

## Preliminary road safety assessment for approach D

### Introduction

The designs prepared so far for Frideswide Square are “concept” designs, intended to demonstrate principles of design and allow traffic modelling work to be undertaken. Since safety performance is very dependent on design details, the safety assessment presented here is preliminary. Changes at Frideswide Square will affect traffic flows on all the approach roads, so this assessment considers this wider area as well as the square itself.

Safety assessments are very difficult to quantify, particularly in busy city centre streets where the interactions between different road users are very unpredictable and complex. This assessment is therefore by definition largely qualitative, based on advice from the county council’s road safety team.

### Current casualty rates

Table 1 below shows the current casualty statistics for Frideswide Square and the other streets most likely to be affected by traffic changes in the square. These statistics include only accidents in which someone was injured and where the accident was reported to the police.

**Table 1: casualties in road accidents 2006 – 2010 (five-year total)**

P = pedestrian also involved; C = cyclist also involved

| Street              | Type       | Fatal | Serious | Slight  | Total |
|---------------------|------------|-------|---------|---------|-------|
| Frideswide Square   | Pedestrian | 0     | 0       | 2       | 2     |
|                     | Cyclist    | 0     | 0       | 9       | 9     |
|                     | Other      | 0     | 0       | 12      | 12    |
|                     | All        | 0     | 0       | 23      | 23    |
| Hythe Bridge Street | Pedestrian | 0     | 0       | 1       | 1     |
|                     | Cyclist    | 0     | 1       | 2       | 3     |
|                     | Other      | 0     | 0       | 2       | 2     |
|                     | All        | 0     | 1       | 5       | 6     |
| Botley Road         | Pedestrian | 0     | 6       | 8       | 14    |
|                     | Cyclist    | 0     | 7 (1P)  | 33 (3P) | 40    |
|                     | Other      | 0     | 0       | 6       | 6     |
|                     | All        | 0     | 13      | 47      | 60    |

| Street                    | Type       | Fatal | Serious | Slight | Total |
|---------------------------|------------|-------|---------|--------|-------|
| Hollybush Row/Oxpens Road | Pedestrian | 0     | 0       | 3      | 3     |
|                           | Cyclist    | 0     | 0       | 2      | 2     |
|                           | Other      | 0     | 0       | 6      | 6     |
|                           | All        | 0     | 0       | 11     | 11    |
| Park End Street           | Pedestrian | 0     | 1       | 1      | 2     |
|                           | Cyclist    | 0     | 0       | 0      | 0     |
|                           | Other      | 0     | 0       | 2      | 2     |
|                           | All        | 0     | 1       | 3      | 4     |
| Worcester Street (north)  | Pedestrian | 0     | 0       | 0      | 0     |
|                           | Cyclist    | 0     | 0       | 0      | 0     |
|                           | Other      | 0     | 0       | 1      | 1     |
|                           | All        | 0     | 0       | 1      | 1     |
| Beaumont Street           | Pedestrian | 0     | 5       | 6      | 11    |
|                           | Cyclist    | 0     | 0       | 4      | 4     |
|                           | Other      | 0     | 0       | 4      | 4     |
|                           | All        | 0     | 5       | 14     | 19    |
| Becket Street             | Pedestrian | 0     | 0       | 0      | 0     |
|                           | Cyclist    | 0     | 0       | 0      | 0     |
|                           | Other      | 0     | 0       | 0      | 0     |
|                           | All        | 0     | 0       | 0      | 0     |

## Preliminary assessment

The net effect of approach D is likely to be slightly negative in the square due to risks to cyclists at the roundabouts. The actual outcome is likely to be especially sensitive to detailed design. However, improved traffic flow on approaches could reduce accidents associated with congestion and queuing.

Experience from the UK and elsewhere suggests that detailed design of roundabouts has a major impact on cyclists' safety. In particular, traffic speeds must be reduced and the geometry and lane widths carefully designed.

Detailed safety and vulnerable road user audits will be carried out at each design stage, and local cycling groups will continue to be involved in the design process.