# JUNCTION AT HIGH STREET/WEBSTERS WAY, RAYLEIGH

## 1 SUMMARY

1.1 This report considers the findings of a study into traffic movements at the junction of High Street and Websters Way, including the current arrangements at Church Street/High Street, and proposes that further work be undertaken to identify improvements.

## 2 INTRODUCTION

2.1 The County Council's traffic control consultants, SA2000, have studied the efficiency of the junction. They took into account reports of drivers passing red signals at the end of the High Street stage, which results in vehicles conflicting with pedestrians during the "Green Man" period, and delays to drivers, particularly when exiting from Church Street.

## 3 DISCUSSION

#### 3.1 Morning Peak

Observations made during the morning peak confirmed that significant blocking of the Websters Way exit from the junction results in queues on Hockley Road as far as The Upway junction. Some left turning vehicles were unable to move into Websters Way, blocking the pedestrian facility, then moving on whilst the "Green Man" signal was displayed to pedestrians.

Factors contributing to the exit blocking were:

- Car park entry/exits in Websters Way and Hockley Road
- Pelican crossing in Websters Way
- Bull Lane junction with Websters Way
- Eastwood Road junction with Websters Way
- More than one bus picking up or setting down passengers at the bus layby between Hockley Road and Bull Lane junction.

A large number of vehicles crossed the High Street stop line when the red light was displayed. The majority of these vehicles were from Church Street. This approach has been programmed to detect only a few vehicles to ensure that it does not become preferable to the A129 principal route, Crown Hill (previous reports to Transportation and Environmental Services Committee refer).

A very large number of pedestrians use the southern crossing point, mainly school children.

It was observed that cyclists tended to ride on the footways and use the pedestrian crossing points.

#### 3.2 Evening Peak

During the evening peak the junction ran efficiently with all demands served well and there were no long queues. The only queues were on Church Street. However, these tended to build up then dissipate quickly. There was a tendency for drivers from Church Street to travel over the High Street stop line when signals were amber or red.

The pedestrian phase was frequently demanded and often wasted when pedestrians crossed in gaps before the appearance of the pedestrian phase. Again, cyclists tended to use the footways and crossing points.

#### 3.3 Off Peak

During the off peak the junction responded to demands accurately varying the green times appropriately. As in both the morning and evening peaks the problem of vehicles from Church Street passing over the stop line of the High Street approach on amber and red did not disappear.

#### 4 CONCLUSIONS

- 4.1 In addition to some minor adjustments to road markings, the consultant recommends consideration of the following options:
  - Introduce Puffin crossing facilities across the western and southern arms of the junction to minimise wasted demands and unnecessary delays to traffic.
  - Investigate the removal of the advanced cycle stop lines.
  - Investigate the scope for creation of an additional right turn lane for the High Street approach, which would be designed to prevent vehicles from Church Street gaining access to Websters Way. As part of this proposal the nearside lane would be used for ahead traffic only, thereby restricting Church Street traffic to use Hockley Road only.
  - The installation of a red light camera to deter vehicles jumping the traffic signals.
- 4.2 The key to improving the efficiency of the junction lies in tackling the exit blocking and this should be the first priority. The other measures (other than the red light camera) would not in themselves improve the situation. Since Members of the Transportation and Environmental Services Committee already rejected the experimental closure of the southern exit from Websters Way car park, a limited range of options remains to deal with exit blocking in Websters Way. Given that reconstruction works, including the installation of new puffin crossings, would be substantial it is essential that a detailed evaluation of the situation is undertaken and this would be best carried out

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using a traffic model, with results and costed options then being presented to Members for consideration.

# 5 FINANCE

5.1 A bid will be made for the traffic model analysis to be funded from the County Council's traffic study budget.

## 6 **RECOMMENDATION**

It is proposed that the Committee **RESOLVES** 

- (1) That the consultant's finding on the persistent red light running on the High Street approach be referred to the County Council's safety camera team for appropriate action, with a report back to a future meeting of the Environmental Services Committee.
- (2) That the peak time congestion in Websters Way be modelled and that the options for improvement be costed and reported to the Environment Overview and Scrutiny Committee for consideration. (County Highways)

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## Background Papers:

Letter from SA2000 Consortium to Highway and Transportation Services Manager (North) 9/7/01 and accompanying report.

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