

# NEIGHBOURHOOD SUSTAINABILITY WORKSHOP *SUMMARY REPORT*

A REPORT PREPARED  
FOR BEACON PATHWAY LIMITED

WRITTEN BY Megan Howell

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## **SUMMARY REPORT**

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## 1. EXECUTIVE SUMMARY

This report provides a record of discussions at the Beacon Neighbourhood Sustainability workshop, held 2 June 2005. It forms a contribution to the Beacon Neighbourhoods Research Project NH101/102.

Beacon Pathway is pursuing an objective of 'creating homes and neighbourhoods that work well into the future and don't cost the Earth.' The intention of the project stream is to develop knowledge and practical guidance for the sustainable development and redevelopment of neighbourhoods.

The purpose of the Neighbourhood Sustainability workshop was:

- To identify the elements that contribute to sustainable neighbourhoods.
- To design a series of neighbourhood sustainability indicators.
- To establish an expert group that will have an ongoing influence in the Beacon Neighbourhoods Programme.

The research team introduced their approach, centred on seven domains of neighbourhood sustainability:

- Neighbourhood satisfaction
- Functional flexibility
- Minimised costs and cost uncertainty
- Civic participation
- Environmental protection and enhancement
- Resource efficiency
- Minimised greenhouse gas emissions

The workshop identified elements of that contribute to neighbourhood sustainability, particularly:

- Personal mobility
- Accessibility
- Mixed use
- Human scale development
- Community
- Safety
- Affordability
- Reduced environmental load
- Resource efficiency and improved local sufficiency

Discussion at the workshop was also helpful in uncovering challenges for the successful implementation of Beacon's goals for sustainable neighbourhood development. Participants underscored the need to provide guidance for different kinds of neighbourhoods (e.g. greenfields, brownfields, existing suburbs), as each will demand different responses and prioritisation within the array of sustainability issues.

The contributions from this workshop are being incorporated into the final report from this phase of the Neighbourhoods project. The report will set the parameters for evaluating the case studies set down for the next research phase. Workshop participants will be kept informed with progress updates, and invited to contribute at key junctures throughout the life of the research project.

## INTRODUCTION

The Beacon Neighbourhood Sustainability workshop was held on 2 June, 2005. The purpose of the workshop was:

- To identify the elements that contribute to sustainable neighbourhoods.
- To design a series of neighbourhood sustainability indicators.
- To establish an expert group that will have an ongoing influence in the Beacon Neighbourhoods Programme.

## 2. BACKGROUND

### 2.1 About Beacon Pathway

Established in May 2004, Beacon Pathway is a collaborative research consortium of established players in residential construction - Building Research, Fletcher Building, New Zealand Steel, Scion (formerly Forest Research) and Waitakere City Council. For research, shareholder funding is matched, dollar for dollar, by monies from the Foundation for Research, Science and Technology. On this basis, Beacon is embarking on an eight-year, \$12 million research programme into sustainability in the residential built environment.

Beacon believes the most obvious place to start “living sustainably” is at home. Our houses – how they’re built, what they’re made of, how we use them and how they relate to other houses and facilities in our neighbourhoods, towns and cities – determine how well we live, and how well we treat the Earth.

Beacon aims to encourage and improve New Zealand’s sustainable living by researching physical building technologies, construction industry practice, urban planning, policy and regulation and consumer understanding of sustainable living practices – and to provide reliable, accessible information to enable New Zealanders to make the choice to live more richly.

Beacon’s vision is simple:

*Creating homes and neighbourhoods  
that work well into the future  
and don’t cost the Earth*

### 2.2 Background to the Neighbourhoods project

Although the bulk of the Beacon research programme is focussed on dwelling-level solutions, Beacon has recognised that it is impossible to create sustainable houses in isolation of their communities. The Neighbourhoods project stream addresses the question of how dwellings are ‘put together’, and the interdependencies between household and neighbourhood, and neighbourhood and city.

The intention of the project stream is to develop knowledge and practical guidance for the sustainable development and redevelopment of neighbourhoods. Research will generate:

- A set of indicators of neighbourhood sustainability, quantified where possible and benchmarked against international best practice.
- Case studies identifying lessons and best practice for NZ neighbourhood sustainability.
- Model *Code of Practice* details for uptake by Councils and developers.
- Workshops and dissemination to encourage uptake.

The current phase of the project is concerned with the nature and measurement of neighbourhood sustainability, with a focus on the built environment of neighbourhoods. The purpose of this phase of the project is to develop a first draft of the model Neighbourhood Sustainability Framework, with robust measures, to guide the development and redevelopment of urban New Zealand neighbourhoods. The research is focussed on those issues of neighbourhood sustainability that:

- are influenced by neighbourhood level physical form and structure;
- can currently be controlled through planning tools, or those that may be able to be in the near future; and
- have a significant impact on sustainability, are measurable and are practical.

Looking ahead, the project will apply the draft Framework to a number of existing case study neighbourhoods – to identify the sustainability features in different kinds of neighbourhood forms, and to begin to understand what might be addressed in different neighbourhoods and at different stages of neighbourhood development.

### **2.3 Our assumptions and parameters**

The research team has worked to clarify their assumptions about neighbourhoods, and the parameters of the research project, as listed below. As we progress further into the research, we expect to uncover – and challenge – many more issues. The list is, therefore, a living document that will be reviewed regularly throughout the project.

The Beacon Neighbourhood project:

- Is focussed on the residential built environment, and how that influences more sustainable performance.
- Is not focussed, at this stage, on the socio-economic or behavioural drivers of neighbourhood sustainability, except as they are influenced by the fabric of the built environment.
- Is interested in different types and phases of neighbourhood development – for example, greenfields, brownfields and retrofit.
- Acknowledges the Auckland Regional Growth Strategy as a primary framework for shaping Auckland neighbourhood development and redevelopment, and the likely uptake of similar nodal development approaches in other regions.
- Recognises the complexity of neighbourhood dynamics, and does not expect to arrive at a ‘one-size-fits-all’ response.
- At the same time, believes that there are a range of sustainability issues that are common to all neighbourhoods, even if the particularities of different neighbourhoods lend themselves to different mixes of priorities and solutions.
- Recognises that the nature of activities in neighbourhoods will change over time, and embraces the design challenge of creating neighbourhoods that are robust, flexible and resilient spaces.

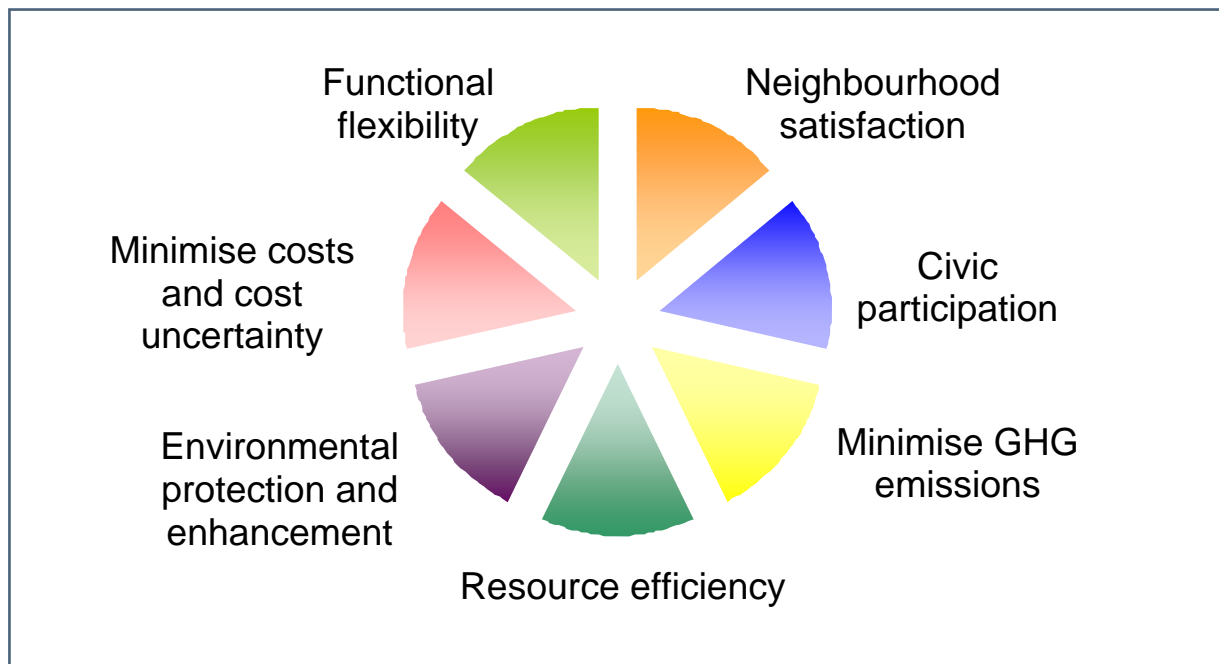
### 3. THE WORKSHOP

#### 3.1 Presentations

The research project team introduced the workshop with a series of presentations. These are attached in Appendix II.

#### 3.2 Discussion

Participants were asked to briefly discuss their vision of a sustainable neighbourhood in small groups, and then to focus on the seven domains introduced by the research team (see figure 1 below).



**Figure 1 Seven Domains of Neighbourhood Sustainability**

Ideas were remarkably consistent across the groups, highlighting:

- **Personal mobility** – walkability, access to public transport, reduced reliance on private cars, urban form that supports personal mobility
- **Accessibility** – ability to access opportunities to work, live and play with an increased proportion of trips internal to the neighbourhood
- **Mixed use** – building stock, character and use, density, employment, local shops, public space including streets
- **Human scale development** – connection between scales and the integration of different neighbourhoods into city form
- **Community** – kinship connections, the ability to age in place, reconnection with place, unplanned interactions with others
- **Safety** – in private and public spaces, tied to sense of belonging
- **Affordability** – mix of tenure and housing types, so our kids can buy into the neighbourhood
- **Reduced environmental load** – stormwater management, air quality

- **Resource efficiency and improved local sufficiency** – energy generation, decentralised infrastructure and food supply

In the afternoon, the research team posed the following questions, and the ensuing lively discussion included a range of responses.

**a. What styles of built environment are conducive to creating desirable outcomes?**

- Housing choice, affordability, tenure mix, flexible house forms and adaptive neighbourhood styles (e.g. ability to move houses off-site, amalgamate sites etc.).
- Transport availability and connections within walking distance, the quality of waiting environments (e.g. bus stops).
- Layered relationships, and permeable boundaries between private and public, house and neighbourhood, neighbourhood and city. Layered scales of facility provision. Boundedness and identity (e.g. impact of major roads).
- A sense of ownership, identity, and long-term commitment (the option to stay put). Community hubs, spaces for informal meeting, often via children and/or dogs. Making it possible to choose local options.
- Access to work (incl. schools) and play – facilities, spaces, amenities. Residential density to support retail/commercial activity.
- Quality of public spaces – streets, roads, parks. Safety and security.
- Low impact design principles.

**b. What prevents those built environments being achieved? What could encourage them?**

- Sustainability scenarios: rising costs, energy use etc. What will we need to do locally? What are the implications for neighbourhoods? How do you design adaptable neighbourhoods?
- Who takes responsibility for provision of services that aren't initially economically viable? Shareholders require sensible return on investment.
- Regulatory issues. Height, design criteria. Limits on use of rainwater tanks, etc. Need more sophisticated regulation to lead developers. Requiring structure planning for significant development/retrofitting.
- Supply side issues. Are developers aware of the possibilities? Why haven't good examples been copied?
- Demand side issues. Perceptions of what people want. Lack of sophisticated awareness of people about how they use their houses, neighbourhoods.
- Lack of technologies? Skill? Understanding? Designing appropriate technologies for apartments, medium density (e.g. rainwater collection). Such technologies need testing.
- Developers, councils and consumers need imagination, drive, and models.
- Lack of focus on these issues – systems are focussed on cars, pipes etc.

**c. What contribution can this programme make? What would a Neighbourhood Sustainability Framework entail?**

- Either setting minimum standards or encouraging best practice.
- Performance based vs. standards based regulation, and the place of rules vs. pre-development dialogue (Beacon could provide a list of criteria to help discussion).

- Feeding into regulatory mechanisms, e.g. NZ standards and subdivision handbook, District plans (could set minimum averages instead of minimums).
- Government policies, e.g. Govt Ageing and Disability strategies, local government policies and Long Term Council Community Plans [LTCCPs].
- Improving the interpretation of standards (i.e. improving skills of surveyors, other professionals, developers, regulators).
- Incentivizing good development.
- Pricing of resources, leading to changed behaviour and changed urban form.
- Demonstrating desirability through a range of projects to show possibilities.
- Mapping typologies: what are these types of developments doing well, or doing badly?
- Educating customers about quality.
- Developing a list of “things communities need to think about.”
- Developing a “Your Neighbourhood” manual.
- Providing specialist bulletins on different aspects of sustainable neighbourhoods.

#### **4. WHAT WE LEARNED**

Workshop participants offered a number of important insights that helped to clarify our thinking, sometimes confirming and sometimes challenging our approach. Ideas we took particular note of include:

- It is important to provide guidance for different kinds of neighbourhoods (e.g. greenfields, brownfields, existing suburbs), as each will demand different responses and prioritisation within the array of sustainability issues. The Auckland Regional Growth Strategy means that certain kinds of development (e.g. around town centres) are going to be more dominant in the coming decades, so these would merit particular attention.
- Neighbourhoods form an important connection between homes and cities, and can be thought of as another ‘layer’ of community. The boundaries between private and public spaces need to be well designed – suitably permeable to allow interaction, yet also defined enough to allow personal privacy.
- Appropriate scales of intervention are linked with the staging of development. For example, what will be possible in an existing suburban situation will be quite different to a brownfields or greenfields development.
- Separating built environment influences from other aspects (such as socio-economic mix) – even conceptually - is a substantial challenge.
- Children are an excellent indicator of neighbourhood sustainability. For example, their ability to get to school independently requires a safe, walkable neighbourhood form.
- The term “diversity” needs to be handled with care, and clearly defined to reflect the fine-grained diversity that exists within relatively homogenous groups as well as between them. (For example, the diverse accessibility needs of different age groups within a community.) Homogeneity is not necessarily unsustainable, nor is diversity automatically sustainable.
- Creating the mix of activities necessary for a neighbourhood to provide access to appropriate local services is beyond the scope of developers. This is partly a challenge of timing: without a critical mass of resident population, there is no economic incentive to develop services; but by the time the population is established, many development opportunities will have been built out. Who takes responsibility for banking the land?

## **5. NEXT STEPS**

The contributions from this workshop are being incorporated into the final report from this phase of the Neighbourhoods project. The report will set the parameters for evaluating the case studies set down for the next research phase. Workshop participants will be kept informed with progress updates, and invited to contribute at key junctures throughout the life of the research project.

## **6. CONTACT DETAILS**

For further information on the Neighbourhoods research stream, please contact:

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For general information about Beacon, visit [www.beaconpathway.co.nz](http://www.beaconpathway.co.nz)

## **APPENDIX I. LIST OF WORKSHOP PARTICIPANTS**

- Blair Badcock, Housing New Zealand Corporation
- Brenna Waghorn, Auckland Regional Council
- Darren Utting, Synergine
- David Halsey, Fletcher Residential
- David Mead, Hill Young Cooper
- Jane Puddephatt, Auckland Regional Council
- John Mackay, Waitakere City Council
- Karen Donnelly, Auckland City Council
- Nick Collins, Beacon Pathway
- Rachel Hargreaves, BRANZ
- Rau Hoskins, Design Tribe
- Robin Allison, Earthsong
- Robin Kearns, University of Auckland Geography Department
- Ross Moffatt, North Shore City Council
- Sumita Ghosh, Landcare Research
- Tricia Austin, University of Auckland Planning Department

### Project team

- Denise Bijoux, consultant
- Katja Lietz, Waitakere City Council
- Kay Saville-Smith, CRESA
- Mark Prain, Maven (facilitator)
- Megan Howell, Waitakere City Council

## **APPENDIX II. WORKSHOP PRESENTATIONS**

The following presentations were delivered as part of the workshop, and are attached for participants' reference:

1. Introduction to Beacon - Megan Howell
2. Visions of sustainability for the built environment at the urban neighbourhood level - Denise Bijoux
3. The built environment & socially & economically sustainable neighbourhoods? - Kay Saville-Smith
4. Scale and boundary of effects - Katja Lietz