

ICTC Conference Geelong

Project Title: Brisbane Urban Growth (BUG) Model

Presenter Name: Chean-Piau Lau, Brisbane City Council

Project Abstract

Brisbane is anticipated to grow rapidly over the next 15 years as one of the fastest growing cities in the South East Queensland region. Various scales of brownfield redevelopment are already in progress. It is expected that the rate and scale of brownfield redevelopment will intensify further as the last remaining greenfield land in Brisbane is fully developed while Brisbane continues to grow strongly as a major economic capital.

In response to this growth and with an aim of reaching the South East Queensland's Regional Plan target of 156,000 new dwellings by 2031, Brisbane City Council (BCC) is undertaking various Neighbourhood Planning and Urban Renewal projects. Until recently testing of the various scenarios tabled under these planning initiatives was a cumbersome and laborious task.

In response to this the BCC set out to create a growth simulation model that provided the user with an efficient means to test multiple planning scenarios and the likely effect that they will have on development sequencing across the city.

The Brisbane Urban Growth (BUG) Model has successfully changed the approach of forecasting future development and the planning of urban infrastructure in Brisbane. The BUG Model is a GIS based growth projection modelling tool. The model projects the likely sequencing of development across the city at a property holding level allowing the user to aggregate results into any catchment as required.

The BUG Model has so far been used to add value to the following projects:

- Brisbane Priority Infrastructure Plan (including growth projections and detailed demand analysis for infrastructure networks)
- River City Blueprint; and
- Various Neighbourhood Planning Initiatives

The BUG Model has provided council with a central resource to manage and use its considerable land use and planning related databases. Considerable positive feedback has been received on the benefits to Council and the greater planning community of a ground-truthed growth projection model for one of the largest Local Government Areas in Australia.

