

Annex 3 – Alternative traffic signal arrangements

Part time signals

1. Where problems occur at junctions only under certain conditions, primarily at peak hours, it has been common to implement traffic signal control on a part-time basis. A study undertaken by the County Surveyors' Society in 1997 was based on a survey of signalised roundabouts (CSS, 1997). Although identifying the benefits of signalling, the study also identified an increase in accidents during the time. Largely as a result of this study there has been a move away from using part-time traffic signals, and many formerly part-time traffic signal junctions have been converted to full-time operation. Although a more recent study was not able to confirm the findings of the 1997 study, there is sufficient doubt over the relative safety of part-time signals to discourage their use.
2. In respect of this specific site, the main issue with part-time signal operation would be that there is no way to provide safe pedestrian crossing facilities for visually impaired pedestrians, as there is no effective way of indicating in a non-visual way that the signals are not operational. Consequently, signalised pedestrian facilities cannot be recommended for part-time signals. Therefore any junction which includes such facilities would have to be switched on permanently, as is the case here – pedestrian crossing facilities are proposed for the eastern (A2 from Canterbury) arm of the junction.

Linked signals at both junctions

3. Signalising both junctions (A251, The Mall) with the A2 will not work in a satisfactory manner; the demand for right turns and predicted queue lengths far exceeds the storage space available. The recommendation of the initial study work was therefore that only one junction should have signal control, with the other retaining the priority working as at present.
4. The A2 / The Mall junction is problematic for a safe and efficient traffic signal layout, due to an established tree and stone horse trough.
5. The A2 / A251 Ashford Road junction lends itself more to signal control, although slightly complicated by a minor side road (Preston Grove). However, the traffic modelling work showed that a workable design was not possible within the current highway boundary; the junction still operated over capacity at peak times. This is why third party land is required from the school and the fire station on the south-western corner of the junction.