Western Brisbane
Transport Network Investigation

Fact sheet

The Western Brisbane Transport Network Investigation is a strategic study focussed on the investigation of regionally significant transport links and travel patterns across western Brisbane.

Transport Modelling

Transport modelling is a tool that planners use to help weigh up some of the factors that might influence the choice of a preferred transport strategy.

Predicting the travel requirements of a future generation is a challenging task, particularly at a time when so many influencing factors are undergoing dramatic change (i.e. the rising cost of fuel price, global warming, rapid state population growth).

The manner in which we plan our future transport networks is also changing and a high priority is being placed on sustainable transport solutions that address walking and cycling, public transport, freight, as well as the need for new roads. It's more about achieving a desired future urban environment rather than simply just responding to traffic congestion on the roads.

What is a transport model?

A transport model tests how well different scenarios might satisfy people's future travel requirements and helps in reaching a decision about which strategy to adopt.

Transport models are 'built' on a computer. Some software (often called microsimulation) is designed to undertake a highly detailed analysis of traffic operations over small areas. Other software is used to model strategic (or more general) transport strategies over much larger areas.

Transport network strategies

A transport network strategy is a package of proposals designed to address future travel demand. It details key future transport network improvement options and why they were selected.

The Western Brisbane Transport Network Investigation team has built a strategic transport model using the EMME/2 software (which has been in use throughout the world for many years). It is a regional model that extends from Brisbane, the Gold Coast, Sunshine Coast and Ipswich, and is appropriate to test transport strategies for western Brisbane.

What data is used?

Transport models need an enormous amount of input data. Demographic data, including population and employment information for the study area, together with details of the road and public transport networks, are coded into the model.

Queensland Government
Queensland Transport

Detailed demographic information is sourced from a range of agencies, including the Australian Bureau of Statistics and the Queensland Government's Planning Information and Forecasting Unit.

As new information becomes available, it is re-run in the model as part of a validation and sensitivity testing process.

How can the model predict the future?

One of the basic assumptions used in transport modelling is that it reproduces current transport conditions and can therefore project future transport conditions.

The model is tested to see if it reflects current transport operations (i.e. by using on-site traffic counts). If the model reproduces current conditions, the input data can be changed to reflect future year demographics and transport infrastructure, and thus be used to predict/forecast future year transport operations. The model is particularly useful in comparing alternative future nework options to see differences in performance.

Early findings

This investigation has prepared:

- information on existing conditions which describes the current network condition
- 2026 base case information which reflects projected future network conditions.

Copies of this information will be available on the website or by contacting the team.

* Queensland Transport acknowledges that there is more to planning a transport network than modelling. Community feedback plays an important role in understanding how, why and when people use the network. While quantitative (statistical) data serves a purpose, your feedback (qualitative) is vital to help the investigation team to gain a better understanding of your needs and values.

Input data for the model includes*:

- Detailed demographic information from sources such as the Australian Bureau of Statistics and the Queensland Government Planning, Information and Forecasting Unit.

Output data from the model includes:

- Information about where people will travel to and from in the future.
- The routes drivers take between A and B.
- Levels of traffic congestion on the road network.
- Public transport patronage on different routes and services.
- Journey times between origins and destinations.
- The total number of trips made.

To find out more visit our website www.wbtni.net.au or to have your say on the investigation, please contact the team:

1800 636 896

info@wbtni.net.au

Queensland Government
Queensland Transport