

RP2021: GREENING SUBURBAN TRANSPORT USING ACCESSIBILITY MODELLING TO PLAN FOR TRANSITIONS

Research Question

How can the SNAMUTS accessibility model best be used in the process of strategic land-use/transport planning towards urban transitions?

The research will look at current accessibility models and visualisations used in strategic planning; the potential impact of SNAMUTS on strategic planning outcomes, and whether it can contribute to knowledge translation between planning research and practice.

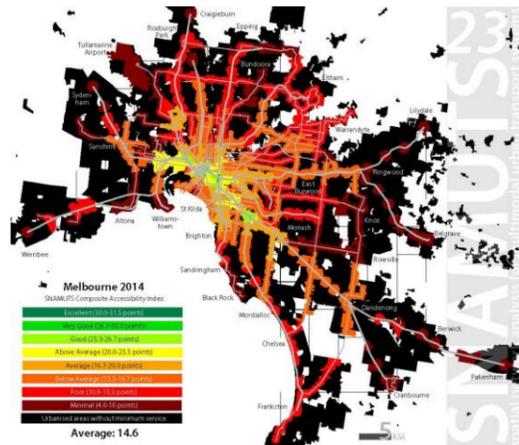


Figure 1: SNAMUTS accessibility map.

Methodology

The research uses an experiential case study to test the value of the SNAMUTS model. The case study is the strategic planning for the Monash NEIC in SE Melbourne. Planning professionals currently working on this process will be shown SNAMUTS mapping of accessibility under different demographic and transport-supply scenario models and the impacts on the planning process will be observed and observe the impacts that

SNAMUTS. The analysis will be grounded in an understanding of knowledge translation in a design science (urban planning) as outlined by Straatemeijer et al (2010).

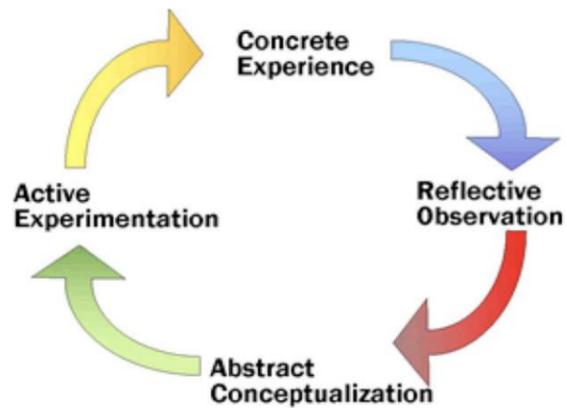


Figure 2: experiential case study is a method suitable for sciences that aim to improve real-life processes.

Since planning is concerned with not only understanding the world, but also changing it, the goal of research is to develop and test solutions that improve current processes. The aim of an experiential case study is to generate grounded and tested prescriptions to be used in other planning contexts beyond the case study.

The study will consist of 1) a review of visualisations in strategic planning in Victoria; 2) interviews with planning professionals; 3) a SNAMUTS workshop with planning professionals.

These steps will allow us to take observational knowledge into active experimentation, and use the concrete experience to formulate informed models of how accessibility modelling can be used in planning.

Results

The research commenced in December 2016 and the first results will be available in early 2018.

Anticipated impacts

Improvements to strategic and integrated planning to respond to challenges of climate change and technological change.



Figure 3: Monash National Employment and Innovations Cluster – draft transport framework plan (2015).

Accessibility models such as SNAMUTS help us understand the interlinked effects of changes to transport and land use.

This research will contribute to our understanding of how accessibility models can be used in real-life planning situations of strategic importance to the future of Australia.

The main intended outcome of the study is to understand how the Victorian strategic planning process responds when encountering SNAMUTS. It responds to the identified need to introduce big data modelling to planners through workshops. Literature finds that experiential testing in realistic practice-based situations is the best way to accomplish this goal.

Further information

To find out more about CRCLCL: Greening Suburban Transport, head over to our project website:

<http://www.lowcarbonlivingcra.com.au/research/program-2-low-carbon-precincts/rp2021-greening-suburban-transport>

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