



case studies

customer success stories from the paramics community

Project

Canning Highway /
Riseley Street

Organization

MAIN ROADS Western
Australia

Objective

Investigate impact of the
installation of a second set
of signals

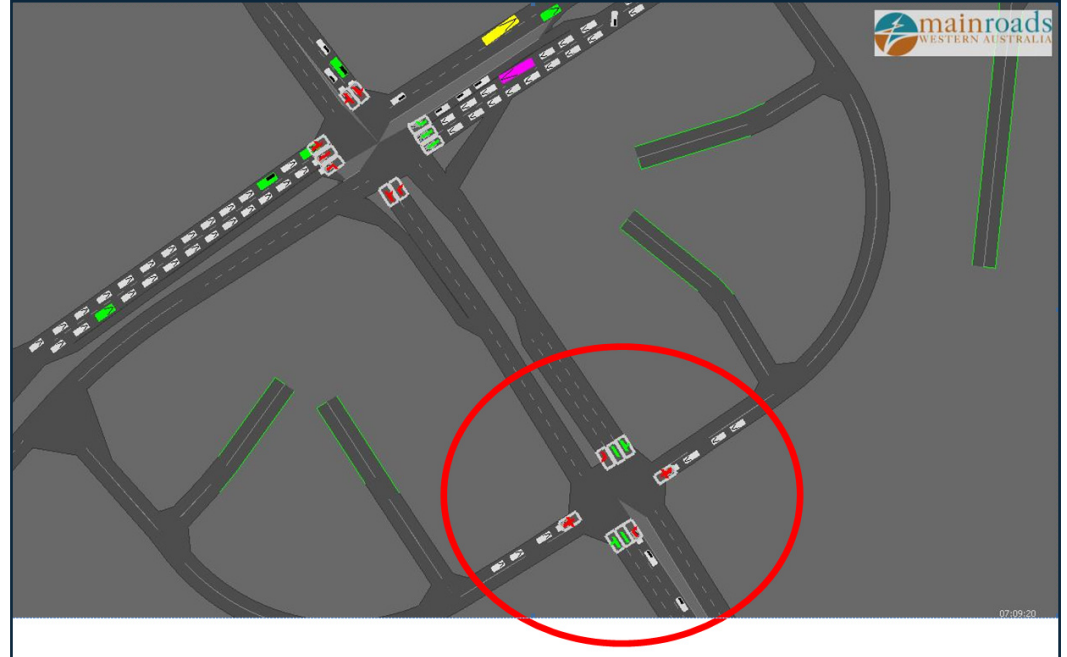
Contact Point

www.mainroads.wa.gov.au



Canning Highway/Riseley Street

Investigation was to be carried out as to the impact of the installation of a second set of signals upstream from the main intersection as shown below.



A simple 13 zone AM peak hour PARAMICS model was built to simulate and assess likely outcomes.

Challenge lay in the fact the existing signals were a slave to an upstream master and hence overall cycle length and phasing needed to first accommodate the needs of this master before consideration could be given to the new signals.

Vehicle actuated coding was required for both sets of signals to implement gapping out rules where phases would be terminated early and have the time reallocated to higher demand movements. VA also allowed for proper phase selection based on detector occupancy.

3 hours of model time was required to mimic the temporal build up of conditions in the area. Periodic release profiles were taken advantage of in this instance to ensure correct queuing conditions. Public transport is coded with some 5 public transport routes operating in the area.

Once the network/scenarios were prepared there was a need to assess the difference in performance of the two networks. This was achieved by inspecting differences in global model statistics (such as VKT and VHT) and localised inspection of link delays on key approaches to the intersections.