WITLUS STAGE 2

PART 2: APPENDICES

Contents

PART 2: APPENDICES

Appendix A

Stage 2 Public Consultation

1 *Introduction*

Stage 2 consisted of three public consultation exercises:

- a postal broadsheet;
- a drop-in day; and
- meetings with specific organisations.

The third element, the meetings with specific organisations, were held to get the views of organisations who had not participated in the consultation process in Stage 1, notably Witney schools and the Chamber of Commerce.

1.1 *The Broadsheet*

The Broadsheet was designed in consultation with the three Councils. It was distributed with a summary findings sheet, a comment sheet and a return envelope. The Broadsheet asked for views on the following issues:

- a drive to, not through approach to assessing the town centre;
- pedestrianisation;
- allowing vehicles in pedestrian areas;
- parking control;
- town centre facilities;
- changing attitudes to travel behaviour;
- promoting walking, cycling and taking the bus; and funding sources.

The Broadsheet was distributed to the groups and individuals who had been invited to our stage one workshops (with a few additions making 145 in total). These groups and individuals represent a wide range of interest within the town. A list of consultees and the Broadsheet, comment sheet, etc. are included in this appendix. Responses were requested by 14th November 1996, although all comments received before 27th November are included in this report. Some groups have asked to submit comments later, and

any comments received after 27th November will be taken into account in stage three.

1.2 *The drop-in day*

A drop-in day was held on 7th November 1996 between 12.00 and 8.00 p.m. at the Corn Exchange Hall. The exhibition consisted of four boards showing:

- options for pedestrianisation and road closures;
- a speed management strategy;
- improvements to pedestrian and cycle facilities;
- improvements to the bus services; and
- opportunities for town centre enhancement.

Groups and individuals were invited to the drop-in day by the Broadsheet. The event was also publicised by the Witney Gazette. Approximately 50-60 people attended the drop-in day. Many had read about the event in the newspaper or had just been passing. Relatively few representative of invited groups attended. Some people gave written or verbal comments on the day while others took copies of the Broadsheet away with them and wrote in later.

1.3 *Meetings with selected organisations*

Meetings were held with the following organisations:

- The Blake School;
- West Witney School;
- The Batt Primary School;
- Henry Box Secondary School; and
- The Witney and District Chamber of Trade and Commerce.

The comments made at these meetings have been taken into account in the preparation of options during Stage 2 and will be reported in Stage 3.

2 *Comments received from the Broadsheet and the drop in day*

By 27th November we had received:

- verbal comments at the drop-in day;
- 10 written comments from drop-in day attendees; and
- 28 written comments from groups and individuals who received the Broadsheet in the post.

2.1 *Drop-in day verbal comments*

There was general, but not universal, support for pedestrianisation. A few attendees felt that they should be able to park wherever they want and that car driver convenience is of paramount importance. Some Bridge Street residents expressed support for Option 3 pedestrianisation, as did others. However, other attendees were concerned about pedestrianising north of Welch Way. They thought that the shops there rely on car borne passing trade and that businesses would die if the area was pedestrianised.

People also made comments about the Cogges Link and North East Distributor (NED). Many expressed scepticism about implementation, saying that they had been waiting for many years for something to be done.

Many attendees were interested in the basic approach (reducing vehicular traffic, modal switch) and the proposals for improving other modes. There was general support for these ideas. However, again, there was scepticism about whether people would actually change their behaviour. Some attendees professed themselves to be totally wedded to their cars. The importance of "soft" measures to persuade people to change their behaviour was highlighted.

2.2 *Written comments*

Consultees gave us written comments about a variety of issues. Not everybody responded to all the issues raised by the Broadsheet. The comments received are set out below under issue headings.

A drive to, not through approach to the town centre
There was general support for this approach with 24 consultees expressing support for the principle while only 2 disagreed and 3 though it would not work. Specific issues raised were:

- important places like halls and churches require car access;
- a drive to not through approach will require an inner link route to allow drivers to leave by a different route from the one they entered by;
- through traffic should be catered for by improving the trunk road structure;
- car parks need to be provided on east side of Witney so cars can avoid Bridge Street; and

- effort should be made to ensure that traffic does not increase on Newland /Oxford Hill.

Pedestrianisation

Table 1 gives an overview of the responses to the idea of pedestrianising the town centre.

Table 1: Comments on pedestrianisation

	No. of responses
Generally agree	11
East end of Corn St	2
Buttercross to Welch Way	6
Buttercross to Witan Way, east side Corn St and Welch Way	2
Buttercross to Bridge St, east side Corn St and Welch Way	4
Buttercross to Welch Way and east side Corn St	1
Do not pedestrianise	5

There was general support for some form of pedestrianisation with 26 consultees supporting pedestrianisation and 5 not supporting any access restrictions. The table suggests that there is variety in views about which areas should be pedestrianised.

A wide range of specific issues were raised:

against pedestrianisation:

- new roads and bus services will allow reductions of cars in the town centre which will mean that pedestrianisation is unnecessary;
- pedestrianisation is unnecessary and would harm the viability of the High Street shops. Better crossing facilities are required;
- although there is no need for widespread pedestrianisation, pedestrians should have priority in the town centre;

access issues:

- pedestrianisation is likely to be inconvenient (e.g. people collecting a large item from a shop);
- car access to churches and private dwellings is required;
- pedestrianisation needs to provide for the elderly and disabled;

- public transport should be an integral feature of any pedestrianisation scheme;

vitality and viability:

- town centre will die if it is pedestrianised. People will just drive to the supermarkets and not use the other shops in the town centre;
- if Witney town centre were made an attractive place to shop, through pedestrianisation and environmental improvements, the public would choose it as a place to shop in preference to other nearby towns. Additional feeder roads would have to be built, but this is the way forward if our town centre is not going to die from over-crowding, pollution and stress;

phasing of access restrictions and road building:

- Newlands Link must be in place before traffic calming is introduced as traffic has nowhere else to go;
- pedestrianisation between Town Hall and Welch Way could be done immediately, extension to other zones needs to wait until new roads are built;

timing of access restrictions:

- pedestrianise Area 2 at peak shopping times;
- traffic should be allowed in pedestrian areas at set times;
- inner zone should be pedestrianised 24 hours, outer zones during the day times;

urban enhancement:

- pedestrianisation, particularly if Areas 1-4 are chosen, would provide the opportunity for more trees, shrubs and flower beds.

Allowing vehicles in pedestrian areas

We received a variety of comments about allowing vehicles in pedestrian areas. Eight consultees thought buses should be allowed while seven thought they should be excluded. Seven consultees thought delivery vehicles should have restricted access. Four or less consultees also mentioned allowing cycles, taxis, emergency vehicles and disabled vehicles in pedestrian areas. Six consultees thought that all vehicles should be excluded from pedestrian areas.

The following specific comments were made:

- there should be limited access for private vehicles to ensure that areas do not become unsafe after dark;
- buses should be allowed in pedestrian areas. There would be less than 10% of the number in Cornmarket;
- buses should be excluded from pedestrian areas but could operate from car parking areas;

- deliveries to the warehouse in town centre may cause problems;
- cycles can cause problems for pedestrians because they travel at speed and are quiet; and
- a marked out cycle lane is required;
- move taxi rank to less conspicuous location; and
- taxis should follow a strict code of conduct and should be required to turn their engines off.

Parking control

13 consultees supported parking charges in some form while twelve thought they were a bad idea. Five consultees were in favour of removing on-street parking in the town centre while one wanted on-street parking to remain. Specific issues raised included:

against parking charges:

- charging for parking would encourage people to shop elsewhere where parking is free;
- free parking is one of Witney's assets;
- people living in surrounding villages are utterly dependent on free parking to meet their needs;
- parking charges will mean people park in the side streets;
- nothing should be done which harms the local economy;

suggestions for organising parking charges:

- charge for parking only for on-street High Street spaces;
- parking charges should be moderate / reasonable (e.g. 30p for 2 hours)
- there should be season tickets for regular users;
- do not charge for parking of under 2 hours;
- limit parking in congested areas (e.g. Bridge Street) to residents and special needs;
- provide extra spaces on the football ground site;
- more wardens are required;
- there should be strict 10 minute time limit on parking on Bridge Street and High Street ;
- if new spaces are provided in a park and ride, equal or greater spaces should be removed to avoid traffic growth;

other:

- who will control parking? Parking controls are currently not enforced;
- removing parking on Bridge Street could be a problem for businesses;

Town centre facilities

Eleven consultees mentioned improvements to town centre facilities. The most commonly mentioned facility was bus shelters. Seating, planting and cycle parking were also mentioned.

Suggestions for town centre improvements included:

- more seats;
- better floral displays and planting;
- better disabled access;
- improve cycle parking with secure facilities;
- improve toilet facilities;
- encourage more small, independent shops e.g. craft shops;
- reduce road space;
- provide a taxi service between the car parks and the main shopping areas;
- save money by not making changes; and
- remove humps in High Street which are dangerous and uncomfortable.

Local bus

Eight consultees mentioned improvements to the local bus services. The following comments were made:

improve services and facilities:

- increase frequency of local buses and make fares a maximum of 50p;
- timetables at every bus stop;
- West Oxfordshire Public Transport timetable booklet re-published;
- facility to allow passengers to pre-buy bus tickets (perhaps books of tickets available at newsagents);
- more luggage capacity on buses;
- Witney need regular services to Chipping Norton and Faringdon. Caterton-Oxford service needs re-routing;
- bus notice boards required;
- weather proof bus facilities are required all over town;

bus lanes:

- segregated bus lanes are required on roads into town centre;
- roads are not wide enough for bus lanes;
- bus lanes are a terrible waste of road space unless buses use them regularly e.g. one every minute, but might be a good idea for rush hour traffic;

suggestions from the bus operator:

- bus operator suggested that they would be prepared to offer discounts for companies who persuade a large proportion of their employees to travel by bus and are open to suggestions for other promotions;
- bus operator has an information hot line and would consider developing an internet site;

Oxford bus

Nine consultees made written comments about the Oxford-Witney bus service. Two favoured improvements to the service, five supported the idea of providing a segregated bus land while two were against this. Twelve consultees also made comments about the provision of a park and ride. Ten supported this while two were against it. The majority thought a park and ride should be provided at the edge of town. The specific comments made were:

park and ride:

- park and ride could be located on the A40 or Cogges Link;
- park and ride will not work in Witney as it is as easy to drive to Oxford as it is to Witney;
- park and ride will not work because of traffic on the A40. This road should be made into a dual carriageway, at least as far as the Eynsham roundabout;

segregated bus lane:

- providing a segregated bus lane is not the answer. The A40 should be made into a dual carriageway;
- a segregated bus lane should not be built on the A40 because its wide grass verges are an environmental asset

suggestions for improvements to the service:

- provide double deckers or more buses to reduce congestion for Oxford trip;
- the service needs re-routing.

Cycle

Six consultees mentioned improvements to cycle facilities. Specific points included:

- segregated cycle lanes should be provided on direct routes with minimum stop points;
- cycle and pedestrian routes should be kept separate;
- comprehensive cycle network largely using existing roads should be provided to link estates with town centre and schools;
- cycle track required Witney-Eynsham (and via Farmoor) and Witney-North Leigh;
- there is not enough room on Witney's roads for cycle lanes.

Pedestrians
Four consultees mentioned improvements to the pedestrian network. Specific comments included:

- provide pedestrian links to new development areas;
- provide more pedestrian crossings, especially on Bridge Street;

Traffic calming
Six respondents mentioned speed management, with five supporting measures and one stating that traffic should not be slowed down. Specific comments included:

- traffic calming is appropriate in parts of the town centre;
- a 20 mph limit is ridiculous except in the central part of the town;

Funding sources
Twenty five consultees made comments about funding sources. The most popular sources were contributions from developers and businesses. Specific responses included:

- road tolls should be tested elsewhere before they are introduced in Witney;
- look for Government or EU funding for a pioneering project to make Witney an example of a traffic free town, incorporating ideas from other countries e.g. Sweden, Holland;
- any cost implications are unacceptable;
- car drivers already pay too much tax;
- everyone should pay something either through rates or parking fees;
- the bus operator indicated that they may be prepared to contribute in the form of risk taking to an extent for improvement of services;
- central government should increase the price of petrol and use money to make improvements;
- funding should come from local rates paid by all because everyone will benefit from an improved environment.

Town growth
We also received some comments about the growth of Witney:

- there should be no new development until main routes to Oxford and through town are improved;

- the basic problem is that the town has grown fourfold but roads have not even doubled;
- continued growth of Witney without infrastructure to serve new developments is the key issue. Housing is being built in the wrong places. Urgently needed infrastructure (Cogges Link and NED) now requires yet more housing to finance it.

Overall approach

Some consultees made comments about the overall approach of the Study:

- a radical approach is required with major investment in public transport and cycle facilities and reducing car use;
- building the West End Link and Cogges Link are the key priorities;
- the suggested approach is well balanced and on the right track. It can be implemented one stage at a time;
- rural villages need to be developed to make bus services more viable;
- proposals should be for the benefit of the community as a whole and only incidentally the private motorist. The Cogges Link and NED are a good idea because they divert traffic from the town centre. It is all right for cars to queue as long as they are not polluting the environment.

Changing attitudes

Nine respondents gave their views about soft measures to change attitudes. Six were in favour of their introduction, one thought they were a bad idea and two thought they would not work. The following specific comments were made:

- changing attitudes has proved difficult in the past;
- changing attitudes is insufficient. Physical changes must be made to improve non-car modes;
- education brings change slowly, solutions are needed now;
- shopping on the internet is a possibility for reducing travel;
- the soft measures suggested are 'tinkering on the edges' with respect to rural areas. There is no scope for mode switch;
- it is very hard to persuade people to change, particularly the younger generation. Traffic will need to at least double before people change their behaviour.

Other

The consultees made a number of other comments. These included:

- many current problems are caused by abuse of regulations e.g. non-residents parking in resident areas; delivery vans blocking access, etc.;

- consultants research has been poor, badly promoted, badly planned and predictable. Consultants' understanding of the locality is obviously misplaced;
- Waitrose should deliver shopping to cut down traffic;
- why live in Witney if you want so many changes? Save money by doing little;
- need for close consultation with interest groups;
- we need the Cogges Link now;
- free school transport is required;
- make the roads around the town centre one-way;
- remove humps in Corn Street;
- urgent action is required to reduce Bridge Street bottle neck. There are too many lorries on Bridge Street. HGVs should be re-directed on A40 to Ducklington Lane junction so that they do not drive through Bridge Street;
- remove parking on Corn Street outside the Batt school;
- design of Cogges Link should include landscaping to ensure that houses in Cogges do not suffer from noise disturbance;
- support closure of the junction of Witan Way and High Street, and closure of Langdale Gate to traffic entering Market Square.

[The leaflet sent to about 170 local stakeholders is reproduced on the following 6 pages.]

WITNEY INTEGRATED TRANSPORT & LAND USE STUDY

A study is underway in Witney into the best ways of reducing transport and environment problems in the town, both now and in the future. Workshops were held in July to discuss the problems. (Inside is a study update, summarising the study findings so far.) Now different possibilities for action over the next 5 - 15 years are being considered. This leaflet provides information on the main possibilities, and invites your views and comments.

You can contribute:

Give your views either on the sheet provided with this leaflet, or separately, and return it by 14th November in the pre-paid envelope to: Emma Clarke, Llewelyn-Davies, Brook House, Torrington Place, London, WCIE 7HN.

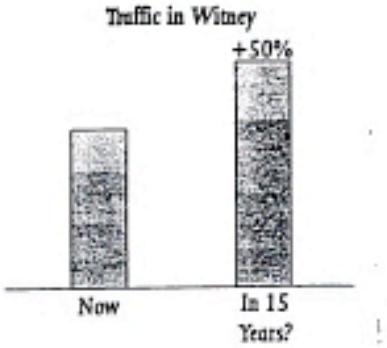
Come to the "drop in" workshop at the Corn Exchange on 7th November any time between 12 and 8 p.m..

The problem now...

Our studies and discussions have shown that traffic already causes problems in Witney.
For example:

- Noise and fumes in the town centre and on the main roads
- Danger for people on foot and on bicycles
- Congestion on Bridge Street and the roads leading to it
- Parking on the street is intrusive and unsightly

See the study update sheet for more details



and in the future...

Traffic is growing everywhere as people own and use cars more, and Witney i... Also, ... own is expected to continue to grow over the next 15 years, and this will create more travel demands.

It is anticipated that motor traffic in the town will grow by at least 50% by the year 2011, that is unless action is taken to encourage other modes of travel. So we must plan now if we want to ensure that the quality of life in Witney does not deteriorate through excessive traffic growth.

How much choice do we have?

We may not be able to control traffic as much as we would like, but with careful planning we can influence what happens. We do not have to accept an ever rising tide of vehicles, and all that brings in terms of danger, noise, pollution and unpleasant surroundings.

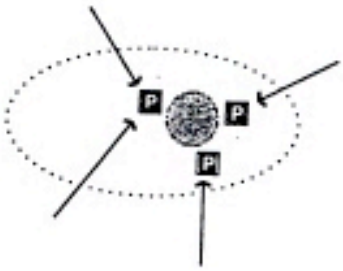
The approach

The key is to provide a safer, more attractive and lively town by reducing the volume of motor t people in Witney may have little alternative to the car, But if walking, cycling and going by bus safer and more pleasant, there is an opportunity for people to use cars less, and so improve t the town. This would need an integrated approach, including limiting access by motor vehicle, by improvements for travel by other means. Neither approach would be effective on its own; bo necessary.

Here are a variety of ideas that might be considered. Do you welcome the comment on what you see as their advantages and disadvantages. You may other ideas you would like to mention:

1. "DRIVE TO, NOT THROUGH"

Car access maintained to the town centre, but not through it. This allows better conditions for pedestrians in the town centre. People coming by car will park in the nearest off-street car park, instead of driving through the town.



2. PEDESTRIAN AREAS

Some parts of the town centre could be pedestrian only without any new roads being built. When the Cogges Link and other road links are built other parts could be included. Pedestrian areas could be limited to certain times of the day or week, for example the main shopping times, and arrangements could be made for delivery vehicles to enter at certain times. The designs would have to cater properly for wheelchair and motorised scooters. Four areas are being looked at (see map).

3. VEHICLES IN PEDESTRIAN AREAS

Should buses be allowed in the pedestrian areas? (There will not be so many buses as i Commarket, in fact probably less than a third of the number.) What about cycles, taxis a vehicles?

4. PARKING CONTROLS

Reduced parking on the street to enable more space for enjoyment, and for pedestrians and cyclis charges in car parks to ensure parking space is used as efficiently as possible. Charges may als some people to leave the car at home for some trips. Residents' parking zones to avoid "spill-over'

5. TOWN CENTRE FACILITIES

Facilities in the town centre could be enhanced for all visitors including pedestrians, cyclists and users of public transport. It may be possible to provide more seating, extend and improve cycle parking and "weatherproof" bus stops. Are there other facilities you would like to see?

What should we be aiming to achieve?

Our discussions show that many people in Witney want:

- A better environment with less motorised traffic
- Better and safer conditions for walking and cycling
- Easier access to the countryside without using a car
- Faster and more comfortable bus services to Oxford
- A more viable and lively town centre
- Less dependence on cars within the town
- More choice of travel between home, work and shops
- More frequent bus services within the town and neighbouring villages
- Improved parking controls
- Lorry controls
- Slower traffic

6. THE GENTLE ART OF PERSUASION

Traffic can only be reduced if people change their travel behaviour. Could you make one in four of your car trips by another means? To bring about such a change, we need to raise awareness of the benefits to the town, and the alternatives available. Extending the County Council's "Travelwise" campaign could help to get the message across.

There are a number of possibilities, such as:

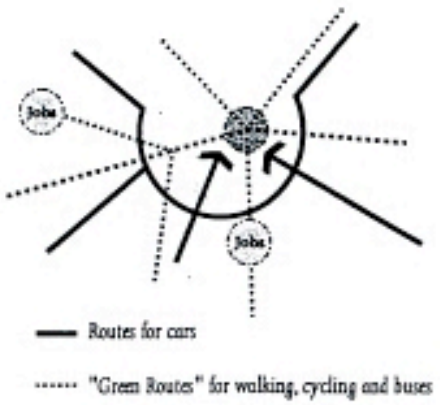
- Company "green commuter" plans
- Safe routes to school projects
- Fitness rides and rambles into the country
- Shop delivery and cycle trailer schemes
- On-line public transport and other travel information

Would you participate in any of these? Would some sort of information service help?

7. AN AFFORDABLE AND ATTRACTIVE COMBINATION

The way forward for Witney is most likely to include a combination of measures. The means of travel which have least adverse impact on the environment are walking, cycling and taking the bus. How might these be promoted together?. Some examples are:

- Users of these means of travel will have more direct routes than car users
- Investment in footway, cycle, bus facilities
- Traffic calming and street improvements
- A widespread speed limit of 20 mph in the town
- Signed and improved foot and cycle access into the country
- Smooth, level footways for those whose mobility is impaired
- Cycle parking and "cycle and ride" bus stops
- Park and Ride in Witney for bus journeys to Oxford
- Bus shelters and other bus facilities
- Segregated bus lanes to speed the journey to Oxford



WHO PAYS?

Any option that includes these kind of measures will cost money. Arranging the necessary finance will be a major challenge. Are contributions from the following sources reasonable?

- Local Authority Finance
- Car users, through town centre parking charges
- Car users, through road tolls (this would require new legislation)
- Businesses (contribution to town centre improvements)
- Companies (contribution to mobility centre)
- Contributions from new development
- Government transport grant

This leaflet is issued by Llewellyn-Davies Planning who, with Sir Alexander Gibb & Partners, are acting as consultants the the three local authorities: Oxfordshire County Council, West Oxfordshire District Council and Witney Town Council

WITNEY INTEGRATED TRANSPORT & LAND USE STUDY

Study Update November 1996

A Reminder: Why A Study Was Needed

Conditions for people living, working and shopping in Witney have deteriorated in recent years. There are now many cars coming into the centre with congestion often occurring in High Street and Bridge Street. Buses are often delayed through the congested areas and on main routes to Oxford. Also some routes are not safe for pedestrians and cyclists.

The study is looking into ways of reducing transport and environment problems in the town, both now and in the future.

Progress so far

Over the summer we have carried out a number of studies. These include an assessment of the quality of all the main pedestrian routes in the town, pedestrian links into the surrounding countryside and cycle routes. We have also observed the way public space in Witney town centre is used by people and looked at the quality of facilities there.

We have carried out two surveys. The first, in July, asked Witney residents about their travel habits and the factors which influence their choice of travel mode. The second, in October, asked visitors to Witney town centre similar questions.

We also consulted many local interest groups in a series of discussion workshops in July.

What We Found

A third of the Witney residents we questioned would most like to see car travel improved. The remaining two-thirds would prefer to see improvements for cyclists, pedestrians or buses.

Half the residents think Witney town centre would benefit from less traffic, and many would like to see safe cycle routes, more space to enjoy in the town centre and control over lorries.

The most popular measures which residents want to see are pedestrianisation, the Cogges Link, a town centre lorry ban, and less congestion in Bridge Street.

Cycling in Witney is popular at three times the national average: however, there are a number of problems:

- Large gaps in cycle network.
- Conflicts between pedestrians and cyclists.
- Inconvenient alignments.
- Problem junctions.
- Roads unpleasant or unsafe to use.

The pedestrian network in Witney is generally comprehensive, with paths linking most major sections of the town and a layout which avoids the need to travel long distances. There are still a number of problems:

- Missing key & local links.
- Inconvenient crossings.
- Narrow paths.
- Obstructions.
- Unsuitable at night-time.
- Problem junctions.

The quality of public transport in and around Witney provides a fairly large proportion of the population with access to frequent services. Problems that still exist include:

- Patchy services to some villages in the surrounding area.
- Limited services for disabled people.
- Peak hour congestion between Witney and Oxford.
- Poor service to main employment areas.

People with mobility impairment are not well catered for in Witney. Street surfaces are inappropriate, crossings difficult and public transport poorly designed. Inconsiderate parking aggravates these problems. Local action groups are compiling a detailed inventory of problems which will be fed into the study.

Next Steps

The consultants are now considering ideas and opportunities for improvements. **A drop-in centre will open from 12.00 noon to 8pm on the 7th November at the Corn Exchange, where people can discuss ideas and make comments.** See the leaflet for details.

Appendix B

Town Centre Visitors Survey

1 *Purpose of the survey*

The survey of visitors to Witney town centre was to investigate:

- how people travel to the town centre (walking, driving, cycling, etc.);
- where they come from;
- where they park if they are driving;
- what type of shops they use;
- roughly how much they spend; and
- why they come to Witney instead of other centres.

2 *Questionnaire*

The questionnaire was designed and was piloted in-house to make sure it was clear and unambiguous. Surveyors were supplied with a map defining the town centre and prompt cards. The questionnaire and map are included in this appendix.

3 *Survey administration*

The survey was carried out between 10.00 a.m. and 6.00 p.m. on Wednesday 2nd October and Saturday 5th October 1996. West Oxfordshire District Council were carrying out a survey of visitors to Sainsbury's on the same days. Their data will be useful in giving us a fuller picture of trips in Witney.

It is important to note that our definition of the town centre did not include Sainsbury's. The area included in the town centre is shown on the map included in this appendix.

Ten surveyors were located at various points in the town centre. Breaks were staggered throughout the day to avoid gaps in the survey data. The surveyors interviewed a range of respondents to give us a reasonable spread of ages (over 16) and sexes of respondents. The results were analysed using an SPSS database (see coding details at the end of this appendix).

4 *Results*

Survey statistics

The surveyors completed 1115 questionnaires, 602 on the Wednesday and 513 on the Saturday. The pattern of responses reflects the busiest times of day and areas of the town centre. Over half the interviews were completed between 10.00 a.m. and 2.00 p.m. and over a third being carried out between 2.00 p.m. and 5.00 p.m.. The interview rate tailed off a little in the last hour of the survey with 10% being carried between 5.00 p.m. and 6.00 p.m..

The number of surveys completed varied according to location. This reflects two factors: the pedestrian traffic at each location; and the speed at which the surveyors worked. Most surveys (16%) were completed in front of the Woolgate Centre on the High Street. Corn Street, the south side of the Town Hall and the High Street opposite Welch Way also produced a high number of surveys. Fewest surveys were completed at the north end of the High Street and the car park end of the Woolgate Centre. In the latter case, this is probably because of a slow survey rate and not because of little pedestrian traffic.

Table 1 gives details of the respondents to the questionnaire.

Table 1 indicates that our sample under or over-represents certain groups. Comparing the survey figures to figures for Witney residents, young adults aged 16-29 are under-represented while people aged 45-70 are over-represented. Women are also over-represented. Car ownership in the survey sample roughly reflected the Witney resident levels.

Around one quarter of our respondents were accompanied by other adults with less than a fifth being accompanied by children. Only a few respondents were 'wheel encumbered' in some way and a similarly small proportion were disabled.

Table 1: Profile of respondents (figures are %s)

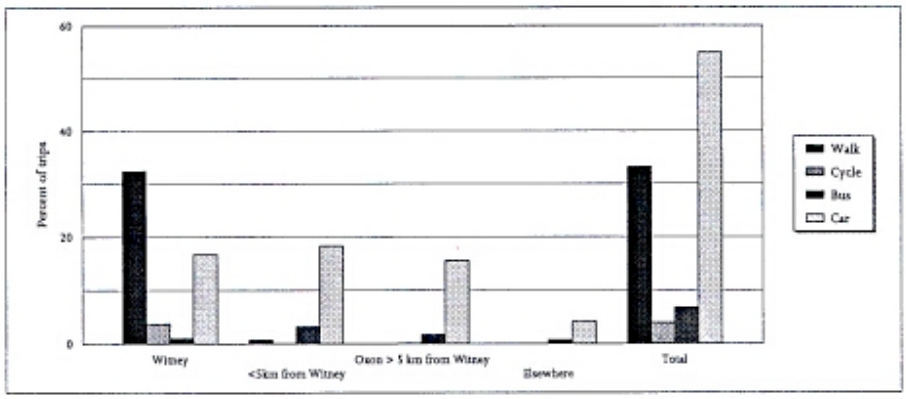
Age	**16-29**	**30-44**	**45-59**	**60-74**	**75+**
	17	31	26	20	6
Sex	**Male**	**Female**			
	40	60			
Car ownership	**0**	**1**	**2**	**3+**	
	14	44	33	9	
No. accompanying adults in group	**0**	**1**	**2**	**3**	
	71	27	2	<1	
No. accompanying children in group	**0**	**1**	**2**	**3**	**4**
	84	10	5	<1	<1
No. in group with :	**0**	**1**	**2**		
-wheelchair/scooter	98	2			
-shopping trolley	99	1			
-pushchair / pram	96	4	<1		
No. in group with disability	**0**	**1**	**2**	**3**	**4**
	94	4	<1	<1	<1

Note: 2 missing cases

Origins and mode of travel

Figure 1 shows where people started their journeys and how they travelled.

Figure 1: Origins of journeys and mode of travel



Note: 13% of reported trips did not travel directly to the town centre from the reported origin

Over half the trips to the town centre (54%) started from within Witney, while one quarter started from less than 5 km from Witney. There is a distinct pattern for trips within Witney. More of these trips were made on foot than in the car. This contrasts sharply with the trips from outside Witney where nearly all were made by car. Of visitors by car, one third were from within Witney. Cycling, taking the bus and other modes of transport account for a small proportion (12%) of all trips.

Parking

We asked the 612 car drivers and passengers where they parked. Half the respondents parked in the Woolgate car park, one quarter in Welch Way and 17% parked on the street. Of the 505 respondents who parked in an off-street car park, 8% reported looking for an on-street space first.[1] To give us an indication of where the people who parked on the street parked, Table 2 shows where they were surveyed.

Table 2: Survey location of people who parked on the street

Location	**% of car users at each survey location who parked on-street**
Corn Street	44%
Church Green	32%
North end of High Street[1]	23%
South end of High Street and Market Square	9%
Welch Way	4%
Total	17%

1 As far as Witan Way

2 Witan Way to Market Square

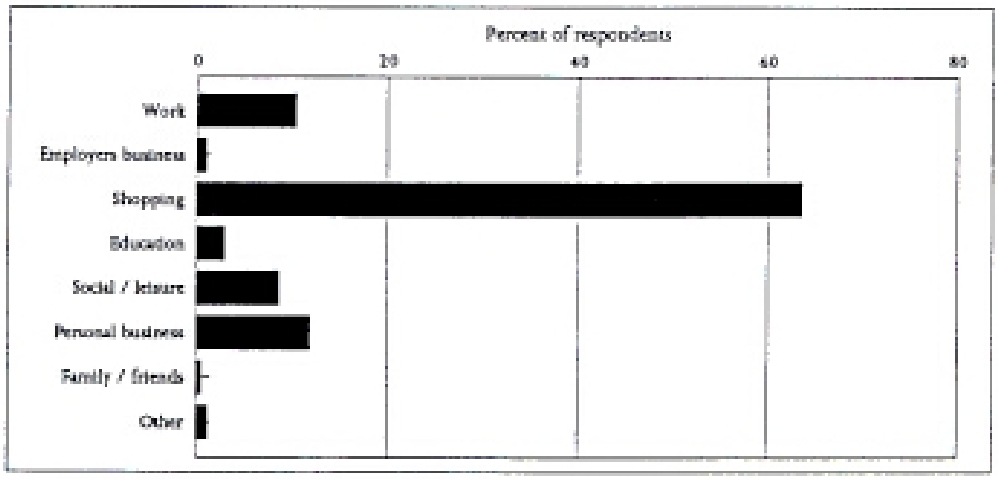
The locations at which respondents were surveyed suggests that Corn Street and Church Green are the most popular on-street parking locations for visitors to the town centre. Respondents surveyed at the north end of High Street were more likely to have parked on-street than those at the south end or in Market Square. Very few people surveyed on Welch Way had parked on-street.

[1] 69 missing cases

Town centre activities

Figure 2 shows the main reason people gave for being in Witney town centre.

Figure 2: Main reason for being in Witney town centre



S ounting for r

reason for being in the town centre, making 984 shoppers in total. Of these, 631 were visiting a supermarket. Waitrose was the most popular supermarket accounting for around half the supermarket visits. Somerfield was the next most popular with Co-op and Sainsbury's trailing with around 13% each. 815 people (83% of shoppers) were visiting other shops in the town centre. Shopping patterns are summarised in Table 3.

Table 3: Shopping (%s)

		Visiting a supermarket		
		Yes	No	Total
Visiting other shops	Yes	42	32	74
	No	14	12	16
	Total	56	44	100

Note: 14 missing cases

Nearly half the respondents (were visiting both a supermarket and other shops, and a third were just visiting other shops. Only 14% were only visiting a supermarket.

How did shoppers travel to the town centre? There is a remarkable similarity between the modal split for shoppers and the total sample. Around half the shoppers drove into town, and one third walked.

We also asked people how much they expected to spend. The most popular amount was £6-£15 spent by 28% of the respondents. Under £5 and £16-£25 were also commonly spent. Only 3% expected to spend over £100 and only 10% spent between £50 and £100.

Figure 3: Amount spent by people travelling by different modes

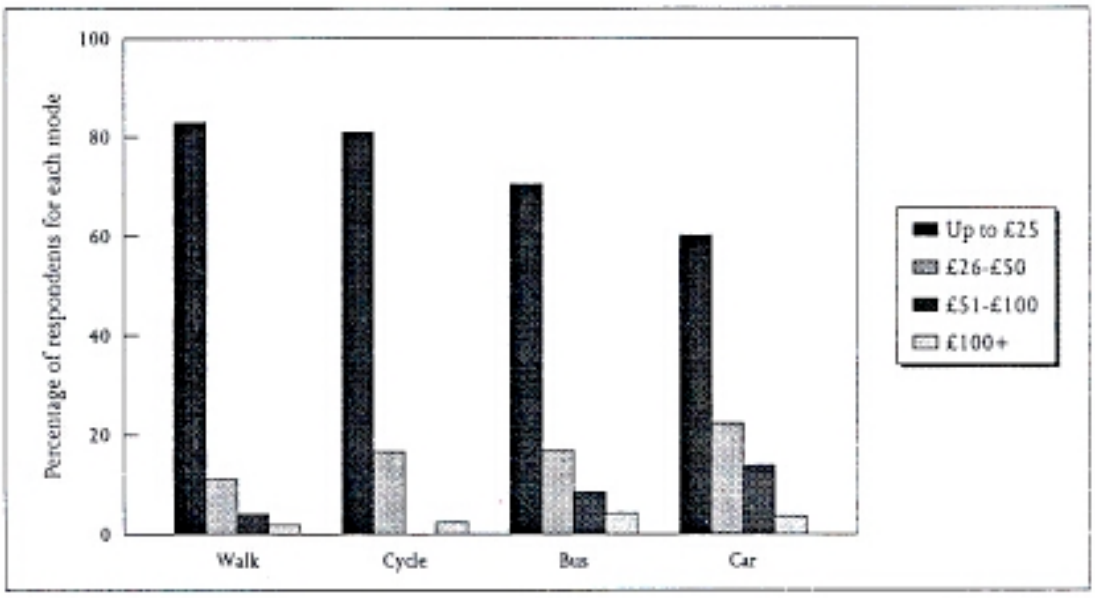


Figure 3 indicates similar patterns of expenditure for all four main modes. Most people spend under £26, with fewer spending £26-£50, and fewer still spending over £50. The survey suggests that car users tend to spend more money than walkers, although the difference is not particularly striking. 17% of car drivers spent over £50 while only 6% of walkers spent over £50.

We investigated the frequency with which people visited the town centre. Figure 4 shows the results.

Figure 4: Frequency of visit and mode of travel

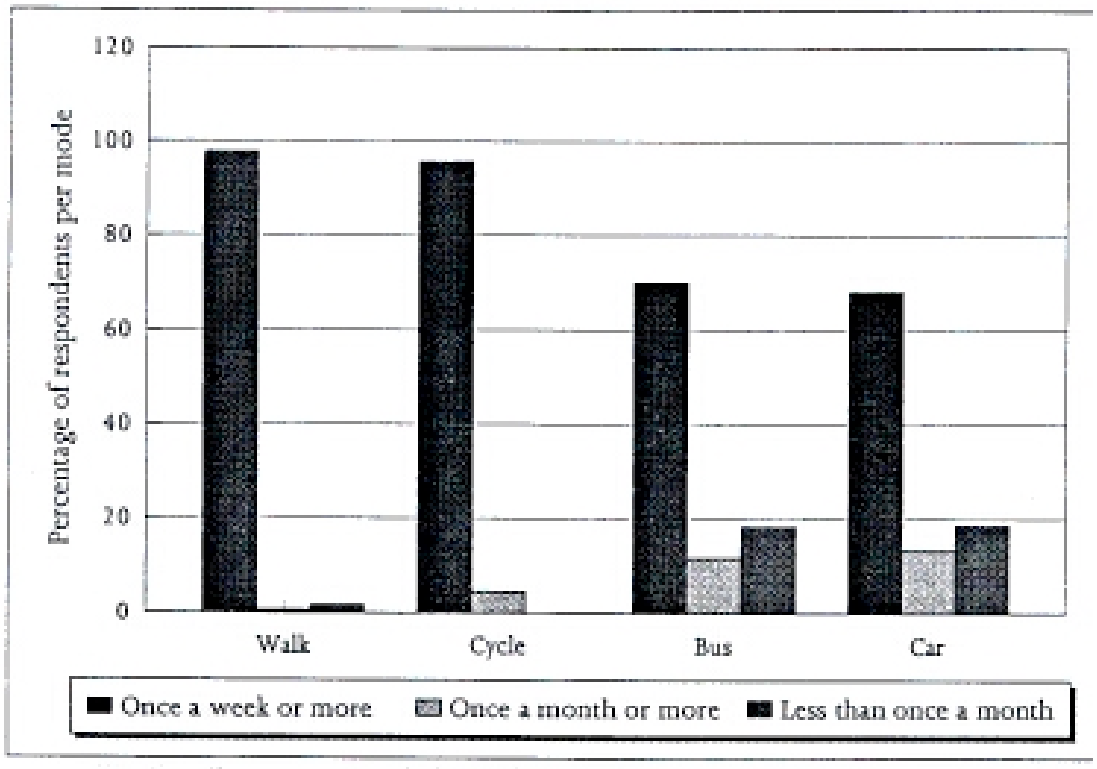


Figure 4 shows that most visitors come to the town centre at least once a week. Again, there is a small difference between the modes, with walkers tending to visit more often than car drivers and bus passengers.

We investigated the monthly amount spent in Witney town centre by shoppers arriving by car and on foot. This was calculated by multiplying the amount spent on the day of the survey by the monthly frequency of visit to the town centre. We estimated that walkers spend an average of £266 per month in the town centre while car users spend an average of £239. Cyclists and bus riders spend £229 and £181 per month respectively.

The survey gives us information which allows us to make estimates about the proportion of trips which are bulk-buy supermarket trips. Only two respondents parked in Sainsbury's and shopped at Sainsbury's. Information on visitors to Sainsbury's will be available from the District Council's survey. 149 respondents parked in the Woolgate car park and went to Waitrose. Of these, 79 spent over £25 for their day's shopping. However, 68 were also visiting other shops, so they may not have spent all of their daily spend at

Waitrose. Assuming that they all were bulk-buy shopping trips, 13% of the car users and 7% of all town centre visitors (excluding Sainsbury's) were bulk-buy trips to the supermarket.

We asked respondents about what attracts them to the town centre. Over a third of the responses were that it is close to home. The next most popular answer was the range and quality of shops. Easy and free parking made up 10-15% of the responses respectively.

Table 4 investigates what attracted people to the town centre in the context of where people started their journey.

Table 4: Attraction of Witney town centre and origin of journey (figures are percent of answers for each distance band)

	Near to home	Near to work	Easy to park	Free parking	Range/ quality of shops	Pleasant environ
Witney	47.7	8.7	8.7	11.8	15.0	8.1
<5 km from Witney	34.4	6.9	12.8	21.9	15.4	8.7
> 5 km from Witney	17.3	7.2	17	23.2	21.6	13.7
Elsewhere	10.7	10.7	12.5	16.1	16.1	33.9

Table 4 indicates that the attraction of Witney town centre varied depending on where respondents started out from. The most popular answer for respondents starting from Witney or less than 5 km from Witney was 'near to home'. The most popular answer for those coming from within Oxfordshire but more than 5 km from Witney was the provision of free parking. Finally, the most popular answer for people coming from outside Oxfordshire was the pleasant environment in the town centre.

Table 5 investigates why people were attracted to the town centre and how they travelled.

Table 5: Attraction of Witney town centre and mode of travel

	Near to home	Near to work	Easy to reach by bus	Easy to park	Free parking	Range/ quality of shops	Pleasant environ
Walk	49.6	8.9	1.9	6.7	6.9	16.5	9.4
Car	31.6	6.5	0.9	15	21.4	15.4	9.1
Cycle	44.3	13.4	2.1	6.2	11.3	16.5	6.2
Bus	23.9	12	25.6	0.9	1.7	16.2	19.7

Table 5 indicates that walkers and car users reported similar reasons for visiting the town centre. In both cases, 'near to home' was the most popular answer. Not surprisingly, ease of parking and free parking were mentioned more by car users (although walkers mentioned them too) with free parking being more frequently mentioned than easy parking. The range and quality of shops was also a popular answer for both walkers and car users.

We also asked respondents about where else they shop most frequently and why. Oxford was the most popular answer accounting for nearly half the responses. All other destinations were mentioned by 6% or less of the respondents. The main reason given, accounting for nearly half of the responses, was the range and quality of shops. The next most popular answer was that the other centre was near to home (14%), while easy parking accounted for 9% of the responses. Free parking accounted for only 2% of the answers.

5 *Conclusions*

The survey suggests that:

- the busiest survey location with most pedestrian traffic was on the High Street in front of the Woolgate Centre. Other busy locations were Corn Street, the south side of the Town Hall and the High Street opposite Welch Way. The north end of the High Street had less pedestrian traffic;
- over half the visitors to Witney town centre come from within the town. One quarter come from within 5 km of Witney and the remaining 23% come from more than 5 km away;
- most trips to the town centre from within Witney are made by foot, while most trips from other places are made by car.

Cycling, taking the bus and other modes account for only 12% of the reported journeys;

- car users mainly parked in public car parks (Woolgate or Welch Way). 8% of those parking in a car park looked for an on-street space first;
- under a fifth of car users parked on the street. The survey locations suggest that the majority of these people parked on Corn Street and Church Green;
- most people (88%) visit the town centre to shop. Two thirds of the shoppers were visiting a supermarket, and 83% were visiting other shops, indicating the importance of having a range of retail facilities in the town centre;
- most shoppers spend under £26 in a day's shopping. Car users tend to spend more than walkers. However, walkers tend to visit the town centre most often. The estimated average monthly spends are similar for walkers and car users, with our survey suggesting that walkers spend slightly more per head. Thus each walker and car user makes a similar monthly contribution to the town centre's viability by spending roughly the same amount, while walkers maker a bigger contribution to the town centre's vitality by visiting it more often;
- the survey data suggests that bulk-buy shopping trips accounted for 13% of the car trips included and 7% of all town centre visitor trips;
- people visit Witney town centre because it is conveniently near their homes and because of the range and quality of shops. Free and easy parking is also important. Free parking is particularly important for people coming from over 5 km away; and
- half the respondents reported shopping in Oxford as their most frequent alternative to Witney. All other locations mentioned were mentioned by 6% of respondents or less. The main reason given for shopping elsewhere was the range and quality of shops. Ease of parking and free parking accounted for only 9% and 2% of the answers respectively.

Coding and assumptions

Q2 If the second part was answered, but not the first, a 'yes' response was added to the first part.

Q4 If more than one answer was given, the first was recorded.

Q6 If more than one main purpose was given, the first was recorded as the main purpose. The second was recorded as a secondary purpose. If shopping was mentioned in Q7 or 8, but had not been mentioned in Q6, it was recorded as a secondary purpose.

Q7/8 If the answer to both questions is no, then the answer to question 9 was left blank irrespective of the answer given.

Q8 Where shopping noted as a purpose in Q6 but no visits to shops were recorded in Qs 7 and 8, Q8 was recorded as a yes.

Q9 If up to £5 is ticked but marked with a zero, this was recorded as a blank.

Q11 If more than three answers were given, only the first three were recorded.

Q12 If more than one answer was given, only the first was recorded.

Q13 If more than three answers were given, only the first three were recorded.

Witney Town Centre Visitors Survey

Office use ☐

Date ☐ Time ☐ Location ☐ Interviewer ☐

"Good morning / afternoon, I am surveying visitors to Witney town centre as part of a study to reduce traffic and improve the town centre. Could you help me by answering some questions? It will only take a few minutes."

1 Where did you start out from today?

Witney	Other Oxfordshire town / village	Elsewhere
_____	_____	_____
write in street name	write in	write in

2 Did you come directly from there to Witney town centre?

show map - note that Sainsbury's is NOT included in the town centre area

Yes ☐ No ☐

If no, where was your last stop before coming to the town centre?

Witney	Other Oxfordshire town / village	Elsewhere
_____	_____	_____
write in street name	write in	write in

3 How did you travel here (to Witney town centre) today?

Tick one which is the MAIN mode. Main mode is the mode used for the longest part of the trip. Walk is the main mode if no vehicle was used.

Walk	Cycle	Bus	Car driver	Car passenger
☐	☐	☐	☐	☐

Other write in

_____

4 (If by car) where did you park? show map

If not by car, skip to Question 6

Public off-street car park:

Welch Way ☐

Waitrose / Woolgate (including Langdale Court) ☐

Sainsbury's ☐

NB These are the ONLY public car parks. They are shown on the map. Any other car parks should be recorded as private.

On the Street ☐

Private off-street car park ☐

5 (If parked off-street) did you try find an on-street parking place first?

If parked on-street, skip to Question 6

Yes ☐ No ☐

6 What is your main reason for being here (in Witney town centre) today? Is there any other purpose? show card

	Main purpose tick one	Secondary Purpose tick as many as appropriate
Work	☐	☐
Employer's business	☐	☐
Shopping	☐	☐
Education	☐	☐
Social / Recreation	☐	☐
Personal Business (e.g. bank, doctor, PO)	☐	☐
Other write in	_____	_____

Qs 7 to 9 are only for people who mention shopping in Q6. If shopping was not mentioned, skip to Q10.

7 Are you visiting a supermarket in Witney today?

Yes ☐ No ☐

If yes, which one(s)? tick as many as appropriate

Town centre: Waitrose ☐ Co-op ☐ Somerfield ☐

Other: Sainsbury's ☐

8 Are you visiting other shops in Witney town centre today?

Yes ☐ No ☐

9 For all your shopping today in Witney town centre, roughly how much do you expect to spend?

show card

Up to £5	£6 - £15	£16 - £25	£26 - £50	£50 - £100	Over £100
☐	☐	☐	☐	☐	☐

write in approx.

Witney Town Centre Visitors Survey

Office use ☐

Date ☐ Time ☐ Location ☐ Interviewer ☐

"Good morning / afternoon, I am surveying visitors to Witney town centre as part of a study to reduce traffic and improve the town centre. Could you help me by answering some questions? It will only take a few minutes."

1 Where did you start out from today?

Witney	Other Oxfordshire town / village	Elsewhere
_____	_____	_____
write in street name	write in	write in

2 Did you come directly from there to Witney town centre?

show map - note that Sainsbury's is NOT included in the town centre area

Yes ☐ No ☐

If no, where was your last stop before coming to the town centre?

Witney	Other Oxfordshire town / village	Elsewhere
_____	_____	_____
write in street name	write in	write in

3 How did you travel here (to Witney town centre) today?

Tick one which is the *MAIN* mode. *Main mode* is the mode used for the longest part of the trip. *Walk* is the main mode if no vehicle was used.

Walk	Cycle	Bus	Car driver	Car passenger
☐	☐	☐	☐	☐

Other write in

_____

14 How many cars are available to the household in which you live?

None	
One	
Two	
Three or more	

15 Which age band do you fit in to? show card

16 - 29	30 - 44	45 - 59	60 - 74	75 or over

16 Do you have any comments about how Witney town centre could be improved?
Prompt about its quality, ease of access, particular problems in Witney

"Thank you very much for your help"

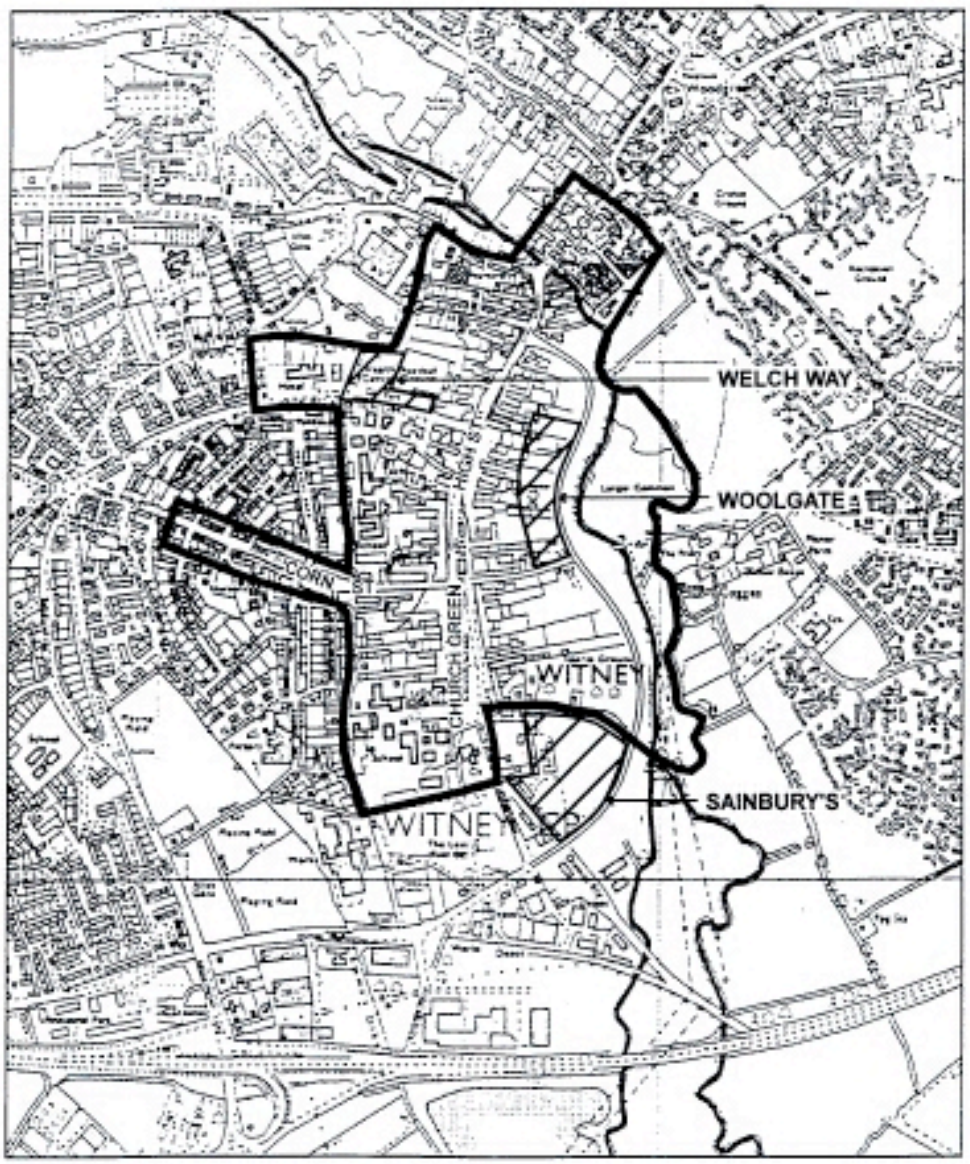
Interviewer to complete before starting next interview

		tick
Sex of respondent	Male	
	Female	

		number
Number of people accompanying interviewee:	Adults	
	Children under 16	

		number
Anyone in the group "wheel encumbered"?	Wheelchair / scooter	
	Shopping Trolley	
	Pushchair / pram	

		number
Anyone in group with disability (sight or mobility)?	yes	
	no	



Town Centre Boundary

Public Car Parks

River Windrush

Appendix C
Traffic Impacts of the Options

1 *Introduction*

1.1 The purpose of this supplementary report is to present a comprehensive account of the possible traffic effects of the options under different assumptions. Where these effects have a bearing on the achievement of the study's objectives they are also covered in the main report.

1.2 The supplementary report is based upon the output of a traffic model which has been used by Oxfordshire County Council since 1990 to predict traffic flows in the town.

1.3 The model results should be treated with caution. The model is a fixed trip matrix model, which assumes that the pattern of origins and destinations in Witney will not change in response to different driving conditions. Only the routes chosen are assumed to change. In addition, only the Friday afternoon peak hour has been simulated, and once again the model assumes that the timing of journeys will not change however congested the roads become.

1.4 Because of these factors the model will tend to overstate some effects and understate others. It does not offer a true reflection of behavioural responses to changing road conditions. In particular:

- it may overstate the relief to be gained in Witney by road building, because it makes no allowance for the fact that some present-day demand for car travel may be suppressed by congestion. Relieving this congestion by providing new road capacity elsewhere may simply release more latent demand onto the road network. Hence, for example, the relief predicted on Bridge Street by building the Cogges Link may not actually occur unless it is enforced;
- it will tend to overstate the impact of traffic growth on peak hour driving conditions in Witney, because it does not allow for the fact that drivers may respond to congestion by making their journeys outside the busiest times;
- it does not simulate the relief afforded by drivers switching to other modes of travel. Hence it does not offer a true reflection of the benefits of each option taken as a whole.

1.5 For these reasons the prediction of adverse traffic impacts by the model does not necessarily indicate that an option does not work, or even that it requires modification. What the model can do, however, is to provide some indication of the comparative difference in traffic conditions as between one option and another, under certain common assumptions.

1.6 The results of the modelling work are set out below.

2 *Traffic Predictions*

2.1 *The Effects of Traffic Growth up to 2001 (See model results mapped at the end of this Appendix)*

2.1.1 Figure 1[2] shows the predicted changes in traffic on the network between 1996 and 2001. The figure shows two effects: firstly the increases in traffic arising through growth (both in the size of Witney and in the amount of car use per capita); and secondly changes in the distribution of traffic following the construction of the Cogges Link and North East Distributor. This scenario (2001 plus Cogges Link and North East Distributor roads) is referred to as the 2001 "do minimum".

2.1.2 As might be expected, the figure paints a general background picture of traffic increases, overlain upon which is a reduction in the North-South movement through Woodstock Road, Bridge Street, High Street and Church Green. This is clearly the effect of some traffic re-routing to the new river crossing.

2.1.3 The volume of traffic in Bridge Street remains high, at 1,976 vehicles in the peak hour. Consequently there is only slight mitigation of the severe traffic impacts on this sensitive location. Traffic in the High Street reduces from 1,369 to 1,084 vehicles in the peak hour.

2.1.4 There are other reductions which can also be attributed to the Cogges Link/North East Distributor, including the Moor Avenue/Dark Lane rat run, the alternative river crossing using Dry Lane/Crawley Road, and the Farmers Close rat run. There are also reductions on the A40 east of Ducklington Lane, with the east bound portion showing a reduction of 1,000 vehicles.

[2]Information on two links was not available from the model. These links were: Newland from Staple Hall to Newland Mill turning; and Mill Street from Puck Lane to Dark Lane turnings.

2.1.5 Traffic increases on Oxford Hill, Hailey Road, Station Lane, Deer Park Road are all disproportionate to general growth in traffic, and may therefore be partly explained by changes to the network. The model also predicts a 49% increase in traffic on Langdale Gate north of the Buttercross. This will aggravate the already severely intrusive effects of cars in this sensitive location.

2.1.6 Overall, the model suggests that vehicle kilometres in the town will grow from 16,400 to 20,400 between 1996 and 2001, an increase of 24%.

2.2 *Growth to 2011*

2.2.1 An attempt was made to predict the effects of further growth in traffic in Witney up to the year 2011. At this point the network became so saturated with traffic that the model was unable to provide a reliable simulation of its effects.

2.2.2 This is a key finding for the Witney Integrated Transport and Land Use Study. It suggests that **unless there is a concerted policy response to growing travel demands there is likely to be widespread congestion in Witney, and that the network will be unable to cope with the demands placed upon it within the current peak hour.**

2.2.3 Although the model is unable to predict how motorists might respond to this situation, it is possible to postulate that the effects might include:

- *peak spreading*; i.e. motorists travelling outside of the current peak hour to avoid congestion. In time this will prolong the adverse effects of traffic in Witney for an increasing proportion of the day;
- *trip suppression*: some motorists may decide to stop coming to Witney because the traffic problems are too severe. This could adversely affect trade in Witney;
- *mode switch*: motorists may switch to other modes of travel, but only if they are available. This underlines the need for a multi-mode strategy;
- *radical lifestyle changes*: such as people moving closer to where they work as current lifestyles become unsustainable.

2.3 *The Local Plan Scenario*

2.3.1 Figure 2 shows the comparison between 1996 and 2001 as in Figure 1, but assumes that the North East Distributor, Cogges Link and West End Link

are all constructed. This replicates in broad terms the situation envisaged in the in West Oxfordshire Local Plan.

2.3.2 As with the previous comparison, Figure 2 also shows relief on the main north-south axis overlain upon a general pattern of growth.

2.3.3 Relief in the High Street in this scenario is greater than in the previous comparison, because of the addition of the West End Link. However the relief in Bridge Street is still not of an order which would mitigate against the severe traffic impacts in this sensitive location with flows at 1,667 vehicles per hour.

2.3.4 The addition of the West End Link also appears to reduce the cross movement of traffic using West End and Oxford Hill to get to the Cogges Link. This would benefit the northern part of the Conservation Area.

2.3.5 On the other hand, the West End Link also appears to encourage new north-south movements on the west side of the High Street, using Holloway Road and the new link to get to Hailey Road and, via Farmers Close, to New Yatt Road.

2.3.6 In the main report, we use this traffic analysis to conclude that road building alone will not have significant or lasting impacts on the achievement of the study's objectives. The short-term effects appear to be mixed, and in any case the model does not account for some of the more important likely outcomes (see para. 1.4 above).

2.4 *Short-Term Pedestrianisation Opportunities*

2.4.1 We modelled the effect of closing the High Street to traffic between Witan Way and St Mary's Church and the eastern ends of Corn Street and Welch Way in 1996, in order to ascertain what could be done in advance of the construction of the Cogges Link/North End Distributor Road (and West End Link).

2.4.2 Figure 3 compares the situation in 1996 with and without this pedestrianisation. The relief on the pedestrianised road is self-evident, and there is also apparent relief in the cross-town movement along Tower Hill, Corn Street west and Langdale Gate providing significant benefits at the Buttercross, along Holloway Road and on Duckington Lane.

2.4.3 The model also suggests increases as displaced traffic seeks alternative routes. Of these the ones which cause most concern are the Dark

Lane/Moor Avenue rat run which is predicted to carry around 500 extra vehicles, and Gloucester Place and Mill Street which are predicted to take around 400 extra vehicles each.

2.4.4 The Dark Lane/Moor Avenue flow should be discouraged by physical measures or access restrictions. The intention should be to encourage the use of Tower Hill (which shows a decrease in traffic) as the principal route out to Burford Road. Consideration also needs to be given to the traffic routed (in the model) via Puck Lane which would not in practice accommodate it. In Option 2, Witan Way / High Street and Tower Hill should be the only north-south routes.

2.4.5 We tested seven junctions (Staple Hall, Tower Hill roundabout, Bridge St/Mill Street, Burford Road/Tower Hill, Welch Way/High Street, Station Lane/Ducklington Lane and Witan Way/Cogges Link) and found no significant changes. In addition, there were no wider network effects.

2.4.6 We used these model results to support the finding of the main report that, subject to fine tuning of the traffic network, it ought to be feasible to introduce a significant amount of pedestrianisation prior to the construction of the Cogges Link/North East Distributor.

2.5 *Pedestrianisation Post - Cogges Link/NED: Option 1*

2.5.1 We modelled three pedestrianisation options superimposed on the "*minimum change*" 2001 road network, i.e. including the Cogges Link/NED but excluding the West End Link.

2.5.2 Figure 4 shows the least ambitious of these. It envisages pedestrianisation of the lower end of the High Street only, from Welch Way to the Buttercross. Figure 4 compares the situation with and without this pedestrianisation in 2001.

2.5.3 The comparison shows that the benefits of the Option are confined to the lower part of the High Street itself. There is no indication of a broader pattern of relief in Witney, because traffic patterns are not radically altered by the option.

2.5.4 The comparison does suggest that traffic will use Corn Street, Holloway Road and either Welch Way or Moor Avenue to route around the High Street and away from town. There were no major changes at the junctions we tested and no wider network effects identified by the model.

2.5.5 We need this finding to conclude in the main report that pedestrianisation Option 1 did not deliver worthwhile benefits against the objectives.

2.6 *Pedestrianisation Post-Cogges Link/NED: Option 2*

2.6.1 Figure 5 evaluates a more comprehensive pedestrianisation option which includes the upper part of the High Street as far as Witan Way, Church Green (west), and the eastern ends of Corn Street and Witan Way. This is the same scheme as was described in section 2.4, but this time the impacts are shown for the year 2001 with the Cogges Link/NED in place. The comparison shown in Figure 5 is essentially the 2001 network with Cogges Link/NED, with and without pedestrianisation.

2.6.2 Figure 5 shows relief within the pedestrianised streets themselves and on Corn Street and Holloway Road. There is also some traffic reduction indicated on the northern most part of the High Street, on Curbridge Road and Tower Hill. There is no broader pattern of generalised relief in the town.

2.6.3 The model suggests that Option 2 pedestrianisation would cause an increase in the maximum queue length at Staple Hall of 55 vehicles compared with 2001 levels. This is, however, a decrease of 20 vehicles compared with 1996 levels. These results must be treated with caution as Staple Hall is a volatile junction and values vary considerably between iterations of the model.

2.6.4 Figure 5 also shows similar traffic increases to those described in para 2.4.3 above. As discussed in Section 2.4, these traffic effects might possibly be mitigated by traffic management and local restraint measures, but the overall conclusion which we drew from this test was that the benefits were not sufficiently widespread to meet the objectives of the study, particularly if a better performing option could be found.

2.7 *Pedestrianisation Post-Cogges Link/NED: Option 3*

2.7.1 In Option 3 pedestrianisation was extended to Bridge Street and Woodstock Road was closed to cars below the North East Distributor junction, to ensure that traffic used the NED. Figure 6 compares the result in 2001 with the situation with no pedestrianisation.

2.7.2 Figure 6 shows a much broader pattern of traffic reduction than any other pedestrianisation option. This is essentially because the closure of Bridge

Street forces most traffic to skirt around the town using Deer Park Road, Thorney Leys, Station Lane and the new roads as an orbital route.

2.7.3 More use is also made of the A40 by local traffic. It is important to note that the addition of the Cogges Link and North East Distributor roads caused a significant reduction (up to 1,000 vehicles) on the A40. While Option 3 road closures cause significant increases on the A40 east of Ducklington Lane compared with the 2001 "do nothing" scenario, east bound levels are much lower (around 700 vehicles) than 1996 levels while there are increases of around 500 vehicles in west bound flows. These effects suggest that the construction of the Cogges Link and North East Distributor roads with Bridge Street open diverts east bound traffic from the A40 onto the new roads. The construction of the Cogges Link and North East Distributor actually provides relief for parts of the A40. Closing Bridge Street diverts traffic back onto the A40. Generally, increases on the A40 mean that west Witney traffic is entering or leaving town via Ducklington Lane and the A40 rather than Bridge Street and Woodstock Road.

2.7.4 The generalised effect of these changes is to bring total vehicle kilometres in the town back to 1996 levels. None of the previous tests show any overall reduction from the 2001 levels discussed in Section 2.1. For these reasons we concluded that only an option along the lines of this one had the potential to fulfil the study objectives.

2.7.5 Figure 6 also suggests, however, that without a supporting package of complementary measures there could be adverse traffic effects arising from this option. The traffic increases which cause most concern are: a significant increase in the Crawley rat-run, with about 200 extra vehicles using the very narrow Dry Lane to take advantage of the alternative river crossing at Crawley village; significant increases through West End and Oxford Hill, and in Hailey Road, probably caused by traffic crossing the northern end of town to get to the Cogges Link; and some increases in the south west quadrant of town which could probably be re-routed onto Ducklington Lane fairly readily. Such impacts must be kept within reasonable bounds or public and political support will not be forthcoming.

2.7.6 The Crawley rat-run, although concerning, does not involve a great volume of traffic. It would therefore be unlikely to affect overall network performance if it were to be re-routed onto more appropriate roads. However a physical means need to be found to accomplish this. This can be explored in Stage 3.

2.7.7 The predicted increases on West End and Oxford Hill involve a larger volume of traffic - in the order of 4-500 vehicles in the peak hour - and there is no ready method for re-routing this flow to more appropriate roads.

2.7.8 The model also shows a number of effects in the wider network. Large increases are shown in the Curbridge and Ducklington areas with an increased two-way flow of 760 vehicles on the road between the two villages and 130 more vehicles using the road into Ducklington to the east of the A415. Increases of 1-200 vehicles per hour are also shown on the B4437 south of Shipton-under-Wychwood, links through Eynsham and on links between New Yatt and North Leigh, and New Yatt and Hailey. An increase flow of 560 vehicles is shown on a link between North Leigh and Hailey.

2.7.9 As discussed in section 1 above, these results need to be treated with caution. It appears that the combination of severe network restrictions and high traffic growth may be causing some spurious routings and instability in the model. The model is sending traffic right out of town in an effort to avoid congestion. Although such diversions have already been observed, the model is unlikely to represent an accurate reflection of what would actually happen, which would involve responses to congestion other than re-routing (such as switch of time, mode or destination). The important point is that re-routing needs to be discouraged through additional measures.

2.7.10 The model also suggests that the Station Lane / Ducklington Lane junction will be busier under Option 3. Maximum queue lengths are predicted to double or treble (increase by between 20 and 57 vehicles) on Station Lane, Ducklington Lane and Thorney Leys, compared with the 2001 "do minimum". Again, there is doubt as to whether drivers would respond by tolerating longer delays.

2.7.11 In the main report we use this finding to suggest that Option 3 ought properly to be considered in the context of a broader panoply of complementary measures whose combined effect is to provide traffic reduction by encouraging other modes of travel.

2.8 *Option 3 Pedestrianisation Compared with the Local Plan*

2.8.1 We also considered the traffic effects in 2001 of Option 3 pedestrianisation as compared with the road network assumed in the Local Plan, i.e. including North East Distributor, Cogges Link and West End Link.

2.8.2 Two comparisons were carried out against the "Local Plan" network. The first (Figure 7) shows the difference between the Local Plan network and Option 3 pedestrianisation with only the Cogges Link/NED. The second (Figure 8) compares the Local Plan network against Option 3 pedestrianisation with the Cogges Link/NED and the West End Link.

2.8.3 The purpose of the first test was to compare the performance of pedestrianisation Option 3 against the situation which is currently being planned for. The West End link, for example, is hoped to secure some relief for Bridge Street. This comparison enables us to judge how much more relief is provided by Option 3 pedestrianisation, and what additional traffic effects have to be taken into account.

2.8.4 The general picture presented in Figure 7 is that Option 3 pedestrianisation expels traffic from the centre of Witney and pushes it to the edge of town. This produces generally beneficial effects compared with the Local Plan scenario in the most sensitive locations. It also avoids the rat running effect which the Local Plan scenario appears to produce in Holloway Road/Hailey Road/Farmers Close and New Yatt Road.

2.8.5 There are on the other hand some significant increases in traffic flows in some sensitive locations, including through Crawley Village (148% more traffic than in the Local Plan, because both the West End Link and Bridge Street river crossings are absent), through West End and Oxford Hill (500-950 more vehicles than in the Local Plan, because traffic from the north and north west is forced across this axis to use the Cogges Link/NED) and generally across the western segment of Witney.

2.8.6 The model indicates increases in flows elsewhere in the network. Links affected include: links through Eynsham; the B4437 near Shipton-under-Wychwood; links in New Yatt; North Leigh; and between North Leigh and Eynsham. There are also increases in the Ducklington and Curbridge area with 835 extra vehicles on the road between the two villages.

2.8.7 The model also indicates an increase of maximum queues at the Station Lane / Ducklington Road junction of between 23 and 59 vehicles.

2.8.8 As with the previous discussion of Option 3 (see Section 2.7) there may be some scope for mitigating these adverse effects through traffic management, which can be further tested in Stage 3, but the main conclusion of the test remains (as in Section 2.7) that Option 3 can only be considered in the broader context of a traffic reduction policy package.

2.8.9 However, the mixed results of this comparison did prompt us to consider whether the West End Link might operate in concert with pedestrianisation Option 3 to maximise the benefits of each while minimising the adverse traffic effects. The final comparison presented, therefore, is the Local Plan network (i.e. including Cogges Link, North East Distributor and West End Link) with and without pedestrianisation Option 3.

2.8.10 Figure 8 shows the predicted traffic changes if pedestrianisation Option 3 is superimposed upon the Local Plan network. If Figure 8 is compared with Figure 7 it is evident that some of the benefits are diluted (for example a lesser level of relief to Welch Way, Holloway Road, Burford Road, New Yatt Road, Woodstock Road and Hailey Road than in Figure 7) and in addition the relief to Farmers Close is replaced by an increase in traffic.

2.8.11 Comparing the two tables also shows a general dilution in the adverse traffic effects. The increase in traffic on Oxford Hill is much less severe when pedestrianisation Option 3 is superimposed on the Local Plan network than when it is carried out without the West End Link, and the increase through Crawley village is also much less dramatic. However, the model suggests that traffic increases on West End with the West End Link in place.

2.8.10 With the West End Link in place, pedestrianisation Option 3 pushes less traffic to the south of the town because cross-river movements are split between the two new bridges rather than all being concentrated on the Cogges Link. Figure 8 therefore shows much less increase in "southern orbital" movement than Figure 7. The queues at the Ducklington Lane / Station Lane junction still increase compared with the Local Plan base, but only by 15 vehicles.

2.8.11 Option 3 with the West End Link also generates much less additional local traffic on the A40 than Option 3 without the West End Link. Without the link an additional 1375 local vehicles are predicted on the A40 east of the Shore Green junction.

2.8.12 Option 3 with the West End Link generates lesser network effects outside Witney. Compared with the Local Plan base, the two-way flows on the road between Ducklington and Curbridge increase by 220 vehicles per hour, although there are still 150 extra vehicles on the road into Ducklington from Witney. The only other wider network effect appears to be an increase of 100 vehicles on the road west of New Yatt.

3 *Conclusions to Appendix C*

3.1 The model results suggest that the construction of the Cogges Link and the North East Distributor might afford a modest degree of temporary relief to High Street and Bridge Street. However this will not be sufficient to mitigate against the severe impacts of the heavy traffic flows on Bridge Street. Indeed, because of the limitations of the model, the predicted relief may not materialise at all if journeys which are presently suppressed by congestion resume or arise in the future.

3.2 Even if there is short-term respite, the long-term prognosis for continued traffic growth beyond 2001 shows that any benefits will soon be lost. The impacts of traffic growth beyond 2001 are so severe that the model is unable accurately to simulate traffic conditions in 2011.

3.3 The construction of the West End Link appears to make little difference to this prognosis. It affords some additional measure of relief in High Street and welcome relief to Oxford Hill, but still the benefits to Bridge Street are minor and temporary. It also generates some increases in traffic which would have to be protected against.

3.4 Pedestrianisation of the High Street from Witan Way to St Mary's Church would give worthwhile traffic reduction in the centre of Witney, but consequent increases in traffic on some roads such as Dark Lane and Moor Avenue would have to be protected against. Further work will confirm the extent of protection required. However, even with this amount of pedestrianisation traffic levels in the town will be 25% higher in 2001 than they are in 1996, with a consequent worsening in general impacts.

3.5 Pedestrianisation as far as, and including, Bridge Street would provide a more radical alteration in the pattern of traffic movement in the town, such that the overall level of traffic would revert in 2001 to 1996 levels. Hence this option would give more general benefits and has the potential to satisfy the study's objectives more comprehensively than the other approaches.

3.6 However, without complementary measures aimed at traffic reduction this option is likely to lead to significant traffic increases on other roads in Witney, including some (such as West End and Oxford Hill) which are sensitive. Option 3 also causes problems at the Station Lane / Ducklington Lane junction and has impacts on the network outside Witney in areas such as Crawley, New Yatt, Eynsham and Curbridge. This underlines the need to see this level of pedestrianisation as a component part of a package of

measures which also includes improvements to other modes, traffic calming and awareness campaigns.

3.7 The value of the West End link as a complement to Option 3 pedestrianisation is uncertain. In general terms it appears to somewhat dilute both the benefits and the adverse impacts of the option. This is because it causes a less radical shift in traffic movements than when Option 3 is combined with only the Cogges Link/NED.

3.8 There are a number of approaches available for mitigating any adverse effects of pedestrianisation Option 3. The most important is its incorporation into a comprehensive suite of traffic reduction policies. This may be sufficient, perhaps in combination with some traffic management "fine tuning" to capture its benefits without suffering the adverse consequences suggested by the model.

3.9 There is also scope to consider further the possible role of the West End Link. The current indications for this scheme are inconclusive, but further testing may reveal a combination of traffic management measures which would improve its value and performance, either with Option 2 or Option 3.

3.10 Finally there is scope to consider further how traffic reduction measures on Bridge Street are implemented. The model has only considered the total closure of Bridge Street in the Friday afternoon peak hour, but as the main report emphasises there are a number of intermediate options for traffic reduction which could be considered. These include signalised flows, access restrictions and part-time closure. These can all be considered in Stage 3 when the Options are fine-tuned.

Fig 1: Traffic in 2001 compared with today

2001 with Cogges Link and North East Distributor vs 1996 base [DIFF A]

Friday p.m. peak hour

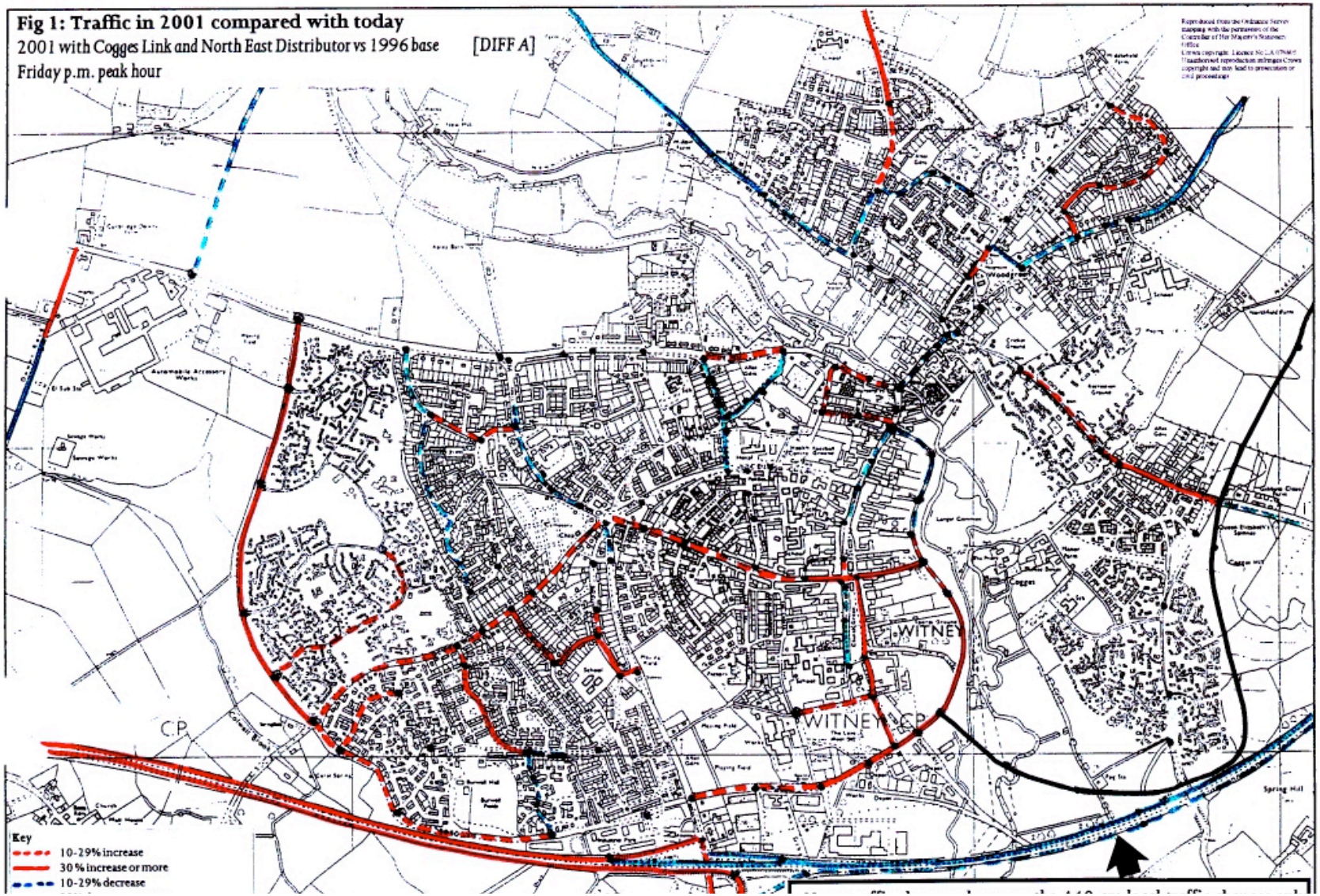


Fig 2: The Local Plan in 2001 compared with today

2001 with Cogges Link, North East Distributor and West End Link vs 1996 base [DIFF B]

Friday p.m. peak hour

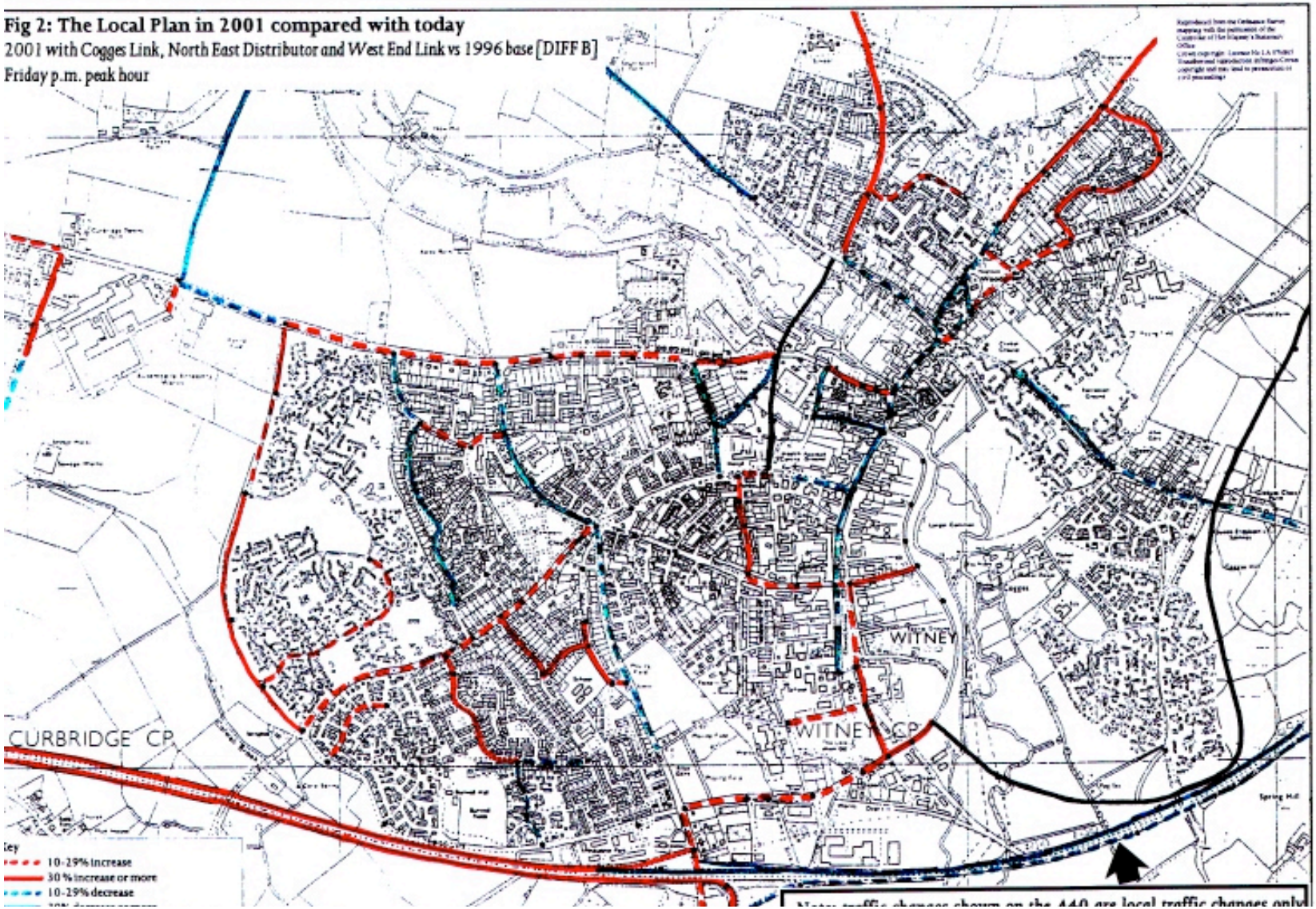


Fig 3: The impacts of Option 2 pedestrianisation if it were implemented today

Option 2 1996 vs 1996 base, no new roads [DIFF C]

Friday p.m. peak hour

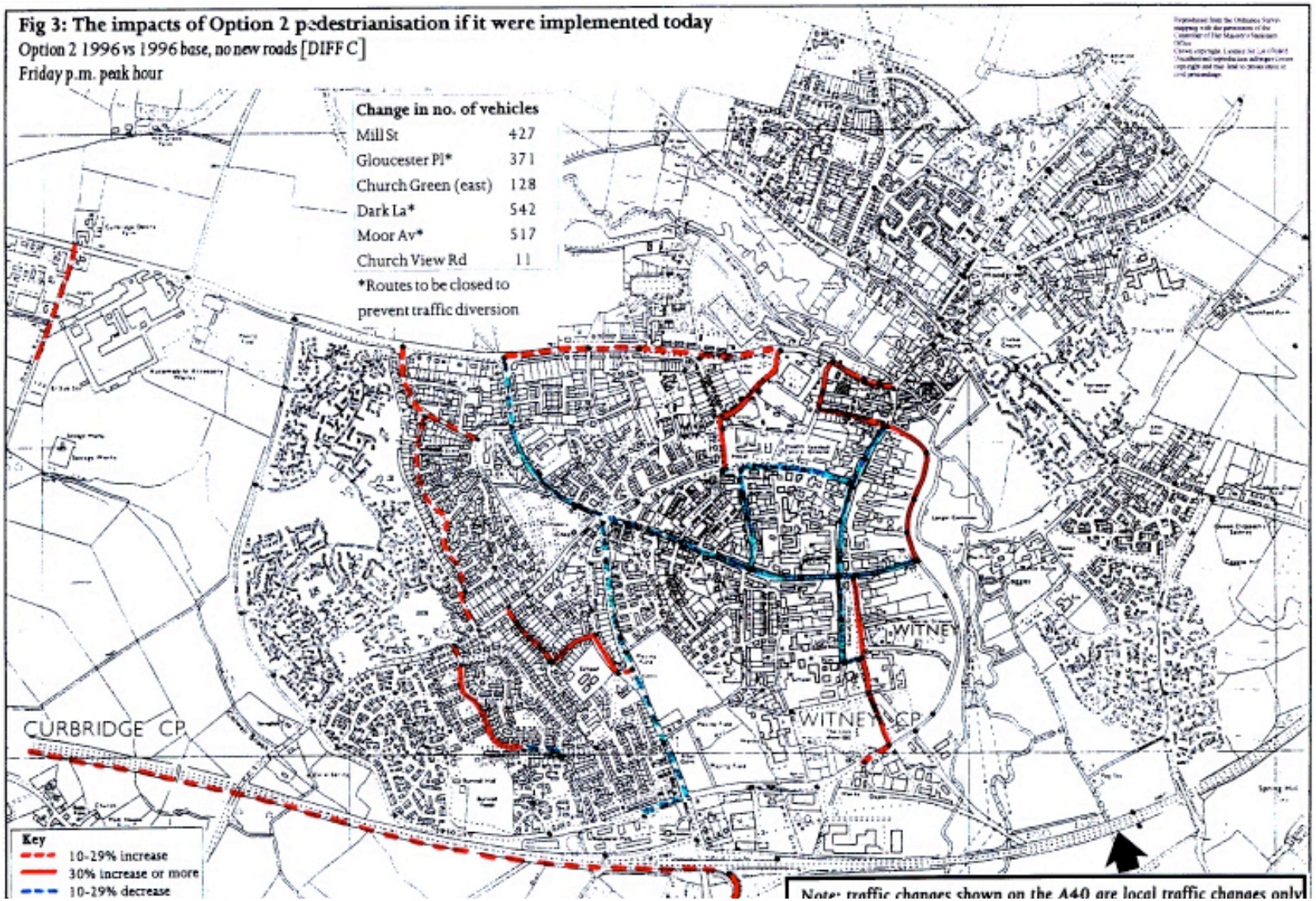


Fig 4: The impacts of Option 1 pedestrianisation in 2001

Option 1 in 2001 vs 2001 base, both with Cogges Link and North East Distributor Road [DIFF D]

Friday p.m. peak hour

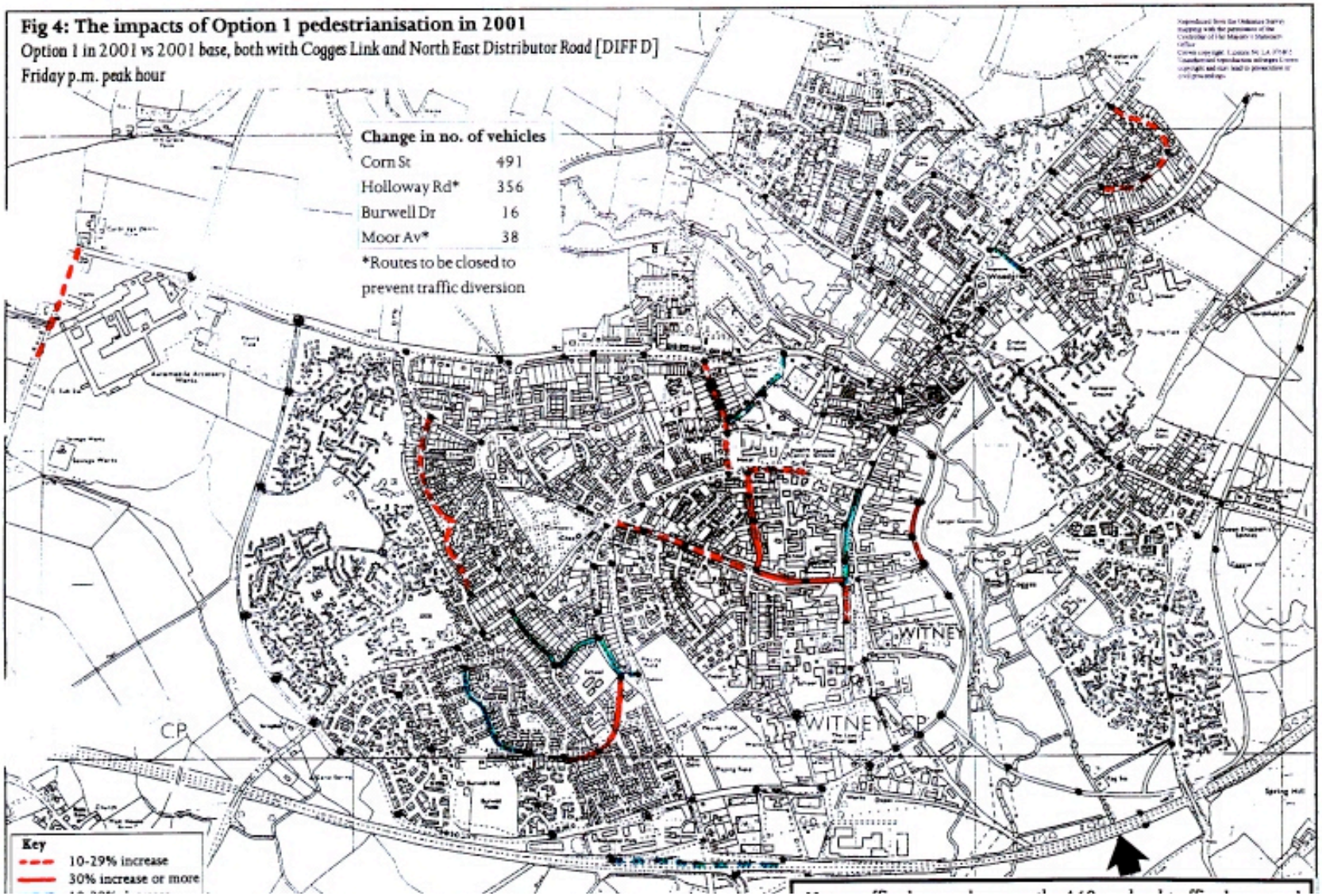


Fig 5: The impacts of Option 2 pedestrianisation in 2001

Option 2 in 2001 vs 2001 base, both with Cogges Link and North East Distributor Road [DIFF E]

Friday p.m. peak hour

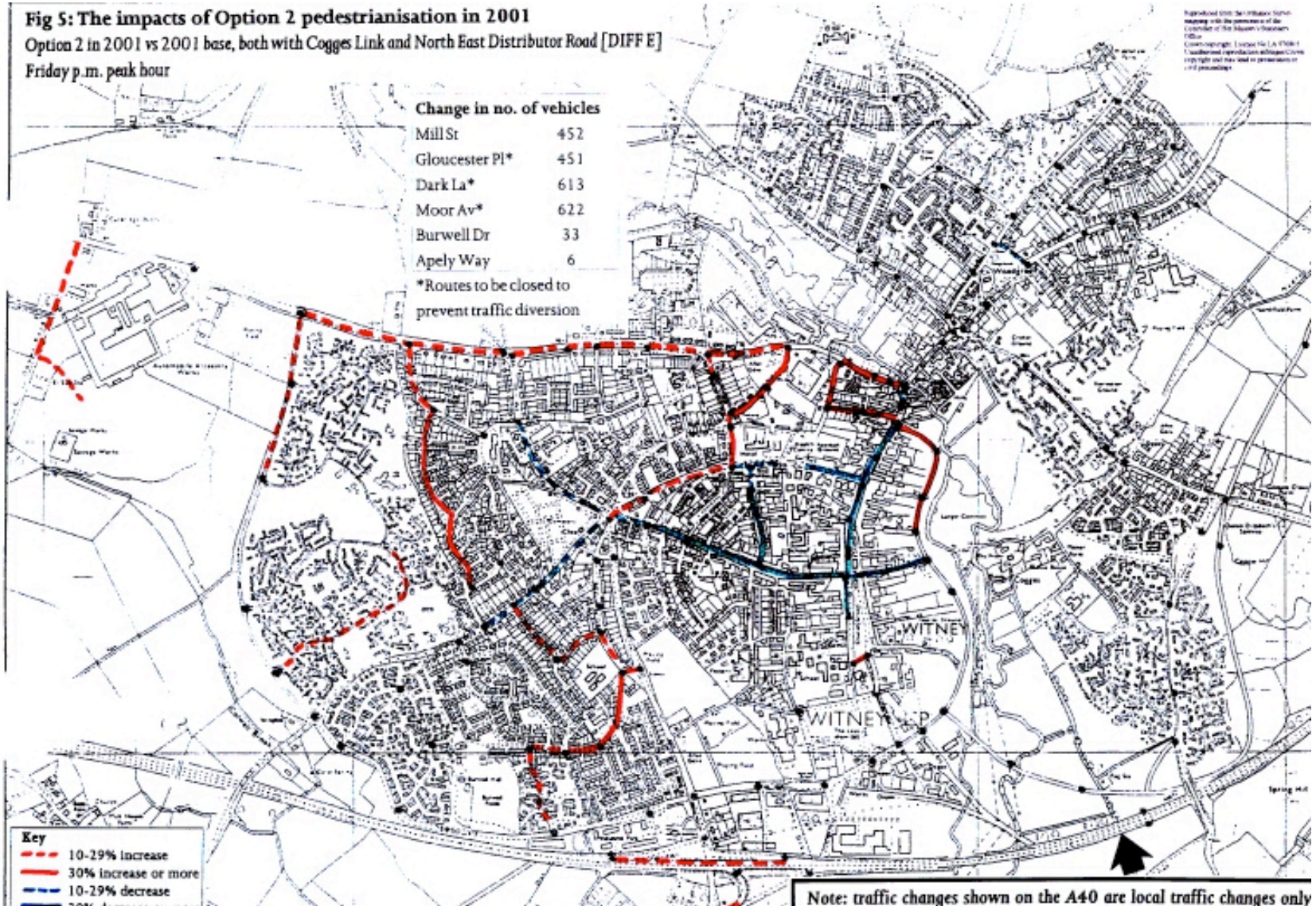


Fig 6: The impacts of Option 3 pedestrianisation in 2001

Option 3 in 2001 vs 2001 base, both with Cogges Link and North East Distributor Road [DIFF F]

Friday p.m. peak hour

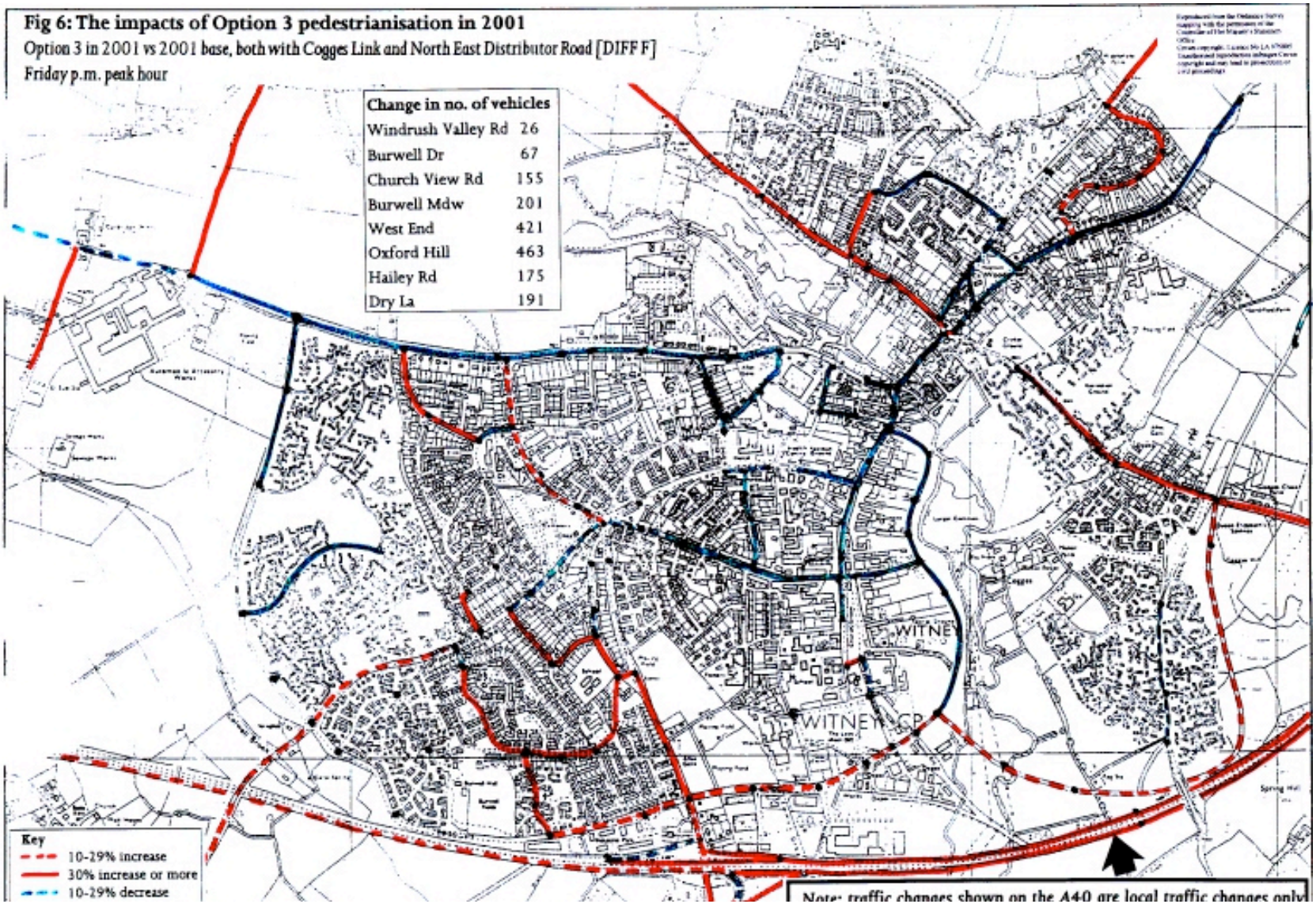


Fig 7: Option 3 pedestrianisation compared with the Local Plan in 2001

Option 3 in 2001 (Cogges Link and North East Distributor) vs 2001 base with Cogges Link, North East Distributor and West End Link [DIFF H]

Friday p.m. peak hour

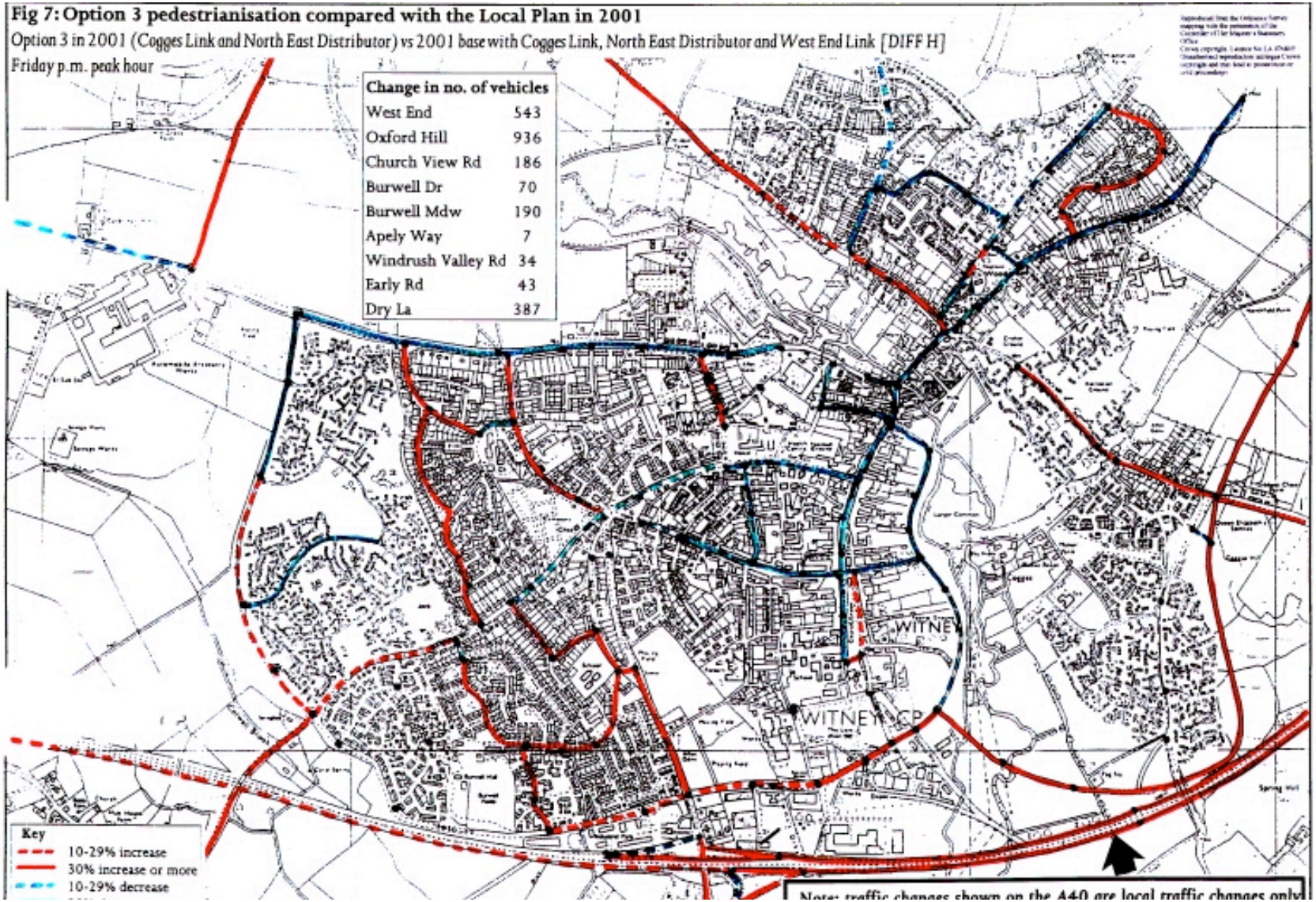
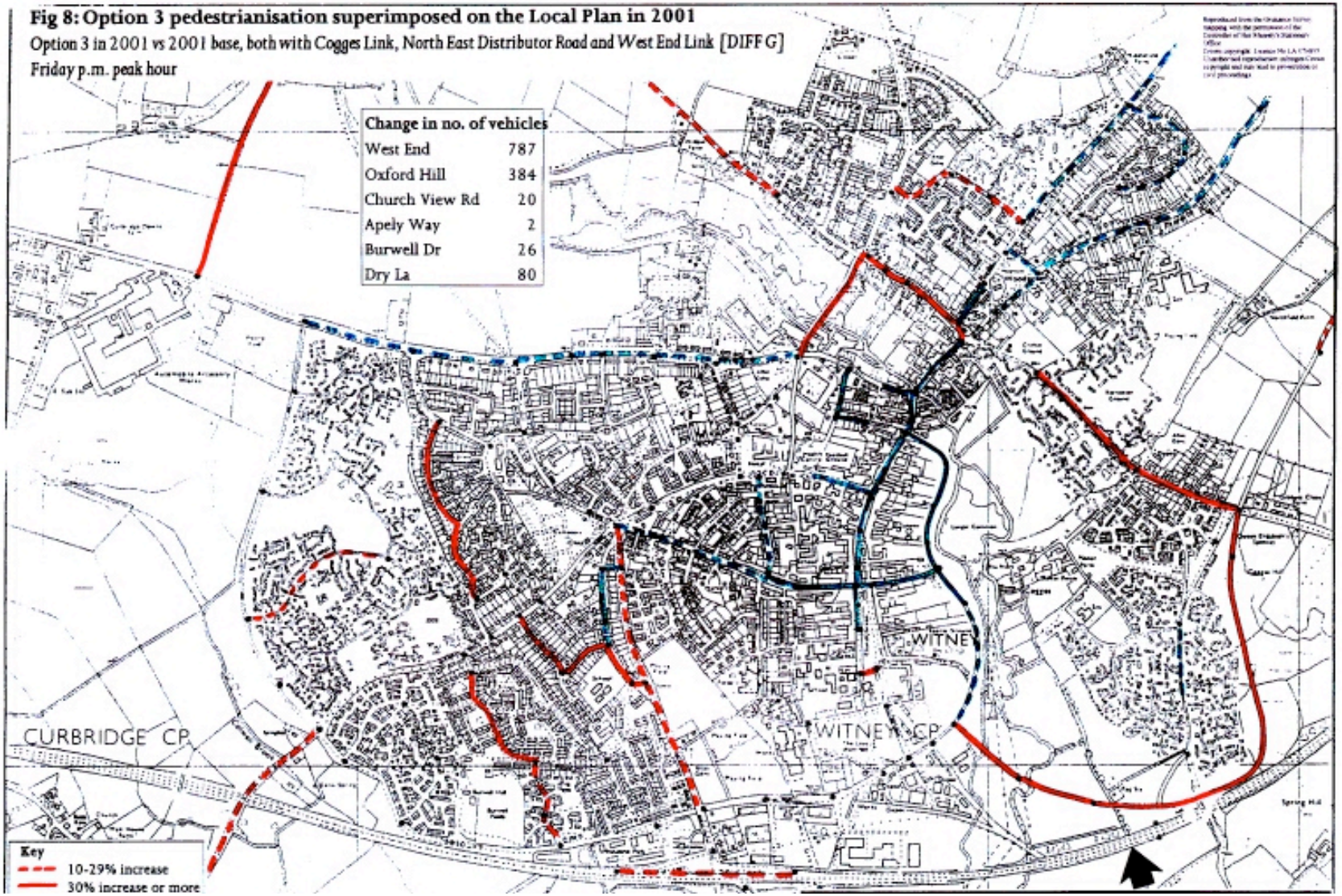


Fig 8: Option 3 pedestrianisation superimposed on the Local Plan in 2001

Option 3 in 2001 *vs* 2001 base, both with Cogges Link, North East Distributor Road and West End Link [DIFF G]

Friday p.m. peak hour



Appendix D
Coding for Convertible Trips

Code	Reason given	Convertible
Material constraints		
1	Goods / Bags not easy to carry	no
2	Health and age reasons	no
3	Weather	no
4	Specific Use of Car (e.g. Driving Lesson)	no
5	Need to take passengers	no
6	Car Used for Occupational Reasons	no
8	Passengers cannot/will not use alternatives	no
9	Trip chain affected by constraints	no
"Objective" choice potential		
11	No public transport available	yes
12	Public transport service times not reasonable	yes
13	No bicycle available	yes
14	Distance too long	no for that mode
15	Cannot ride bike	yes
Lack of information / acceptance		
16	No info on route	yes
17	No info on timetable	yes
19	Journey too short for bus	yes
20	Do not want to use bus	yes
21	Only want to travel by car/prefer car/don't like buses	yes
22	Public transport too tiresome/dear	yes
23	Do not want to cycle/walk/too lazy	yes
Time		
26	Waiting time considered too long	yes
27	Travel time too long / car considered faster	yes
28	Too many changes	no for that mode
29	Walking to stop considered too long	yes
30	Unreliability	yes
31	Usually too slow	yes
32	Travel chain determined by time	no for that mode
33	Do not want to cycle/walk early or late in the day	yes

Comfort		
35	Bus crowded	yes
36	Other travellers unpleasant	yes
39	Usually too uncomfortable	yes
40	Security risk	yes
41	Clothing	yes
42	Excessive emissions/noise	yes
44	No bus shelters	yes
Route		
45	Unsafe (traffic dangers)	yes
46	No / poor paths	yes
48	No / poor cycle parking at destination	yes
49	Easy car parking at destination	yes
50	Too dear, car seen as cheaper than bus	yes
52	Car more convenient/bus, car or bike convenient/practical	not yes
53	No reason given	no for that mode