

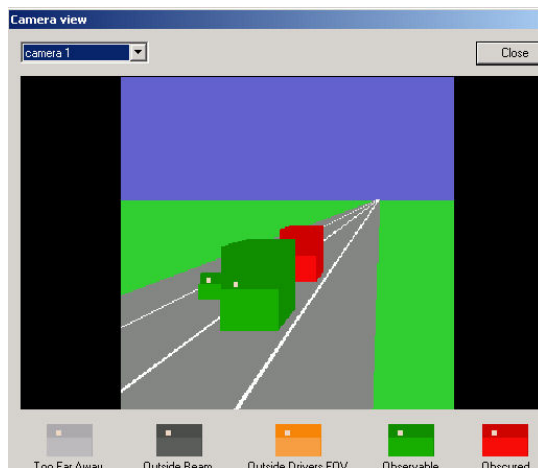
# CASE STUDY

## Modelling the obscuration of motorway signals

SEA provided the Highways Agency with a tool to assess the visibility of motorway signals. These are the electronic signs mounted over the carriageway on cantilevers, gantries or posts in the central reservation.

The MOMS project (Modelling the Obscuration of Motorway Signals) produced a software simulation based on SEA's traffic model to allow users to experiment with the various factors relating to signal visibility. For instance, a signal's dimensions, height above the road, and position relative to the hardshoulder verge can all be varied. The model is then used to simulate typical traffic patterns passing the signal.

During a simulation run, the view from a virtual camera mounted in the middle of the signal is generated. This allows the user to quickly check that the signal is positioned correctly. When a run is complete a set of statistics is produced relating to the time period over which a signal can be viewed and the probability of obscuration by other vehicles."



### Image information:

The output of the MOMS tool was checked for accuracy by analysing a video taken from a bridge over the M4. The photograph shows a typical obscuration event. These events were counted over a set period of time and then a signal at the same height and offset to the road as the camera was simulated by the tool and the number of obscuration events cross-checked. The motorway image was taken from the virtual camera mentioned above.