended in this report, it will be important to monitor their effectiveness against their objectives. This will be required in order to make any necessary modifications, but also to attract future (ongoing) funding via the TPP process. The following surveys are recommended for this purpose *(see also Table 9.1)*:

- pedestrian surveys in town centre;
- household travel survey (repeat 1990 survey but with smaller sample) revealing mode split;
- traffic monitoring (flows and level of service for cars, buses, pedestrians and cycles);
- ATC's and manual counts;
- physical survey;
- repeat survey of conditions for these with mobility improvement;
- accident statistics; and
- speed counts.

Mobility centre activities

7.3.2 *See 4.4.6 - 4.4.16.*

County Council/Thames Transit "Quality Partnership" contract

7.3.3 In the deregulated bus environment, it is not possible to specify bus service levels, except for subsidised services. There is scope, however, for securing desired levels of service quality via the process of voluntary contracts between the local authorities and bus operators. It is recommended that the County Council, in conjunction with the other local authorities, seek such a contract with the present main provider (Thames Transit).

7.3.4 This contract could include the following aspects of service quality for routes serving Witney:

- vehicle quality (including passenger comfort and accessibility);
- vehicle design (chassis dimensions in relation to speed cushions and other street design features);
- service stability;
- reliable journey times (highway authority responsibilities);
- passenger information;
- passenger infrastructure; and
- ticketing- passenger care.

7.3.5 In addition, the continued presence of buses in the pedestrianised areas of the town centre will require certain limitations to be imposed on bus activity, in particular speeds and waiting. A code of conduct for all bus operators serving the town centre should be drawn up and agreed with the operators, perhaps using the existing code for Oxford City Centre as a model.

8 Implementation, Phasing and Monitoring

8.1 *General phasing of schemes*

8.1.1 The recommended schemes and measures have been set out in the foregoing sections (sections 3-7) in terms of implementation sequence. The programme is expected to take up to 10 years to complete (i.e. up to year 2007), but this is mainly because achievement of the target foot and cycle networks, and area-wide traffic calming will require consistent action over time to bring the entire networks up to the desired standards. Other schemes require investments to be concentrated over a shorter timescale, such as the town centre pedestrianisation and the Cogges Link. The recommended programme of scheme implementation is outlined in Figure 8.1.

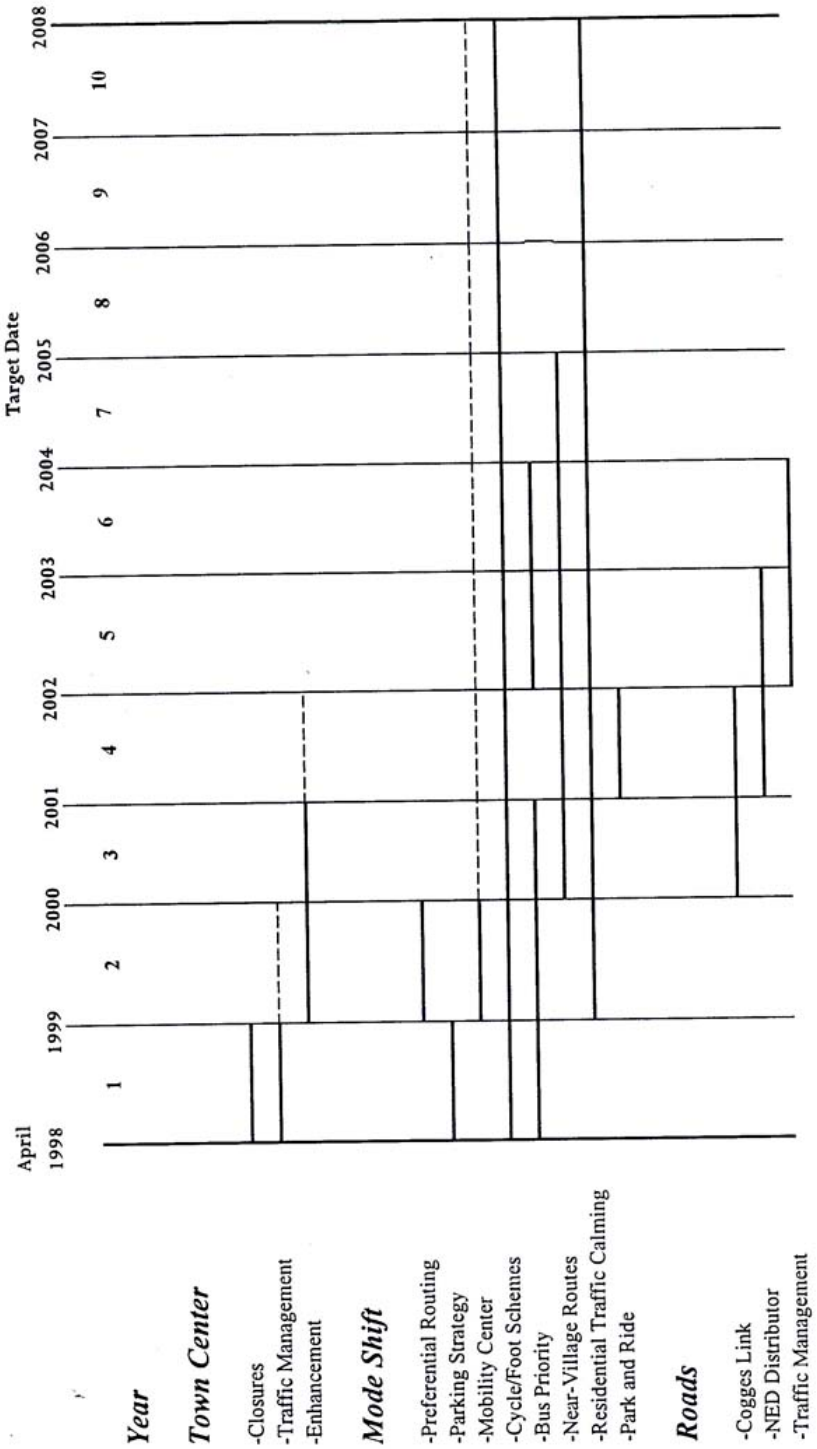
8.1.2 This section of the report provides more detail about the order in which particular schemes should be implemented, and the priority attached to them. The programme recommended here can provide only a guide to help the realisation of the WITLUS strategy, and it may need to be modified as a result of consultations, or financial or other circumstances.

8.1.3 The suggested phasing is intended to reflect the following considerations:

- the need to present benefits to the public as early as possible;
- the need to raise public awareness of and support for the WITLUS strategy and its objectives;
- the need to minimise disruption due to construction works, especially in shopping areas;
- the need for adequate lead times for planning and consultation;
- the likely availability of funding in a given year; and
- practical issues in the sequencing of schemes, in particular the avoidance of adverse traffic impacts.

8.1.4 It is recognised that the WITLUS strategy involves a significant increase in local authority activity in the town. Whilst we have no doubt as to the desirability of the recommended schemes, and the enormous potential for transport and environmental improvement, we are aware that implementation of the strategy is unlikely to be free of obstacles and difficulties (such as unexpected opposition by some groups or individuals, unforeseen engineering difficulties, or new circumstances requiring a change in spending priorities). In setting out the intended implementation process, it is not possible to take account of circumstances that are by their nature unpredictable. What is important, however, is that the local

Figure 8.1 General Implemenatation Programme 1998-2008



authorities establish an implementation mechanism that is capable of dealing with difficulties as they occur.

8.1.5 It is therefore recommended that the local authorities establish an implementation team which can co-ordinate different aspects of the work, provide a focus for public involvement, and provide the enthusiasm and leadership necessary to maintain the impetus of the strategy, and overcome the difficulties that will almost certainly arise along the way.

8.1.6 The remainder of this section gives special consideration to the phasing of the town centre schemes, and goes on to consider phasing of schemes throughout the town. Finally, the monitoring requirements are discussed in more detail.

8.2 *Implementation of town centre pedestrianisation*

8.2.1 The full recommendation for pedestrianisation and environmental enhancement of the town centre are set out in Section 4. Implementation of these schemes will require careful planning, including detailed consultation with interested parties and the general public.

8.2.2 The recommended approach is to secure as many of the benefits of pedestrianisation as possible in each implementation phase so as not to disadvantage the trading conditions in one part of the town centre by improving conditions in another part. In particular, the northern and the High Street is judged to be currently less successful than the southern part of the High Street, and improving the latter alone could seriously damage the prospects for the northern part.

8.2.3 Nevertheless, implementation of the town centre traffic and environmental enhancement schemes in their entirety in a single phase may create unreasonable demands in terms of planning and financial resources. It is recognised that a phased implementation has considerable merits, including the following:

- opportunity to demonstrate the benefits in the first phase to help acceptance in subsequent phases;
- opportunity to improve procedures and designs in later phases; and
- more modest traffic network changes at the one time.

8.2.4 A number of possibilities for phased implementing of the scheme have therefore been examined and are summarised below. It should be stressed, however, that while there may be practical and financial benefits to phased implementation, there are also dangers and costs involved, possibly including the following:

- difficulty of sustaining momentum for implementation over an extended period;
- extended periods of disruption due to construction;
- more extensive consultation;
- more periods of adjustment to changed traffic arrangements; and
- costs of re-signing and (possibly) re-design for different phases.

8.2.5 In putting forward possibilities for phased implementation, therefore, it should be borne to mind that such an approach is driven primarily by financial and practical realities, and care should be taken by the authorities concerned to ensure that any problems are minimised. In particular, it will be necessary to monitor the impact on trade and vitality in areas not included in any initial implementation phase.

8.3 *Phasing of town centre schemes*

8.3.1 Both the traffic changes (consequent on road closures) and the subsequent environmental enhancement works can be implemented in more than one phase. We have considered two traffic phases *(see Table 8.1)* and three enhancements phases *(see Table 8.2).*

Table 8.1: Phasing of traffic changes

	Single Phase (recommended)	Two Phase 1	2
Closures to ground traffic			
- High Street (north end)	•		•
- Welch Way (east)	•		•
- High Street (south end)	•	•	
- Corn Street (east end)	•	•	
- Buttercross/Town Hall	•	•	
- Buttercross/War Memorial	•	•	
Rat run prevention			
- Moor Ave closure	•		•
- Park Lane/Gloucester Place traffic calming	•		•
Other			
- Langdale Gate and Church Green one-way	•	•	
- Parking controls (High St, Corn St, Church Green)	•	•	

8.3.2 It should be noted that in order to avoid abortive work, environmental enhancement work should be carried out only when and where the final traffic arrangements have been secured. For this reason, the traffic and enhancement phases do not coincide.

8.3.3 The alternative approaches to phasing have implications for the spreading of costs over the implementation period. Undertaking all enhancement work at one time following the various road closures would require all the costs to be met in a single year, and would place heavy demands on the construction process.

8.3.4 Implementing the traffic changes in a single phase (see Table 8.1) would still allow environmental enhancement works to be implemented in stages. For example three key areas could be repaved following the road closures (Buttercross, Welch Way Junction and Witan Way Junction ie. areas A, C, F and G on Figure 4.1), and the remaining areas repaved in the subsequent year. This would mean costs in the first year of around £580,000, and £960,000 in the second year (£965,000 and £1,725,000 respectively if the High Quality enhancement option is chosen). The second year work could be extended into a third year, for example with the Corn Street and Welch Way Boulevard sections (D and H on Figure 4.1).

8.3.5 An alternative, more gradual, approach would be to introduce traffic changes in two phases, and to spread enhancement over three phases, as shown in Table 8.2. The first phase would involve closures of the southern part of the overall project followed by enhancement of that area. In the second (or subsequent) year, further closures at Welch Way and Witan Way would allow subsequent repaving of the north end of High Street to Witan Way. In a third (or subsequent) year, remaining areas (Welch Way and Corn Street) would be repaved. The costs in this three phase scenario fall more heavily on the early stages, due to the larger area involved in repaving Market Square. Referring to the figures shown in Figure 8.2, 56% of the costs would fall in the first stage, 29% in the second stage, and 15% in the final stage. This option is likely to be more difficult in terms of securing the necessary funds in the first year.

8.3.6 The possibility of closing High Street between Buttercross and Welch Way only as a first phase was also considered, but is not recommended because of the limited scale of benefits offered, and the adverse traffic impact on Corn Street and Holloway Road. This section of the town centre is already traffic calmed, and enhancement work (repaving) would need to stop short of the junctions (Welch Way and Buttercross) where improvements for

pedestrians are needed most. With the Langdale Gate/Corn Street route open to traffic, and High Street closed, drivers would be likely to divert via Holloway Road, thus creating an undesirable rat run in this residential area.

Table 8.2: Environmental enhancement phasing

	Single Phase	Two Phase*		Three Phase*		
		1	2	1	2	3
Repaving						
Witan Way/High Street Junction	•	•			•	
High Street, northend	•		•		•	
Welch Way/High Street Junction	•	•			•	
Welch Way (Boulevard)	•		•			•
High St (southend) and Market Sq	•		•	•		
Buttercross/Town Hall	•	•		•		
Corn Street (east)	•		•	•		
Redesign (not included in costing)						
Langdale Gate	•		•			•
Church Area (east side)	•		•			•
Estimated Cost of Phase £(000)						
Quality Standard	1,500	545	960	845	430	230
High Quality Standard	2,620	930	1,690	1,495	710	415
Plus Signage (approx)	35	35		30	20	

Note 1: It is assumed that all works in a particular area are undertaken at one time, to an overall design, to avoid extended local disruption. The term "repaving" here includes all associated works such as street furniture, landscaping and lighting.

Note 2: Both Single and Two Phase approaches require all changes to the traffic network to be made at one time. The Three Phase approach assumes traffic changes in two stages (south end, followed by north end closures).

8.4 *Five year implementation programme*

8.4.1 An overview of the recommended programme of scheme implementation is shown in Figure 8.1. Further details of programming are provided in the following paragraphs.

8.4.2 As will be noted, most of the schemes for the town centre and for areas west of the Windrush can be implemented in advance of, or at least are not dependent upon, the opening of the Cogges Link. The exception is the reallocation of space to pedestrians at the Mill Street/High Street junction, the full potential for which will be easier to realise after the Cogges Link is opened.

8.4.3 East of the Windrush, some schemes complement the Cogges Link and North East Distributor Roads, together with associated housing and other development northeast of the town. These will require simultaneous implementation and include the Woodstock and New Yatt road closures (or traffic calming, see paragraph 6.3.7), redesign of Staple Hall junction to assist, vulnerable road users, traffic calming measures in the outlying villages (i.e. Crawley, Poffley End, New Yatt) to limit rat-running, and the bus priority approach to the Cogges Link on Oxford Hill.

8.4.4 There are other schemes in east Witney/Woodgreen which can be implemented in advance of the Cogges Link, but which will also be complementary to it.

8.4.5 These include the bus stop and crossing facilities on Newland/Oxford Hill, and pedestrian and cycle facilities between Hailey Road and Mill Street via a new path across the Windrush. None of the recommended schemes is dependent upon the construction of the West End Link road. On the other hand, the road network changes recommended in this report do not prejudice the case for West End Link.

8.4.6 Implementation of the West End Link would follow only after full consideration of the comprehensive development area possibilities, in conjunction with the aim of reducing traffic on Bridge Street. The traffic impacts of the West End Link options are summarised at Appendix B.

8.4.7 We now consider the programme and sequencing of the schemes set out in sections 3 to 7 of this report. The estimated cost implications are that the first year would require funding in the order of £0.6-£0.7 million, Year 2 would require higher of levels both TPP and non-TPP funding up to around £1.3 million. Years 3 and 4 and funding would be at around £0.8 million each year followed by lower funding requirement in subsequent years. The total of public sector capital costs is estimated in the region of £5 million (see also paragraph 9.1.1). These are provisional figures only, and fuller detail will be available in the TPP submissions for 1998/99. There is scope for spreading total costs over a longer period than indicated below.

8.5 *Year 1*

8.5.1 The focus in the first year is on establishing the new traffic and parking arrangements associated with the town centre pedestrianisation scheme. Public consultation and detailed planning will be required in advance. (The traffic management measures could be established initially using experimental powers under the Road Traffic Regulation Act 1984, with reduced consultation requirements, but this is not recommended.)

8.5.2 The following should be undertaken first:

- closure to all traffic (except cycles) of Moor Avenue (south of junction with Dark Lane);
- traffic calming of Gloucester Place/Puck Lane;
- Langdale Gate to become one-way westbound; and
- Church Green (east side) to become one-way southbound.

8.5.3 Followed by closure to general traffic of:

- Buttercross (between the Town Hall and the Buttercross, and between the Buttercross and the west side of Church Green);
- Corn Street (east of the junction with Holloway Road);
- Welch Way (east of car park access);
- High Street (at junction with Witan Way).

(Note: in the two-phase traffic changes discussed in section 8.2, the last two items above would be deferred to Year 2, and a temporary closure of High Street immediately south of the Welch Way junction would be needed in Year 1)

8.5.4 The following measures would also be required in year 1:

- new signals at Burford Road/Tower Hill
- new traffic signs at locations affected by network changes
  - temporary advance warning of changes
  - permanent signs directing drivers to town centre car parks (From Bridge Street/A415 to Witan Way car parks; from Curbridge Road/A4095 and Burford Road/B4047 to Welch Way and Witan Way car parks; from "fiveways" roundabout to Welch Way car park);
  - permanent signs indicating new routing (e.g. at "fiveways" roundabout indicate Corn Street as no through route); and
- new traffic signals to provide bus priority "call ahead" facility at junction of High Street and Witan Way.

Parking strategy

8.5.4 Early implementation of a parking management strategy is required to manage the parking supply, and to generate income for implementation of the Mobility Centre and town centre enhancement works in following years. The following measures would be implemented in year 1:

- remove on-street parking within closure area (simultaneous);
- parking charges in public car parks;and
- on-street parking controls.

Cycle and pedestrian networks

8.5.5 The focus should be on securing the enhanced safety required as a result of the new traffic arrangements, and making a start with mode switch encouragement.

- new crossing facilities at Witan Way/Langdale Gate, Burford Road/Moor Avenue and Tower Hill/Windrush Valley Road.

Bus priority

8.5.6 Bus priority bus stops at Newland/Oxford Hill combined with pedestrian and cycle crossing facilities (3 total).

8.6 *Year 2*

8.6.1 The focus should be on exploiting the benefits of the town centre closures, namely environmental enhancement work, and a further step in improving access to the town centre by the non-car modes.

Town centre enhancement

8.6.2 Repaving and other enhancements to three key areas (Buttercross, Welch Way junction, and Witan Way junction.
(Note: if the two-phase traffic changes discussed in 8.2 were adopted, repaving of the Welch Way and Witan Way junction key areas would not be possible until after the second phase of traffic changes had been implemented, probably Year 3.)

Mobility Centre

8.6.3 This important component of the mode switch measures should be implemented as early as possible, but funding (if dependent on parking revenues) will not be available until Year 2.

Preferential routing improvements

8.6.4 These would consist of:

- bus-friendly traffic calming on Curbridge Road;
- redesign of Welch Way (pedestrian priority treatments at cross-overs, and relaying with side strips);
- Corn Street kerb re-alignments, parking bays and cross-over treatments;
- Tower Hill side entry treatments;
- bus shelters with facilities (e.g. Newland/Oxford Hill and Curbridge Road).

8.7 *Years 3-4*

8.7.1 The focus will be on the completion of town centre enhancements, and on the new road and other developments in the north east of the town.

8.7.2 *Road and traffic management schemes*

- Cogges Link and North East Distributor roads started in conjunction with new housing development;
- Associated traffic management measures on Bridge Street approach routes.

8.7.3 Town centre enhancement

Repaving and other enhancements of remaining sections.

Foot and cycle route development

8.7.4 The following measures would be implemented in years 3-4:

- new facilities tied in with Cogges Link (including new crossing at Witan Way) and ensuring new links into the country;
- new routes into the North East Development Area (to be available for first new residents);
- cycle-friendly traffic calming on Church Lane; and
- first schemes for improving routes to near-villages: priority suggested to those villages with greatest potential for mode switch, namely Crawley, Ducklington, and Minster Lovell.

Park and ride

8.7.5 Feasibility study of Oxford park-and-ride facility combined with new A40 access at Downs Road, and dependent on successful implementation of A40 segregated bus lane.

Continuing

8.7.6 The following measures would continue

- Mobility Centre;
- residential traffic calming; and
- foot and cycle network development.

8.8 *Year 5*

8.8.1 Measures in year 5 focus on environmental traffic management schemes dependent on the opening of the Cogges Link, and further development of the foot and cycle networks. North East Distributor Road is started.

Traffic management

8.8.2 Traffic management measures in year 5 are:

- bus lane with advance signal at Oxford Hill junction with Cogges Link;
- other flow control (queue relocation) measures on Bridge Street routes, including new signals at High Street/Mill Street, and Crawley Road/Hailey Road;

- Staple Hall possible new signals with left-turn bus filter and lane into Bridge Street, with "call ahead" facility.

Foot and cycle schemes

8.8.3 These consist of:

- completion of routes associated with Cogges Link;
- foot and cycle path link between West End, Mill Street, Puck Lane;
- associated new crossing facility at Mill Street/Puck Lane.

Continuing

8.8.4 The following measures would continue:

- Mobility Centre;
- residential area traffic calming;
- foot and cycle network development.

8.9 *Year 6*

8.9.1 Year 6 focuses on environmental traffic management and bus priority schemes dependent on opening of the North East Distributor Road as follows:

- closure of Woodstock and New Yatt Roads near town boundary;
- traffic calming in Poffley End and New Yatt villages.

Continuing

8.9.2 The following measures would continue:

- Mobility Centre;
- residential traffic calming; and
- foot and cycle network development.

8.10 *Monitoring*

8.10.1 The procedures for monitoring must be designed to answer three basic questions:

1. Are the schemes working efficiently?
2. Are the schemes being implemented according to the programme?
3. Is progress towards the defined targets satisfactory?

8.10.2 The operation efficiency question mainly is concerned with road safety and accidents, which must be monitored on a continuous basis in liaison with emergency services and local groups. The purpose is to ensure that any unforeseen and undesirable consequences of schemes are recognised, so that remedial action can be taken, using police powers if necessary. Unforeseen problems for bus services also need to be acted upon. It is

important to note, however, that delays to motor traffic arising in the first weeks of the scheme implementation should not be acted upon hastily. It is important to allow a period for "settling down".

8.10.3 The second aspect of monitoring is concerned with keeping the implementation of the strategy in tune with the agreed sequence and programme. This is primarily a matter for County and District Council Officers, using mostly existing liaison and monitoring procedures. It is recommended, however, that the officer working group established between the Town, District and County Councils could usefully continue to oversee the monitoring of the strategy implementation.

8.10.4 The most resource intensive monitoring will be that required to measure progress towards achievement of the defined targets. The required surveys tailored to the identified targets are listed in Table 2.1 and the detailed survey procedures are set out below in Table 8.3 together with a commentary on actions likely to be needed if progress is falling behind target.

Table 8.3 Monitoring Procedures

SURVEY	PERIOD	ASSOCIATED TARGET	ACTIONS PROMPTED
Household Travel Survey	5 years	Mode Split	Mobility Centre projects Intensify non-car provisions Review parking charges
National Census	10 years (2001)	Journey to work	As above Tougher bus priority Review networks serving employment areas
Auto traffic counters	Ongoing	Environmental traffic capacity	Review mode switch measures Review environmental traffic management
Town centre surveys (interview and observation)	5 years	Pedestrian intensity	Review planning initiatives to increase land use diversity Review tourist and other publicity Consider town centre manager role
Parking surveys (New stats.)	Ongoing	Parking efficiency	Review charges, time controls and permits Review parking supply
Accident statistics	Ongoing annual audit	Accident reduction	Intensify traffic calming (physical/educational) Review scheme design
Speed counts (Before and after)	Ad hoc	Calm driving, speed enforcement	Intensify traffic calming (physical/educational)
Physical survey of foot/ cycle provision	2 years	Access for people with mobility impairment	Review maintenance priorities Review scheme effectiveness
On-street stopwatch surveys	2 years	Minimum delay to "environment combination" modes	Review traffic management (e.g. signal timings)

9 Funding

9.1 *Introduction*

9.1.1 As explained in the Executive Summary, the WITLUS strategy could generate a public funding requirement equivalent to up to £600 per Witney household. Most of this is expected to be met from external sources and from parking revenues. This section, however, reviews a wider range of possible funding opportunities, including developer contributions to road schemes.

9.2 *Funding opportunities*

9.2.1 The schemes recommended in this study form part of an overall strategy for land use and transport development in Witney. Therefore, in securing the necessary funds to implement individual schemes, various potential sources should be considered. This will help in maximising the chances of achieving a successful outcome, not only because no single source can meet all the various requirements, but also because presentation of schemes within an integrated strategy increases the range of funding opportunities.

9.2.2 Various sources of funding have been identified as set out below (regardless of potential).

Transport Policy and Programme (TPP) "package" submission

9.2.3 The standard mechanism for assessing and allocating public funding to transport projects is the annual TPP submission to the Department of Transport. The TPP is an assessment procedure. The funds are allocated through Transport Supplementary Grant (for major road schemes), Section 56 Grant (for major public transport schemes) and through credit approvals within the DoE's Rate Support Grant allocation for other projects.

9.2.4 Government funding for transport projects has been restricted in recent years, and local authorities cannot expect an allocation in excess of their previous years' allocation.

9.2.5 To maximise the chance of success the TPP submission should comply with the guidance offered in Circular 2/96 and the revised draft produced in March 1997. The essential features which Government are looking for are:

- a package approach, where measures are related to an overall strategy;

- multi-modal approaches which provide for walking, cycling and buses, and which include demand restraint measures such as parking management;
- provision for the needs of people with mobility impairment; and
- linkage between TPP strategy statements and land use plans.

9.2.6 The package approach being examined in the Witney Integrated Transport and Land Use Study fulfils these requirements, and the specific measures which are being tested are consistent with the more detailed guidance given in Circular 2/96. Even so, the shrinking funding and in particular the reluctance of to fund major new capital projects mean that other sources must also be explored. Whilst there is little chance that WITLUS measures will receive Transport Supplementary Grant (TSG), there may be opportunities for loan sanction.

9.2.7 It should be noted that TSG eligible projects can be substituted within packages. However, resources cannot be taken from approved TSG projects to pay for projects which have not been approved. Within a local authority's TPP package, therefore, the primary use of the substitution facility is to bring approved projects forward.

Planning agreements for private developer contributions

9.2.8 The main scope for drawing private investment into Witney's transport package is through planning obligations through the Town and Country Planning Acts. This is the principal way in which transport infrastructure in Witney has been funded over the last 15 years. This is the approach being taken in respect of both Local Authority highway schemes (e.g. the Cogges Link) and development roads (e.g. the North East Distributor Road,) which are being funded through developer contributions from adjoining development.

9.2.9 Some aspects of the Witney package could be funded from development in this way: for example the provision of new pedestrian and cycle links into the town network from a previously undeveloped and unconnected area, or contributions from developers to off site car parking, service access, pedestrian safety measures and bus services and facilities.

9.2.10 Private investment is likely to work well where new measures can be incorporated as an integral part of a development project. For example, an integrated pedestrian and cycle network could be built up in stages from facilities incorporated into each new development, with the WITLUS providing the co-ordinating network.

Private Finance Initiative (PFI)

9.2.11 The Private Finance Initiative (PFI) is focused on the delivery of services for which investment in assets is required. The private sector takes the role of operator of the asset in the delivery of those services. The public sector pays for the service provided on receipt of that service and not during the construction period. The asset is designed, built, financed and operated by the private sector. The public sector is concerned with the specification for the service and its delivery and performance over the life of the contract.

9.2.12 PFI services have been used to provide highway services. These include providing and maintaining pavement structures, lighting and de-icing in winter. A provider of highway services has an essentially passive role in providing a safe highway, although the manner in which the highway is designed and maintained can directly influence the safety and convenience of road users. Payment for these services can be linked directly to usage, and a proportion of the payment can also be linked to 'availability' i.e. the number of lanes open and safe for use. Qualitative elements related to the payment mechanism are critical in determining whether the available capacity is of an acceptable standard. Thus core payments are linked to 'availability' and 'usage'. In addition, road layout, signage and devices such as speed cameras can improve the safety of the highway, and payments can be introduced to provide financial incentives to improve the actual reduction in accidents over time.

9.2.13 PFIs do not pay for projects. They seek to transfer the risk involved in the provision of a service (through the construction and operation of an asset) from the public sector to the private sector. They mean that the public sector does not have to pay for an asset as it is being built, but are billed when the asset is up and running. PFIs have been used to finance assets such as prisons, hospitals, water and sewerage plants, accommodation refurbishment and roads.

9.2.14 The logic of the payment structure indicates that the payment method could be used to provide footways and paths, cycleways and paths, bus service infrastructure and town centre enhancement schemes. Although some of these fall within schemes eligible for TPP funding, the PFI may be a way of providing finance for elements for which funding from other sources is not available. PFI is not recommended for funding road schemes where the object is to minimise, rather than maximise, use by motor vehicles.

Other private finance

9.2.15 There may be scope to fund environmental improvements through sponsorship by local business. This approach has been pioneered in Salisbury and Berkhampsted, where landscaping schemes were paid for, or contributed to, by local stakeholders.

Car parking charges

9.2.16 The use of parking revenues is governed by Section 55 of the Road Traffic Regulation Act 1984. The Act distinguishes between on-street and off-street revenue. On-street revenues can only be used for transport-related purposes.

9.2.17 Off-street revenues (from public local authority car parks) can be used for any legitimate local authority expenditure, whether transport related or not. We suggest that the revenue from parking charges be used to fund the Witney Mobility Centre to the tune of £100,000. This is a good match of revenue and spending for the following reasons:

- parking charges will supply an ongoing source of funding which the Centre will require;
- people will be more likely to accept paying parking charges if they can see that the charge is directly being spent on improving travel and environmental conditions in the town; and
- the target population for the Mobility Centre is car drivers to Witney. The direct financial link between the charges and the Mobility Centre would be a good way of raising awareness.

9.2.18 Revenue surpluses could in addition be considered as a possible source of funding for the town centre environmental enhancements, and this also is regarded as beneficial in terms of public acceptance of a traffic-reduced town centre.

9.2.19 Appendix D sets out the possible revenues from parking charges. Charges are likely to generate an annual income of at least £550,000 per year, and could be in excess of £1 million if all parking acts in public car parks are charged for. If, however, free periods of parking were made available (say up to 2 hours), revenue would be unlikely to exceed £180,000 per year. In addition to charge revenue, there will be revenue from parking penalty charges and fines. A number of costs would need to be met from this income (maintaining the car parks, equipping and maintaining the charge system, salaries and costs of enforcement) which are unlikely to exceed £100,000 per year.

Lottery funding

9.2.20 The Heritage Lottery Fund is interested in funding restoration and enhancement projects for town centres. Their priorities for the support of the improvement of townscapes are as follows:

- the scheme should be situated within a conservation area;
- the application should be submitted by the Local Authority, who should take the lead role;
- the proposed works should be part of a general enhancement scheme;
- the scheme should seek to use quality materials appropriate to the area and historic fabric;
- the Local Authority should provide a formal statement confirming future support for repair costs and assurances that a suitable quality of material will be maintained;
- environmental improvement works should be related to building repair; and
- there should be a demonstrable need for the scheme.

9.2.21 The Heritage Lottery Fund gives money for works such as building repair, environmental enhancement, including hard and soft landscaping, and street furniture. Schemes that include building repair have higher priority than those that do not, but schemes which do not include repair of buildings are still eligible for funding, particularly when these form part of a broad environmental enhancement scheme. For projects over £100,000, the Heritage Lottery Fund will fund up to 75% of the cost of the scheme. The Fund likes to see evidence that all possible funding opportunities have been explored.

Department of Transport demonstration and other project and research funding

9.2.22 Innovative schemes such as the provision of a segregated bus lane along the A40 and the railway line at Oxford may qualify for special funding as a demonstration project by the Department of Transport. The County Council and the Department of Transport are currently funding a feasibility study for the provision of this bus lane.

English Heritage

9.2.23 English Heritage funds schemes aimed at the preservation and enhancement of conservation areas. These schemes, know as Conservation Area Partnership Schemes (CAPS) are run under a

partnership arrangement, usually with a local authority, but also involve other major stakeholders where their interests coincide with the aims of the scheme.

9.2.24 The schemes are locally managed schemes of repair to buildings and structures within the conservation area. However, where appropriate, funds are also available for environmental enhancement work. Applications for funds should provide enough information for English Heritage to understand the special architectural and historic interest of the conservation area, the problems it faces, the requirements for funding, and the authority's approach to its conservation.

9.2.25 If West Oxfordshire District Council is minded to enter into such a scheme, focusing on works to buildings and structures within the town centre, it may be possible to include town centre enhancement measures under the CAPS umbrella.

Council tax

9.2.26 We considered the possibility of using council tax funding to generate income to pay for the transport measures. There is currently no levy for West Oxfordshire District Council, and this tax could be used to raise funds. Acceptability of a local tax element might be increased if identified (and marketed) with a specific project, such as the enhancement and revitalisation of Witney town centre.

Conclusion

9.2.27 The main sources of funding for the implementation of transport infrastructure schemes in the WITLUS strategy are likely to be: revenues from parking charges and enforcement, the TPP package submission, and private developer contributions negotiated through the planning process. The town centre enhancement scheme, and the Witney Mobility Centre mostly fall outside TPP funding rules, and will require alternative sources of funding. Town centre enhancement needs to be funded in advance of major new developments, and is in any case likely to exceed private contribution capability. The Mobility Centre is primarily a call on revenue expenditure accounts and thus falls outside the TPP and some other funding source rules. The conclusion is that both projects should use revenue from car parking charges, from a District Council tax, or from a combination of these two.