

# **Engaging Stakeholders in the Redesign of Bloxwich High Street**

## **Developing Techniques for Streetspace Reallocation**

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**EPSRC DISTILLATE**

**Project B: Option Generation**

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## **1. Background**

This report describes a Case Study which forms part of Project B (Option Generation) within the EPSRC (Engineering and Physical Sciences Research Council) DISTILLATE research project. It has been carried in cooperation with Walsall Metropolitan Borough Council, which part-funded the exercise, and with research contributions from Buchanan Computing Ltd.

The study has been designed to develop and apply improved methods for generating scheme options that are based around stakeholder engagement, in the context of an application that involves the redesign of urban main roads. The exercise builds on previous work in the 'ARTISTS' project funded by the European Commission (ARTISTS, 2005), and a study for the Department for Transport (DfT) funded under the FIT (Future Integrated Transport) initiative (Jones *et al* 2006).

## **2. Introduction**

Traditionally, engineers identify an area for improvement and develop street scheme solution(s) based on their professional judgement. They then consult local residents and local business, by asking for comments on (and later in the process, for any formal objections to) the scheme(s) they have prepared.

In this traditional approach to scheme design and consultation, local people have very little input into the design process, so their ideas are not directly incorporated into the proposals; they have little understanding of the limitations faced by traffic engineers when drawing up their recommended scheme; and they have little sense of ownership of the final scheme. Highway authorities often experience difficulties in introducing new street layouts and traffic regulations on busy high streets, due to opposition from local traders and residents.

The philosophy behind this alternative approach is that there is much to be gained from involving stakeholders directly in the design process. In this way, schemes are likely to better meet local needs and be seen as an enhancement to the local street scene, rather than an imposition.

The workshops described in this report took place in Bloxwich, a town in the West Midlands with a population of around 40,000 people. Bloxwich has a traditional high street, approximately 700 metres in length, which is located on a radial route into Walsall. This is illustrated in Figure 1. It is a busy arterial road, with approximately 20,000 vehicles passing in both directions on a weekday over a twelve-hour period and it accommodates 20 bus routes. The high street contains 89 shops, 5 pubs, 2 large supermarkets, 1 school, 2 churches and a prosperous off-street market. As a result, there is considerable pressure on parking and loading spaces, and a concentration of vehicle-vehicle and vehicle-pedestrian traffic accidents in the area.



**Figure 1: Bloxwich High Street**

The West Midland authorities are currently introducing a phased programme of Red Routes across the conurbation, and have experienced resistance to this process in some areas from local people. Walsall Metropolitan Borough Council, responsible for the Bloxwich area, had committed to introducing a Red Route scheme along the high street, as part of Phase One of this programme.

The main objectives of the Red Route network are to reduce congestion and traffic delays, while improving road safety and conditions for all street users. This involves using a purpose-designed set of road markings and traffic signs, which designate areas for parking and loading, and those where stopping is not permitted.

Walsall MBC had previously consulted on a possible Red Route scheme for Bloxwich High Street in 2003, based on a design developed by an external consultant, but this had not been well received at a public meeting. Subsequently, the authority decided to adopt a more innovative approach, and work with UCL and Buchanan Computing on an interactive stakeholder engagement approach being developed as part of the DISTILLATE project, using a combination of physical and computer-based design tools.

These procedures are designed to encourage more innovative thinking about how street space might be allocated, taking into account various street user needs. They are intended to be used by stakeholders in design workshops, with facilitation and assistance from local authority highway professionals. The exercise involves two sequential workshops, followed by a formal public consultation exercise.

The purposes of the workshops were to:

- Gain an understanding of the concerns of local stakeholders/traders, and what features they wanted to be included in the designs;

- Discuss these various interests among mixed groups of high street users and see how they might be accommodated, along the high street;
- And, following the design exercises, to identify a design – or designs – to be developed for general public consultation.

### 3. Workshop One

The first workshop was held on Thursday 23<sup>rd</sup> November 2006 in a local primary school in Bloxwich, from 6pm to 9pm, with the aim of identifying initial options. The council invited people who had businesses on and around Bloxwich High Street, as well as local elected councillors and residents. A total of 14 members of the public attended, approximately 7% of those invited. The participants were mainly traders (most of whom were residents in the area as well) but also included two local councillors members, a local church priest and a local policeman.

#### ***Briefing***

The participants were first shown a PowerPoint presentation, explaining the objectives behind the Red Routes and how they function. This was followed by a briefing about the high street, and an explanation of how the rest of the evening was being organised.

Participants were informed/reminded of existing conditions along Bloxwich High Street, and about the existing traffic regulations in the area; they were provided with smaller scale plans showing the existing regulations. Some of the main features of the High Street are summarised in Figure 2 below.

**Bloxwich High Street: Existing conditions**

A busy West Midlands High Street:

- 89 shops, 5 pubs, 2 large supermarkets, 1 school, 2 churches and a prosperous market
- 20,000 vehicles, 2-way in 12 hours
- 20 bus routes pass through area
- Pressures on parking/loading
- Concentration of accidents along the High Street

 Walsall Council

**Figure 2: Workshop presentation slide detailing the current facilities**

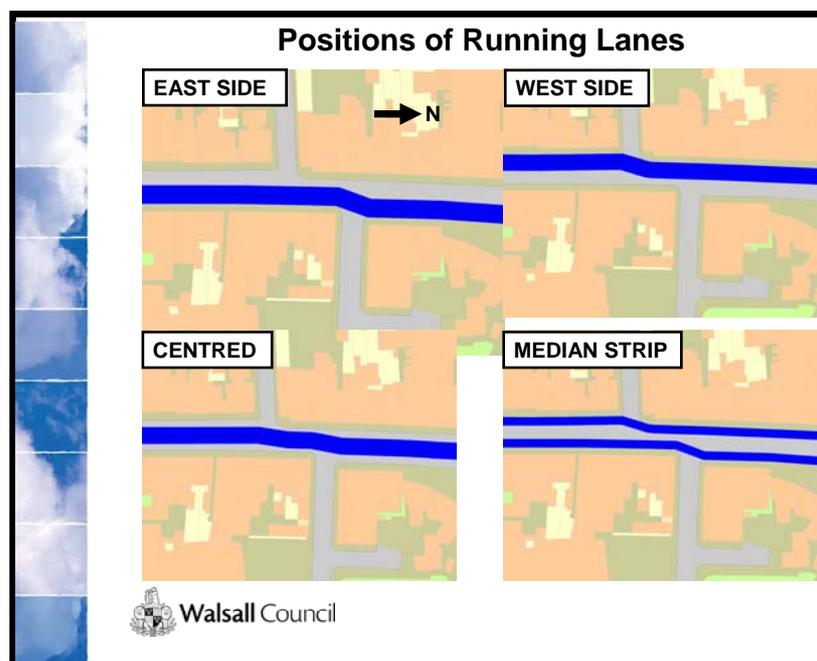
The participants were then invited to consider whether there were any other general issues that the design exercise should address when reallocating street space. For example, facilitating smoother traffic flow and stimulating Bloxwich as a shopping centre. Any such additional objectives were agreed

by the whole group and recorded on a flip chart, before they divided into two smaller design workshop groups.

### ***The Design Exercise***

The design exercise involved the following steps:

1. Each group was provided with a street plan of the high street at a scale of 1:250, showing the road layout and the existing buildings. Participants were invited to orient themselves, and identify their premises or the usual shops and businesses they visited.
2. The plan incorporated the minimum set of fixed conditions to be taken into account during the design exercise, namely:
  - The building line, and a minimum clear footway width on each side of the carriageway of 2.0 metres (2.5 metres in total, to allow for kerbside street furniture);
  - Minimum stretches of kerbside 'no stopping' (double redline) markings, located around side road corners and at major junctions; and
  - As a guide, areas that could be allocated for parking and loading spaces on the side roads adjoining the high street, and the availability of private loading/parking spaces behind the buildings fronting the high street.
3. The groups were then invited to decide on how the remaining space along the high street should be allocated, subject to two constraints:
  - (i) There should be one continuous traffic lane in each direction along the high street, although this could vary its position within the highway, as illustrated in Figure 3 below:



**Figure 3: Workshop slide showing possible running lane positions**

- (ii) A minimum specified number of parking/loading/bus stop bays and pedestrian crossings should be provided along the high street (or, where appropriate, adjacent to it), to cater for the minimum needs of particular user groups. Participants were shown both the current and minimum requirements for the new designs, as in Figure 4:

	Existing Spaces	Minimum Spaces	
Parking Bays	13	13	
Loading Bays	12	12	
Disabled Bays	3	4	
Bus Stops	8	8	
Crossings	3	3	

...You will be provided with colour blocks, to scale

 Walsall Council

**Figure 4: Workshop slide showing current provision and minimum bays to be provided**

Each group was then provided with a box with many compartments containing the full set of features at 1:250 scale that might be included in the redesign of the high street layout, including:

- Sets of different coloured and sized Perspex blocks depicting: single, double and quadruple parking bays; single and double disabled parking bays; single and double loading bays; single and double bus stop bays; bus shelters; pedestrian refuges; bike stands and benches.
- Sets of different coloured and sized acetates showing running lanes for general road traffic, bus lanes, cycle lanes, and the space requirements of two kinds of pedestrian crossing (zebra and pelican).
- A set of equivalent stickers, of appropriate size and colour, for marking the final scheme on the plan, once it had been agreed by the group.
- A set of coloured pens, to mark kerb lines, etc. and
- Post-it notes, to record points of detail

Some of these items are illustrated in Figures 5 and 6.



**Figure 5: A selection of the tools provided to each design group**



**Figure 6: A Box of Perspex Blocks and Acetates**

For ease of identification, the blocks and acetates were colour coded and used appropriate symbols (depicting a cycle, parking space, etc.), as shown in Figure 7.

The acetates and Perspex blocks were also made to 1:250 scale, to match the street plan of the area, so that each block and acetate represented the size of area needed on that plan for each feature. For example, an area of two metres by 6 metres is needed for one general parking space. These enable participants to easily see the amount of space required to accommodate their design suggestions.

Feature	Colour	
Vehicle Lane	Grey	Grey
Bus Lane	Red	Red
Cycle Lane	Green	Green
General Parking	Yellow	Yellow
Disabled Parking	Blue	Blue
Loading	Brown	Brown
Bus Stop	Orange	Orange
Traffic Island	Cyan	Cyan
Signal Crossing/ Zebra Approach	Magenta	Magenta

**Figure 7: Colour code for features**

Since each high street plan was several metres in length, it was felt that the group would find it difficult to design the whole street at one time. So it was suggested that they first decide where they wanted to locate the three specified pedestrian crossings, followed by the required sets of bus bays along the high street, before then dealing in more detail with locating facilities along each of the four intervening sections, in turn.

Each group had at least one facilitator from UCL assigned to them. One member of the council worked with each group and two engineers floated between the two workshop groups.

Once a consensus had been agreed in each group regarding their preferred design, the blocks were replaced with stickers identical in size and colour to the blocks<sup>1</sup>. These were stuck onto the maps, to ensure that the designs would not shift or be lost when the maps were moved. Any kerbs that need to be widened were also drawn on at this point. The participants in each group then appointed one person to present their proposals to the engineers and the members of the other design group.

## **Results**

The results of the workshop are discussed under two themes. The first theme reviews how the exercise worked as an activity: how the participants reacted to the task, how well they worked with each other and with the representatives of the local authority. The second theme looks at the results of the exercise; where and what facilities were placed on the area and how different were the two groups' schemes.

<sup>1</sup> In the event, the participants in each group were able to agree on a common streetspace allocation design; but several copies of the 1:250 plans were made available, in case the groups had wanted to generate several design options.

Whilst it had been suggested to each design group that they divide into sub-groups to investigate different street sections, in practice the members of each group chose to keep together as a team. They worked their way up and down the high street as a group, with occasional assistance from a facilitator or council engineer. They started the design exercise, as suggested, by deciding on the location of the pedestrian crossings, but in some cases these locations were subsequently altered as they added other features onto the map. The participants asked the council members, the facilitators and the engineers questions concerning design rules or local knowledge. However, as much as possible, the task was left to the participants.

Initially the participants tended to consider the area surrounding their own businesses, or the areas where they had a direct interest. However, with a little prompting, most participants were willing to contribute their ideas to designing the whole of the area. It is worth noting that all participants played an active role, both in discussion and placing blocks/acetates on the map. They seemed to quickly understand the purpose and rules of the design task, and to become familiar with the symbols and colour coding of the blocks and acetates. Figure 8 shows one of the design groups in action.

Participants were generally very enthusiastic about the task, although some people lost concentration towards the end of the exercise. As this part of the evening lasted roughly 80 minutes, this was not surprising. There were some areas where a consensus was quickly reached, for example in favour of narrower footway widths, but in other cases there was considerable discussion, for example concerning the number of loading bays needed and their location.



**Figure 8: Participants designing their high street**

Towards the end of the session, each group reviewed its proposals, and converted these from the moveable blocks and acetates to the stickers and added other markings (e.g. kerb lines and running lane markings). In some cases, this prompted further debate, as the proposals became definitive.

The two groups' proposals were very different. One plan contained a large number of loading bays on the high street, whereas the other group provided mainly parking bays. To meet the minimum requirements, the first group provided parking bays off the high street, whereas the other group provided the majority of loading bays off the high street. Both groups increased the number of general and disabled parking spaces considerably above the minimum. Neither group increased the number of bus bays. Indeed, they were reluctant to find space for as many bus stops as were required, partly because some of these provided layover areas for terminating buses and were not for general passenger use.

Both groups also talked about changing the existing one way system in the side roads of the high street: adding new one way roads, removing some one-way roads and reversing the directions of others. Both groups kept the general traffic lanes in the centre of the available highway space, and neither group seriously discussed adopting one of the different lane layouts shown in Figure 3.

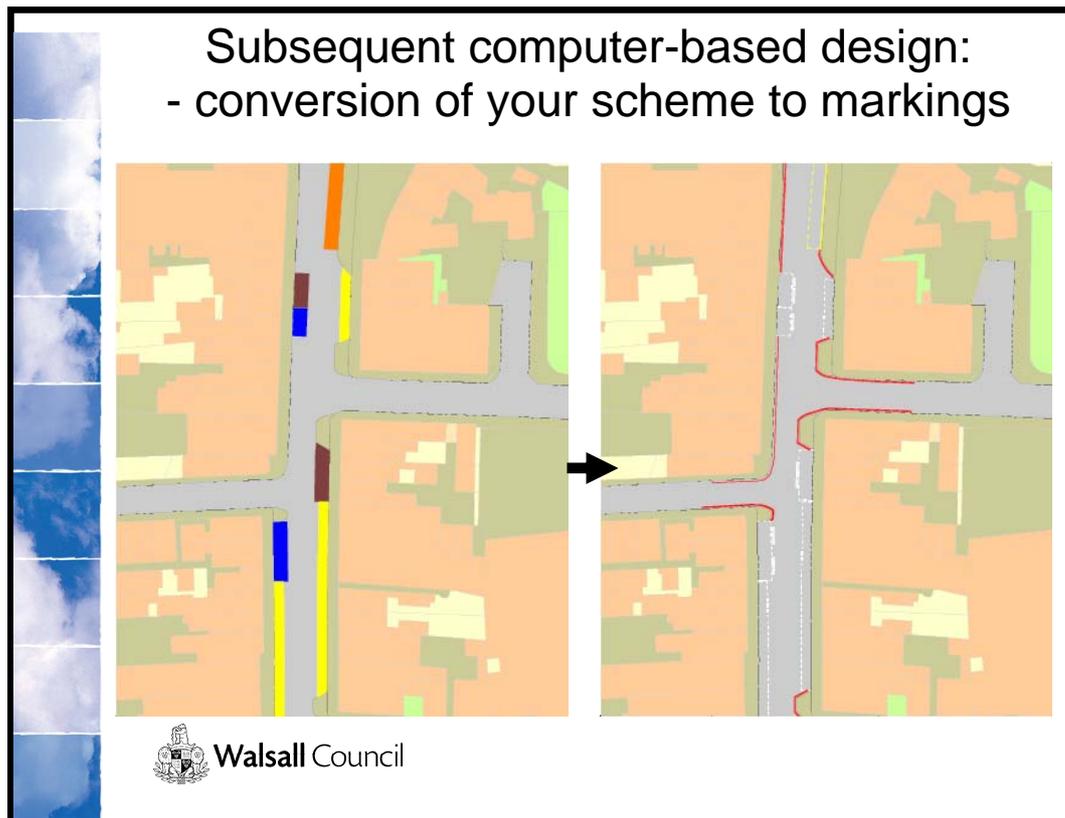
Each group kept the pavements at the minimum 2.5 metres width that had been marked out on the plans. They were told at the beginning of the exercise that this was considerably less kerb space than is currently provided. However, both groups stated that they preferred the narrow kerbs so that they could have more parking and loading bays. Participants said that they felt that the footways were currently too wide for users' needs.

Following the workshop, the designs were converted to a computer-based GIS format, using an enhanced version of Buchanan Computing's LineMap software. This was both able to reproduce the block representation from the 1:250 plans and to convert this information to a realistic line marking format, as illustrated to participants in Figure 9. This conversion process established that both designs were technically feasible, with only minor adjustments.

### ***Feedback***

The feedback from workshop groups about how the design exercise had been organised was very positive. The participants liked this method of designing streets, and they described the outcome as "their scheme", not the Council's.

The atmosphere was very positive and supportive, with the local business people talking and joking freely with the traffic engineers. This was an unusual experience for both parties, since in other contexts the exchanges over road scheme design would have been confrontational. It certainly enhanced the image of the Council among those who participated.



**Figure 9: Workshop slide illustrating and comparing LineMap in block and line form**

Although the number of people who attended was small, the participants felt that if more people had known that the Council was taking an inclusive approach, then many more people would have come to participate.

#### **4. Workshop 2**

The second workshop was held on Tuesday 5<sup>th</sup> December in the same location in Bloxwich, from 6pm to 8:30pm. The council sent out invitations to the same full list of local businesses and residents as was used for Workshop One. Ten people attended this workshop, half of whom had participated in the previous workshop. [The timing, unfortunately, coincided with a major football match.] Like workshop one, most of the participants were local traders and local residents, though there were some new attendees. One local councillor also attended.

The purpose of this second workshop was to examine and compare the two designs developed in the previous workshop and to decide if one (or more) schemes were suitable to take forward to the public consultation stage.

#### ***The Exercise***

Large scale plans of the two schemes developed during Workshop One were placed on the walls at the venue, both in line marking and in coloured block formats, for participants to look at when they arrived (see Figure 10). This made it simple for participants to remember - or to discover - what the two designs looked like in detail, and it stressed the fact that the Council was





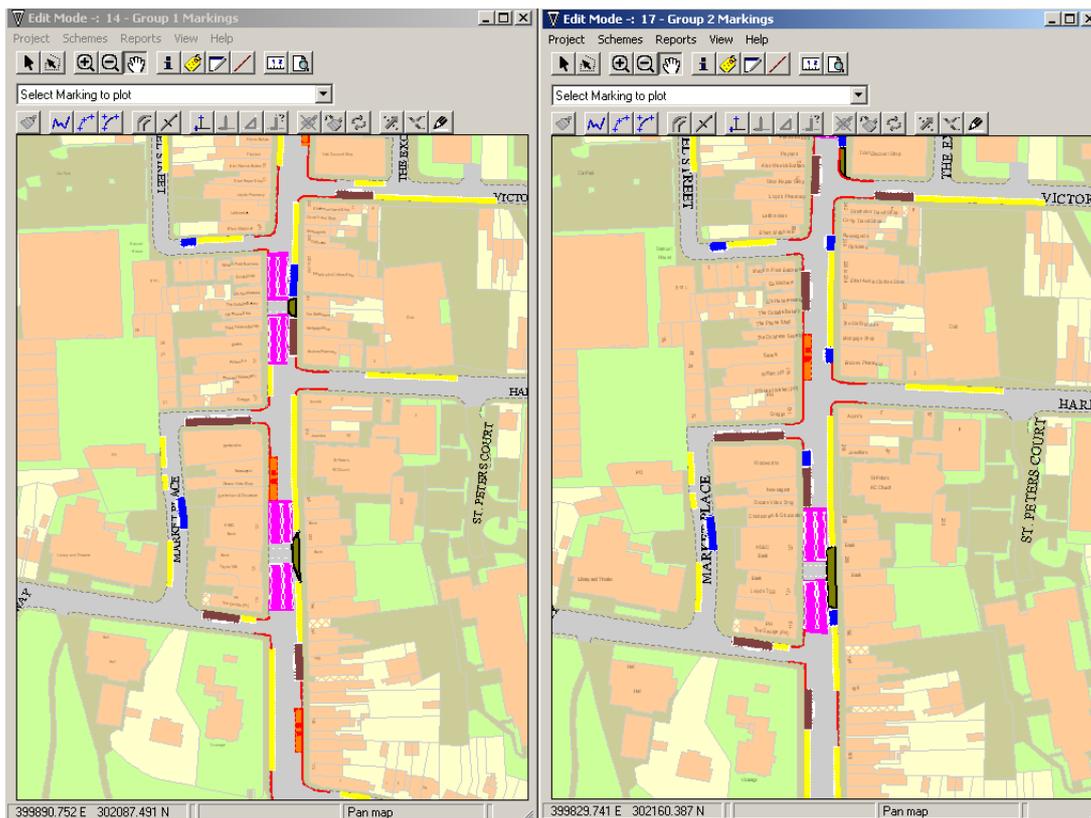
**Figure 11: One group of participants**

The intention had been to run the evening event by first giving a brief overview to all participants of the similarities and differences between the two previously developed schemes on a large screen by using LineMap, working from one end of the high street to the other, and then dividing participants into two groups to consider which scheme or schemes should be taken forward to full public consultation. Finally, it had been anticipated that the views of the two groups would be compared and debated in a plenary session, editing any changes on screen using LineMap.

In the event, the exercise proceeded slightly differently than had been envisaged. While participants sat in their two groups, they worked together as one larger group, using the on-screen LineMap presentation as the main focus and occasionally referring to their paper copies as necessary. Thus, what had been intended as an opening plenary presentation, where the two schemes were briefly compared, became the main working tool for the whole group during the evening, in a plenary workshop session.

Figure 12 shows how the two schemes were compared alongside each other in LineMap for one section of Bloxwich High Street, using the block diagram format. Once this was displayed, a member from each of the original design groups was invited to explain why they had chosen their particular pattern of space allocation along that section – and who might gain or lose, as a consequence. Other participants were then invited to add their comments on the two options, and to suggest any modifications to the allocation of streetspace. Once agreement had been reached on a preferred outcome, the design was modified appropriately in LineMap, and participants moved on to consider the next section of the high street.

In practice, it soon became evident that one of the two designs was strongly preferred over the other, so there was very little need for on-screen editing as the exercise proceeded.



**Figure 12: An example of the two schemes side by side in LineMap format**

Instead, a lot of the discussion was concerned with the direction of traffic in the residential streets off the high street, and whether to allow or ban traffic turning off the high street at specific junctions. A key concern for the participants was to keep traffic moving along the high street and to reduce congestion. They wanted to make it easy for vehicles to turn off the high street, once they had finished their business there, and to ban entry onto the high street from some of the numerous side streets. Yet they recognised that a balance needed to be struck: while some turning restrictions would reduce congestion, too many restrictions would be seen as a barrier to local access, and would encourage people to do their shopping outside the local area.

## **Results**

While there was not an initial preference for one scheme over the other, following explanations and discussions a strong consensus emerged among the participants to put one of the two original schemes (the design from group one) out to public consultation, with some relatively minor changes to its design.

Considerable changes to the pattern of traffic in the surrounding residential one-way streets were agreed upon. Some side streets were made 'no entry' onto the high street, while other streets with existing 'no entry' restrictions had them removed. Associated with these changes, some of the one-way traffic flows were reversed.

There was some discussion as to whether it would be feasible to reduce the speed limit on Bloxwich High Street to 20 miles per hour, and to reduce substantially the amount of guard railing. This generated further debate about the current average speed on the high street, the use of speed cameras and the area's accident record and its causes. The participants were divided as to whether this idea would be beneficial overall and, because agreement could not be reached, it was eventually decided that a speed reduction to 20mph would be put to wider public consultation, to see what the general local population felt.

There was also considerable debate as to whether disabled parking should be positioned on the high street or in the adjacent side streets. In one scheme in Workshop One the disabled parking had been provided predominately on the high street, and in the other scheme it was predominantly in the side streets. The debate centred on whether it was better to provide safer parking (on the side streets), away from the heavy traffic flows, or to provide reserved parking closer to destinations (on the high street). It was eventually agreed that there should be some disabled parking on both the side streets and the high street.

Both original schemes and the final preferred scheme involved a reduction in the width of the footway along the high street to 2.5 metres; the council engineers queried this. Participants felt that the current footway was very wide and making it narrower would raise no difficulties – it would be better to use the surplus space for parking and loading activities. The council warned that a narrower footway would mean that the existing "A" board advertising signs would have to be removed and that this would be enforced. The engineers suggested that, during the wider public consultation, a section of the existing footway could be marked out to demonstrate how much narrower the footway would become under these proposals.

Finally, participants were asked about what they felt would be the best methods to gain the widest participation from the local population of residents and traders.

### ***Feedback***

Feedback from this Second Workshop was as positive as that provided by participants to the first one. People were reassured and pleasantly surprised by the openness and willingness of the Council to listen to the views of local people, and were very happy with the streetspace design that finally emerged from this exercise.

It was felt that the success of these workshops would help in ensuring a more harmonious and effective relationship between the council and local stakeholders in the future.

## 5. Public Consultation

The design workshops only involved a small number of local business owners and residents, and were intended to develop a scheme or schemes that would form the basis of a wider, more conventional public consultation exercise.

As agreed, a few months after these events the local council put the chosen plan from the workshops out for wider public consultation. The public were invited to view and comment on the proposed scheme during daytime on three different days (Tuesday 6<sup>th</sup>, Saturday 10<sup>th</sup> and Thursday 15<sup>th</sup> of March 2007). The public consultation times, days and venue was advertised in local papers and on local radio. The consultation exercise was carried out by exhibiting the scheme in an exhibition bus manned by local traffic engineers and parked adjacent to Bloxwich High Street (see Figure 13).



Figure 13: The Public Consultation venue

The bus contained a large scale plan of the proposal (see Figure 14), with several smaller maps highlighting some of the suggested proposals in more detail. Pamphlets were provided, describing the Red Routes, local bus schemes and specifically the Red Route in Bloxwich (see Appendix 1); these were displayed and could be taken away by visitors.



Figure 14: A section of the proposals, as presented for public consultation

A continuous Power Point slide presentation was displayed on a large monitor screen. This described how the recommended scheme had been developed through the use of local design workshops, and included details of possible variants on the basic design, such as a 20 mph speed limit on Bloxwich High Street. Members of the Council's engineering team were on hand to discuss the scheme. Questionnaires asking for feedback on the scheme were given out to members of the public who attended the exhibition and were also made available on the Council's website (see Appendix 2).

Following up on a discussion in the second design workshop regarding whether people appreciated the implications of the width of the current pavement being narrowed, people were referred to a particular area of the high street where the footway was already 2.5 metres wide. This enabled the public to see what the narrower pavements would be like if the proposal was adopted.

On each day between 35 and 40 people attended the exhibition. On weekdays there was a peak when the bus first opened at 9:30am, but it became much quieter during the afternoon. There was a mix of local residents, local shoppers and local business owners among those who attended, and some of the previous workshop participants visited the exhibition.

### ***Feedback***

In general, the Council felt that feedback from the consultation was mainly positive – in contrast to a previous effort to consult on remodelling the High Street. Before they attended the exhibition, it seems that many local residents were under the impression that parking was to be banned along the high street - which they assumed would force parking onto local residential streets. Once they discovered this perception to be wrong, and that the proposed scheme would increase rather than reduce on-street parking provision, they were pleasantly surprised and generally happy with the proposals. The results of the questionnaire show that a substantial majority (87%) found that the information available at this consultation was informative.

Some modifications to the scheme were suggested by several attendees, in particular:

- The local public toilets should be removed. They were considered dirty, badly maintained and were not used by many people for these reasons.
- People did not see the benefits of the current build-outs for bus stops and wanted them taken back to their original kerb line position.
- People were uncomfortable parking after dark in the area. A need was identified for more secure parking near the local market.

The possibility of introducing a 20mph speed limit along Bloxwich High Street was included in the consultation as a result of discussions in the second workshop. However, the people who were asked about this issue at the exhibition were either not concerned about the lowered speed or were against it. This ambivalence or negativity was reflected in the questionnaires as well.

One issue generated disagreement. This concerned the introduction of a pedestrian phase at a set of traffic lights at the southern end of Bloxwich High Street, where it merges with another road. This junction had been the subject of heated discussion in the Second Workshop, but in the end everyone agreed that a pedestrian phase was needed there.

However, among the wider public there was less agreement – partly perhaps because they had not taken part in a debate about the pros and cons. Those in favour of the plan argued that it would improve pedestrian safety and access; while those against the plan said it would create congestion. Both anticipated impacts were correct, and it is perhaps a political decision, in the end, as to where the balance of priority should lie.

### ***Questionnaire analysis***

A total of 35 people responded to the questionnaire that was given out by the Council at the public consultations and on the Council's website, which is reproduced in Appendix 2. There was a fairly even gender split, with 46% of respondents being female. Most respondents were aged over 55 (64%). Car, taxi and bus were the most frequently used methods used by the respondents travelling to Bloxwich.

The aspect considered most important (Qu.3) was "Improving safety along the A34/Bloxwich High Street for vehicles": 61% of respondents thought this was very important. 18% of the respondents thought that the scheme would be 'very effective' and a further half felt that the proposed scheme would be 'effective' in achieving this (Qu.4). Respondents thought the scheme was most effective in improving pedestrian facilities, with 69% saying the proposal would be 'effective' or 'very effective' in achieving this.

Overall, over half those surveyed were in favour of the proposed plan (59%); the remainder were either not sure (19%) or were opposed to it (22%).

## **6. Conclusion and Future Developments**

### ***Effectiveness of the general approach***

The Walsall Council engineers and planners liked this new method of approaching and designing local schemes, and plan to use this approach in developing future schemes. As a consequence of this positive experience, they commissioned UCL to provide them with two sets of the blocks and acetates, and have undergone training in LineMap. The engineers saw considerable value in using this approach when developing larger schemes, such as the redesign of a high street, and also wondered how useful this method might be for much smaller schemes, for example where a bus stop needed relocating. They are now applying the method in other parts of the Borough, and recommending its use elsewhere in the West Midlands.

The local stakeholder participants – mainly business people - liked this new approach too. They stated that they would be happy to use this method in the

future and would be more likely to attend Council led meetings now they had seen this approach used. Participants felt the exercise was productive as their views were being directly incorporated, rather than simply being “listened to”. They also gained a greater understanding of what problems engineers faced in designing schemes, and the kinds of constraints and compromises that they had to deal with.

The exercise proved useful in generally understanding how the high street is used, and the specific needs of different groups; it provided detailed knowledge that the Council engineers did not have. Not only were participants able to give their own perspective, but both groups also provided insights into how other groups used the high street. For example, participants created a designated stopping place for “Ring and Ride” transport services for people with mobility difficulties, and located it where they believed it would be most beneficial for them.

This exercise also helped to make clear the general types of viewpoints and attitudes held by different stakeholder groups. Whilst the local traders generally had similar views to each other - and these remained constant throughout the workshops and public consultation - the views of the local residents were much more varied. Traders attending the public consultation who had not attended the workshops were similarly positive about the proposal as the traders that had designed them were. Local residents were a lot more varied in their viewpoints concerning the proposed scheme, as well as what they believed the area needed. Indeed individual local residents were observed wanting changes that opposed each other, at the public exhibition.

In conclusion, this method of liaising with stakeholders is an open, accessible approach to street planning. Using scale blocks, scale acetates and maps makes the design process as simple as possible to understand. It allows councils to regain trust among their constituents and to gain a wider understanding of the needs of an area. It allows members of the public to participate in development of their community and gives them an appreciation of the constraints behind street planning.

### ***Areas for methodological improvement***

The engineers found that the two schemes generated in the first design workshop were generally technically feasible, with the exception of certain pinch points, where insufficient room had been allowed for manoeuvring traffic.

This partly arose because acetates were provided showing minimum traffic lane widths, but along straight sections of street only, and not where vehicles might need to turn or change their direction of travel. This has subsequently been addressed through the provision of extra acetates (see later).

The approach also worked well in terms of developing scheme designs that met the requirements of local users, but there is scope for improving the level of innovation in the generated designs. Two limitations were apparent:

- (i) Both design teams worked from the existing street centre line, despite being encouraged to think about moving this towards one kerbline or another, or separating the carriageways to provide a median strip along the centre of the high street; and
- (ii) The base plan showed minimum footway widths of 2.5 metres from the existing building lines, and neither group showed any interest in widening this further.

These limitations might be addressed in several ways, including:

- Presenting information differently on the base plan, for example by showing minimum AND maximum footway widths (i.e. assuming a minimum carriageway width around the centreline).
- Marking out different footway widths on the ground at the Design Workshop venue.
- Paying more explicit attention to footway movements and activities, public space use and street furniture provision, and what can be accommodated at different footway widths.
- Providing real-life examples of innovative designs, in the form of photographs or simple diagrams.
- Developing composite acetates or blocks, showing what an area might look like in cross section if several measures were implemented alongside each other (e.g. median strip plus two running lanes and two cycle lanes).

### ***Improvements to the street space design kit***

The blocks used in the Design Workshops were made of clear Perspex, with a coloured film on the upper surface. While this worked successfully, by the end of the project the film showed signs of wear and tear, and the blocks were sometimes inverted when placed on the plan (resulting in the text being in mirror image format) because the Perspex was transparent.

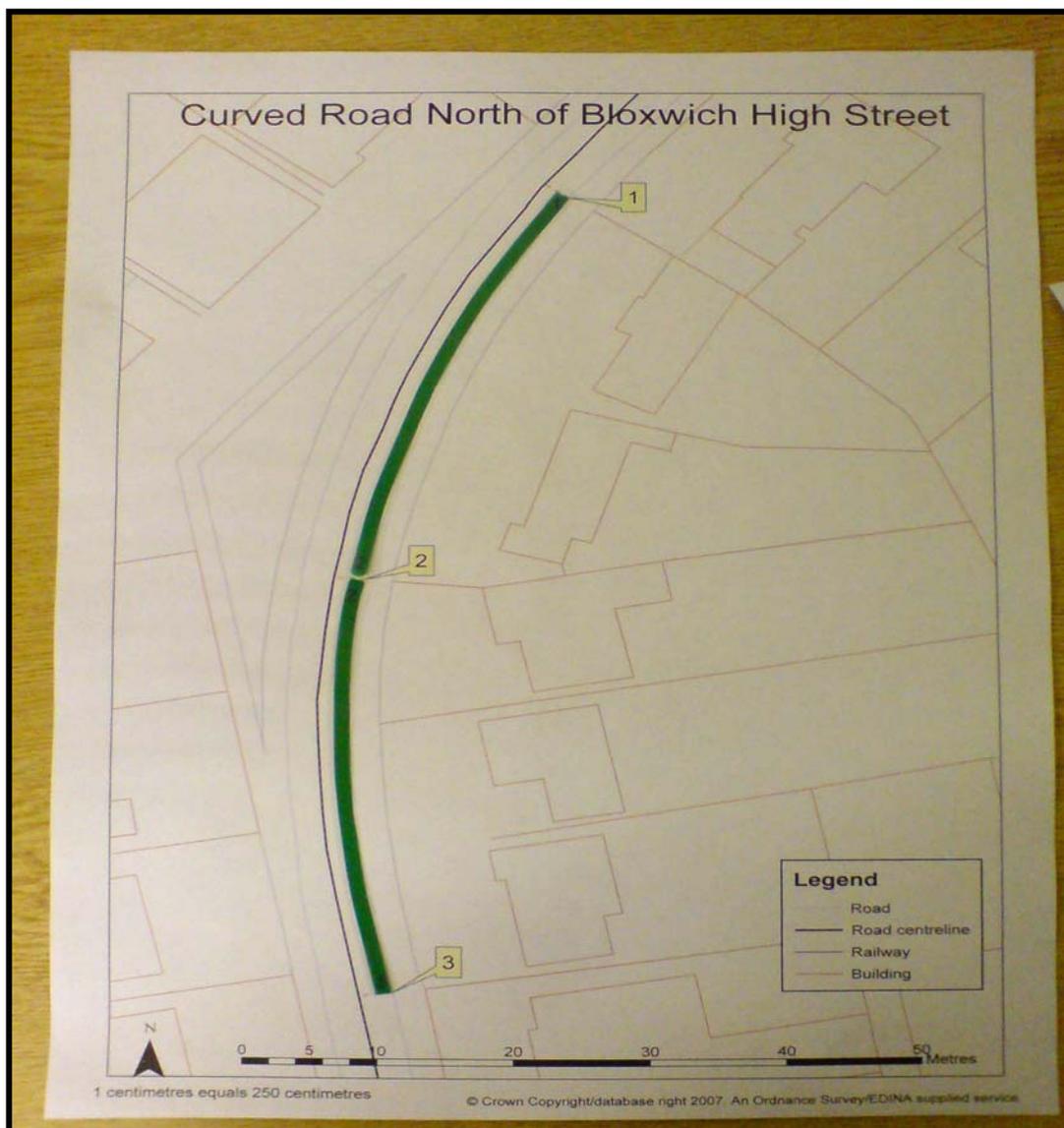
To overcome both these problems, the physical construction of the blocks has been modified (see Figure 15). While the basic design has been kept the same, the blocks have been made out of a more durable, thicker, opaque white plastic, and the symbols and colours have been made sharper so they are easier to read, using a much more durable type of transfer.



**Figure 15: A new form of plastic block**

Several additions to the set of acetates have also been made. Bloxwich High Street was on a straight section of highway, and so it was possible to use straight sections of acetate strip to realistically denote running lanes, cycle lanes, etc. In other applications, it may be necessary to provide curved acetate strips to represent, for example, a bus lane along a curved section of street.

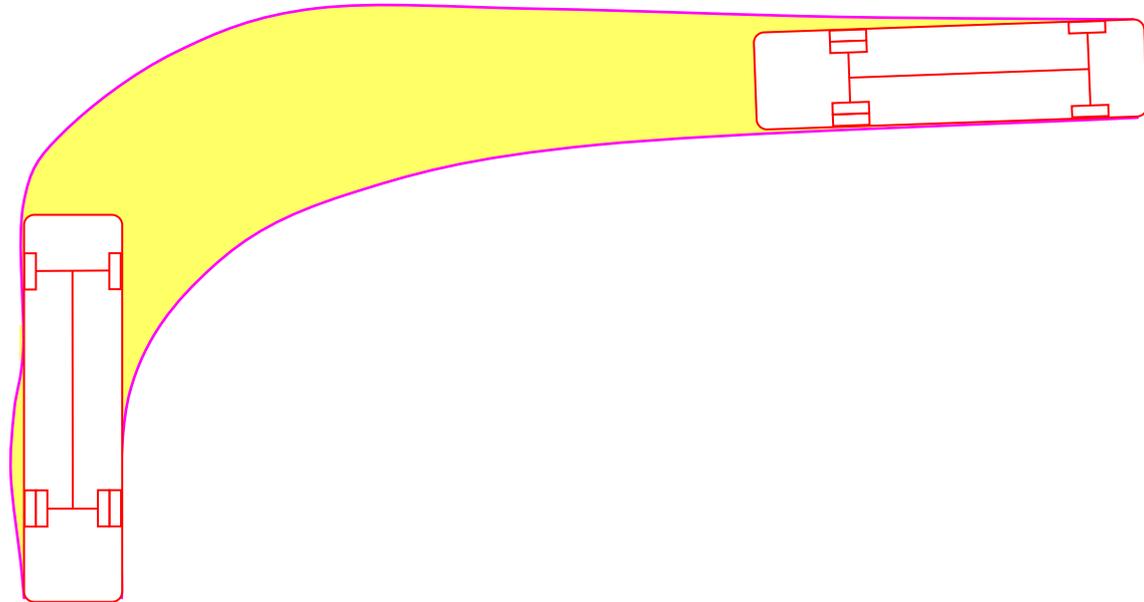
This customising of streetspace features to accommodate local geographical conditions can be achieved by using the LineMap software to generate lanes to scale electronically, and then printing these out on acetate. An example of a cycle lane generated in this way for two curved street sections is illustrated in Figure 16.



**Figure 16: An example of a curved cycle lane acetate**

Acetates have also been generated that provide guidance on how much carriageway space to provide at junctions to allow for the swept path of a bus (or other large rigid vehicle), as shown in Figure 17. This example illustrates

what area of clear space is needed for a 10 metre by 2.5 metre bus to turn through a 90 degree angle. In practice, this will obviously differ depending on the size of bus, and the angle of the turn on the road, but nevertheless this provides users with a rough indication of turning space requirements in terms of the surface area of the carriageway.



**Figure 17: Bus sweep for Full lock 90° right turn, based on FTA large rigid design vehicle (10m x 2.5 m)**

## References

- ARTISTS (2005). "Arterial Streets for People - Guidance for planners and decision makers when reconstructing arterial streets". Lund University, Sweden. Web link: [www.tft.lth.se/guide/artistsguide.htm](http://www.tft.lth.se/guide/artistsguide.htm)
- Jones, P., Cook, A., Tanner, G., Christodoulou, G., Potter, R. and A. Wadhawan (2006). "Computer-based tools for streetspace design and reallocation". Final Report to the Department for Transport, in conjunction with Buchanan Computing and GDC. March 2006. Transport Studies Group, University of Westminster.



## Introduction

Walsall Council are proposing plans to implement a Red Route along the A34 including Bloxwich High Street. At present initial workshops have been held in December 2006 where local traders were invited to provide their views on the problems faced along the High Street and develop an outline proposal for implementation.

The plans developed in conjunction with the traders form the basis of the consultation proposals.

The purpose of the consultation is to obtain your views on the proposals so that we can finalise our plans ready to carry out the works, this leaflet gives you a brief overview of the aims of the Red Route scheme.

## What are the benefits?

- The efficiency of the available road space will be improved, helping to tackle congestion.
- It will allow buses to keep moving, which improves bus journey times.
- It will benefit the environment, as pollution from vehicle emissions will be reduced as traffic is allowed to flow more freely.
- A safer and more pleasant environment will be provided for pedestrians, which include improved crossing facilities at side road junctions.
- People with disabilities will benefit from specifically allocated and well enforced Blue Badge parking places near shops and businesses.
- Loading and short term parking facilities will be reviewed and will be clearly marked with parking 'boxes' and signs.

## What is a Red Route?

- Red Routes are a method of ensuring that the most effective use is made of the road space allowing improved travel for both people and goods.
- Red Routes use a package of measures including road improvements and dedicated loading areas for delivery vehicles where required. The measures are complemented by better enforcement of illegal and inappropriately parked vehicles.
- These measures will help improve traffic flow and reduce congestion. Developments could also include improved and innovative traffic signalling and junction alterations where necessary.
- Red Routes use a package of measures to improve safe traffic flow. The most obvious of these measures are the red lines along the road edge, which are a clear signal to drivers to say 'No Stopping'
- Red Routes are not blanket 'No Stopping' restrictions. The scheme actually includes better provision for legal parking and loading.
- Better signing of car parks will direct people to parking areas located off the main road. These will be improved wherever possible to encourage greater use.
- Parking for disabled people will be provided where needed.
- All of the proposals have been designed to take account of the various demands and uses placed on the High Street.

## What is the aim of the scheme?

The section of the A34 known as Bloxwich High Street is an important section of the route that is heavily used by both pedestrians and road users.

The aim of the scheme is to control the movements along the High Street by using Red Route enforcement which will enable the traffic to move more freely and decrease the journey time for road users and increase safety for pedestrians.

## What are the proposals?

The measures proposed as part of the Red Route scheme are:

- Replacing existing 'yellow line' waiting restrictions with new Red Route lines, signs and enforcement.
- Increasing the number of parking, loading and disabled bays both on and off the High Street.
- Providing better enforcement to eliminate illegal stopping and parking, making more efficient use of road space to improve traffic flow and journey times.
- Introduction of a Ring and Ride facility near the market area
- Pedestrian facilities implemented at the Bell Lane/Stafford Road junction
- Proposed signalisation of the High Street/Wolverhampton Road junction and development of a public square in place of the public toilets.

## Appendix 2: Public Consultation Questionnaire

Walsall Council - Vision 2008 "Making it easier to get around"



Walsall Council

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### A34 Bloxwich High Street Red Route Improvements

#### Public Consultation Questionnaire

Now that you have seen the proposals for the improvements along Bloxwich High Street, we would be grateful if you could complete the questionnaire below to tell us what you think of the proposals.

Q1	Generally, are you in favour of the proposals?				
	Yes	<input type="checkbox"/> 1	No	<input type="checkbox"/> 2	Don't Know

Q2	Please tick how often you travel along the section of the A34/ Bloxwich High Street, covered by the proposals, by each of the modes listed.					
		Daily (5 or more times a week)	2-4 times a week	Once a week	Less often	Never
	Car/taxi	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	Van/lorry	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	Bus	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	Motorbike	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	Cycle	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Walking	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	

Q3	Please tick how <b>IMPORTANT</b> each of the following are to you.				
		Very unimportant	unimportant	Important	Very important
	Improving car journey times along the A34/ Bloxwich High Street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving bus journey times for all Routes to and from Walsall	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving the reliability of all bus routes (they turn up when expected)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving the reliability of car journey times along the A34/ Bloxwich High Street (journey times are less variable)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving safety along the A34/ Bloxwich High Street for vehicles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving the junction & pedestrian facilities at the Bell Lane/Stafford Road junction	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving pedestrian facilities along the A34/ Bloxwich High Street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Reducing illegally parked vehicles along the A34/ Bloxwich High Street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Improving bus shelters along the A34/Bloxwich High Street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Providing up to date bus information for Bus Services to and from Walsall	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

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**Walsall Council - Vision 2008 "Making it easier to get around"**

Q4	Please tick how <b>EFFECTIVE</b> you think the proposals will be at achieving each of the following: -				
		Very ineffective	Ineffective	Effective	Very effective
	Improving car journey times along the A34/Bloxwich High Street	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving bus journey times for all bus services to and from Walsall	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving the reliability of buses to and from Walsall (they turn up when expected)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving the reliability of car journey times along the A34/Bloxwich High Street (journey times are less variable)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving safety along the A34/Bloxwich High Street for vehicles	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving the junction & pedestrian facilities at the Bell Lane/Stafford Road junction	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving pedestrian facilities along the A34/Bloxwich High Street	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Reducing illegally parked vehicles along the A34/Bloxwich High Street	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Improving bus shelters along A34/Bloxwich High Street	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
	Providing up to date bus information for all bus services to and from Walsall	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

Q5	Please indicate how you heard about the exhibition (tick all that apply)			
	Press advertisement	<input type="checkbox"/> <sub>1</sub>	Word of mouth	<input type="checkbox"/> <sub>6</sub>
	Leaflet	<input type="checkbox"/> <sub>2</sub>	Website	<input type="checkbox"/> <sub>7</sub>
	Letter through your door	<input type="checkbox"/> <sub>3</sub>	Other	<input type="checkbox"/> <sub>8</sub>
	Posters in premises along the route	<input type="checkbox"/> <sub>4</sub>		<input type="checkbox"/>

Q6	If you have seen the study website, how informative did you find it? ( <a href="http://www.walsall.gov.uk">www.walsall.gov.uk</a> )				
	Very uninformative	Uninformative	Informative	Very Informative	Not seen
	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

Q7	How informative did you find the information available at the public exhibition?				
	Very uninformative	Uninformative	Informative	Very Informative	Not seen
	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

