

URC RESEARCH REPORT

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Project Title: Reprogramming Sunnynook as an Urban Transport Node

RMOL#: RIO8220

What are the research questions?

How is the introduction of a public transportation node (busway stop) into an urban neighbourhood likely to affect the urban systems already in place if no other changes to the neighbourhood are planned and implemented?

Alternatively, if the wider social, environmental and economic benefits are considered, then what type of parallel, or subsequent, transformation is required of the existing urban form and infrastructure to maximise such benefits?

What are the key issues and opportunities afforded by the introduction of the transport node?

Rationale

The rationale included in my application has remained relevant.

Methodology

We slightly revised the methodology proposed in our application by utilizing a scenario approach to identify the key issues to be addressed in the development of a town centre. In this approach, we devised four scenarios for the development of a new town centre. Each scenario occupies a different portion of the site, and has its own logic in terms of how it relates to the existing urban fabric. In the first scenario, the town centre develops along the motorway, in the second it develops around the existing park. The third scenario proposes a centre that develops within the interior of existing neighbourhood blocks, while the fourth suggests that it develops along Sunnynook's main arterial route. We then analysed these scenarios according to a list of approximately twenty criteria. We developed the criteria based on our analysis of the site and our discussions with the North Shore City Council.

We undertook three sets of drawings for the development of the scenarios and their subsequent assessment. The first set of drawings consisted of analysis of existing site conditions. These included all natural, built, and programmatic aspects of the site, and relate directly to the first research question. The second set of drawings illustrated the four town centre scenarios, and relate directly to the second research question. The third set of drawings outlines two final proposals for the development

of a town centre (hybrids of the original scenarios) based on our analysis. This relates the development of a town centre to the third research question. A combination of hand drafting and digital drafting were used for completing each of the three stages of drawings. Final drawings for each stage were digitally rendered, although we are now considering hand rendering some of the final drawings as well.

4. Outcomes / findings

We are currently in the process of submitting abstracts to two conferences. Participation in each conference will lead to publication of a double-blind peer reviewed paper. The two conferences are: Positioning Planning in the Global Crises conference in Bandung, Indonesia on November 12-13, 2009, and the International Conference on Sustainable Architecture and Urban Design, University Sains, Malaysia, March 4-5, 2010.

We also intend to publish an article (non-peer reviewed) in a local journal, such as Architecture New Zealand, outlining our research.

One of the most rewarding aspects of the project has been developing a working relationship with the North Shore City Council. We have been in regular contact with the Council throughout the development of the research. Their input has been invaluable, and they have been very supportive throughout the project.

One difficulty we experienced as a result of our scenario approach was trying to illustrate the scenarios without designing them. Generally in architectural practice, as soon as one draws a building on a site, one begins to critically assess it in terms of design. We therefore found it difficult to draw each of the scenarios without, to some extent, designing them. This proved problematic, as our primary research goal was to identify issues, not to design a new town centre.

As a result, we utilized a 'rubber stamp' approach to drawing the buildings in our scenarios: the scale of all proposed buildings in each scenario is the same, and the buildings are placed at regular intervals along parallel axes, facing in the same direction. The size of buildings, their distance from each other, and their placement is within reason, but not intentional. The buildings, therefore, serve a twofold purpose: they are placeholders, identifying the portion of the site upon which a more considered design would evolve, and they facilitate calculations (population density, percentage of site covered) for the assessment of each scenario.

The scenario approach, though it proved difficult to work with at times, worked well as an analytical tool. It facilitated the identification of issues involved with the development of a town centre at various locations on the site, as we could assess each location with respect to our criteria. By simply manipulating the number of buildings, their proximity to each other, or their height, we could alter variables such as population density, percentage of site covered, percentage of open space as opposed to built space, relative scales of existing and proposed buildings, land available for car parking, and the potential for energy efficiency.

5. Publications and dissemination

We are still in the process of designing/printing a small document containing our drawings and research findings for the North Shore City Council.