

Chippenham Traffic Model

Chippenham is identified as a town for major expansion. To adequately assess the likely traffic impacts of development proposals PFA Consulting has built a 2007 'base year' micro-simulation traffic model of Chippenham for both a PM Saturday period.

S-Paramics represents a radical new approach to the understanding, representation and analysis of road traffic. Individual vehicles are modelled in fine detail for the duration of their entire trip, providing accurate traffic flow information necessary for the analysis of congested road networks. Visual presentation of model outputs is one of the main benefits of S-Paramics models, allowing them to be understood by elected representatives and the general public.

In developing the Chippenham traffic model up-to-date traffic data was collected and analysed. A comprehensive survey programme was developed which resulted in the following sources of data being collected:

- Roadside interviews
- Automatic number plate recognition (ANPR) surveys
- Manual classified and automatic traffic counts
- Car park counts
- Journey time surveys
- Junction queue length surveys

The traffic model was calibrated to reflect existing conditions and to match on-site observations and recorded stop line throughput. Validation of the model was undertaken through comparisons between link flows and journey times.



The validated Chippenham base year traffic model provides a good representation of existing traffic conditions. This will allow future development options and highway schemes to be adequately assessed as part of the Local Development Framework (LDF) process.

Summary of professional services:-

- Transportation modelling
- Traffic surveys
- Public consultation