Meeting future local capacity needs

Traffic and transport engineering

With Australia's population predicted to reach 35 million by 2050, governments need to analyse, react and plan to ensure the safe, efficient and sustainable movement of people and goods in congested urban environments.

Halcrow is the leading provider of traffic, transport and road safety services with a team of experienced transport engineers, traffic modellers and planners.

Through expertise and experience, it is possible to analyse, design and deliver transport solutions to improve safety, sustainability and liveability in the modern street system.

The services we offer to clients include:

- strategic transport planning and network planning
- local area and city centre traffic management
- parking policies and development control plans
- traffic analysis and design
- road safety analysis and auditing
- workplace travel plans
- designing for walking and cycling
- pedestrian modelling
- traffic project consultation

Delivering value – case studies

Sydney Strategic Transport Model and toll user module development

Halcrow was commissioned by the NSW RTA to develop and update the Sydney Strategic Transport Model to provide a detailed toll user module. The base transport model was updated for use in transport planning with a simplified toll choice.

The toll user module was developed to enhance the built in route choice behaviour of the EMME strategic network package. It is a toll logit model which can cater complex route choice decisions taking into account socio-economic demographics of tollway users, multiple connected and disconnected tollways, and different tollway pricing schemes such as toll plazas, distance based pricing and capping.

Victoria Road – Inner West Bus Way, Sydney

Halcrow staff were part of the alliance team managing the design of the ITS system for the Inner West Busway.

This comprised the introduction of tidal flow along the Victoria Road corridor and the use of Variable Message Signs (VMS), Lane Usage Signs (LUS), Changeable Message Signs (CMS), In-pavement Lighting (IPL's) and CCTV's.

These measures enabled the introduction of a moveable barrier machine, a first in Australia.

City of Sydney Cycle Path SCATSIM Modelling

A SCATSIM Paramics model of the Sydney CBD was used to develop and assess various bicycle routes and bicycle infrastructure within the CBD.

The model indentified potential opportunities and implications for traffic flows and bus network operation. This allowed bicycle strategies to be developed in a co-ordinated manner with other CBD transport modes.

Victoria Dandenong Rail Corridor

The Department of Infrastructure (Victoria) commissioned Halcrow to undertake stated preference surveys of rail users in the Dandenong rail corridor. The project required Halcrow to undertake the following activities:

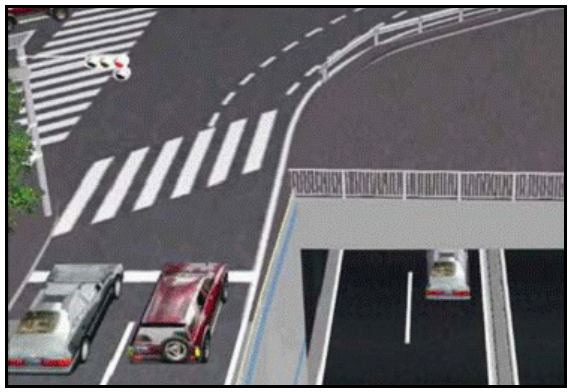
- Rank and quantify the effects of a range of travel service attributes and qualitative factors for existing rail customers
- Derive elasticities and attribute valuations that can be used in future applications to assess potential changes in demand.

Pacific Motorway Transit Project (PMTP)

Halcrow performed the technical role in the development of micro simulation models and assessment of interchange and road network options for the planned upgrade of the Pacific Motorway Transit sections A, B and C between the Logan Motorway and Gateway Motorway.

The project included development of a detailed multi user class simulation assignment of the Pacific Motorway to evaluate alternative scheme upgrades.

The Paramics micro simulation model was developed to look at both morning and evening peak periods and included features for transit lane operation, ramp metering and park and ride facilities.



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