

Built Environment

This Built Environment Theme Paper has been prepared as part of the START – Sustaining the Auckland Region Together project. The paper reflects a range of views and does not represent official positions of the organisations involved.

1.0 Introduction

This paper presents a summary of the expert group’s discussion about the built environment dimensions of a sustainable future for the Auckland region. It proposes ‘end state goals’ for the built environment of the Auckland region, identifies opportunities and challenges that we will need to meet, and proposes a series of actions that might help to get us closer to the goal.

The definition of the built environment we have adopted for this work is as follows:

“The built environment encompasses the buildings, spaces, places and structures in which we live, work and play. It is the house you live in; the office, factory, school or shop you work in; the gym, café or playground you socialise in; and it’s the connecting spaces between these places. The built environment is what makes our towns and cities hum. It contributes to the activity and energy that people choose to live in cities and towns for.” (Ministry for the Environment, 2006)

The scope of the built environment theme in the context of the START project has been determined as the pattern and hierarchy of built environments in the Auckland Region and the connections between them. The hierarchy within the region’s built environment have been categorised into four generic but distinct levels, for which different actions and outcomes can be ascribed. These are:

- Individual House or Building
- Neighbourhoods (streets)
- Community (area or ‘suburb’)
- Sub-regional Centres
- Regional Centre

The built environment theme is concerned with the ‘micro’ level of the city region at the individual building unit level as well as what collectively makes up the place, neighbourhood, centres and community. Whilst this theme incorporates some spatial relationship components, the overall regional spatial relationships between different environments, or land-use clusters, are more ‘macro’ considerations addressed within the related Urban Form & Infrastructure Theme.

A key consideration, and building block, in the exploration of a more sustainable built environment is the notion of the neighbourhood or community. This is where people live their lives, interact with others in social, cultural and physical settings, and derive connection and identity. This is not to undermine the importance of productive business areas or centres within the region. However, most of our endeavour and

activity in pursuit of a sustainable built environment will need to be conducted at the level of local communities.

2.0 End State Goals

The following end-state goals are envisaged for the built environment of the Auckland region in the future, as a result of the collective implementation of all elements of the START framework:

Quality

Built environments in the Auckland Region that are planned, constructed and continuously maintained to a high standard.

Adaptability

Built environments that can adapt to changing needs and conditions in the Auckland region and beyond.

Natural Environment

Built environments that reflect and enhance the natural environment of the Auckland region, and that optimise people's access to it and enjoyment of it.

Governance and Management

An integrated approach to managing changes to the built environment of the Auckland region supported by quality and active governance, management, education, leadership, and high levels of community participation.

Resource Efficiency and Autonomy

Built environments in the Auckland Region that use land and other resources efficiently and that are more autonomous and self-reliant in terms of resource production, consumption and management (e.g. energy, water, waste).

Amenities

Built environments in the Auckland Region that offer an optimal level of amenities for all who live there.

Diversity

Built environments in the Auckland Region that support diversity and allow people to live, work and pursue their lifestyles in ways they wish to.

Tangata Whenua

Built environments in the Auckland Region that honour significant sites and reflect the histories, perspectives and aspirations of tangata whenua.

Identity

Built environments in the Auckland Region that recognise and reinforce Auckland's leading place in, and relationships with, the Pacific.

Communities for Life

Built environments in the Auckland Region that enable 'communities for life' whereby people can have the ability to live their lives in one community.

3.0 Seeds and Constraints for the Built Environment

3.1 Seeds for Sustainability

In terms of management and direction of change in the built environment of the region, we should focus on the region's natural assets and past successes. 'Assets' are interpreted as intrinsic characteristics of our place, and 'successes' are recognised as the positive consequences of past choices, and often occurred where our assets were preserved or enhanced through public decision-making.

Our Assets	Our Successes
<ul style="list-style-type: none"> ▪ Auckland is blessed with many natural environmental features that make it attractive – access to the east and west coasts, beaches and harbours, native bush, proximity to rural hinterlands and countryside environments, distinctive volcanic landscapes. ▪ The New Zealand lifestyle and more particularly the Auckland lifestyle is what helps to set us apart from other international cities and provides a “competitive advantage” over others. It is what draws the ex-pats back to live and bring up their children, and it's a compelling attractor for new migrants. ▪ Auckland's growing mix of cultures and ethnic groups provides this city with a rich cultural diversity. ▪ We have history and heritage that is reflected in our built environments – although we have had varying success in retaining this. ▪ Auckland already has definable, distinctive communities (areas, suburbs, neighbourhoods), with some successfully functioning as “urban villages” – that is offering choices for live, work and play. 	<ul style="list-style-type: none"> ▪ We have made strategic land acquisitions to preserve land for parks and to protect special landscapes that are an intrinsic part of the Auckland lifestyle. ▪ Our open spaces, our proximity to beaches all around our coastal edges (east and west) and their connections to their neighbourhoods. ▪ We have a Regional Growth Strategy that identifies a network of centres and growth nodes – that guides where and how growth is to be directed. We are now starting to see higher density development (particularly residential) in our town centres and sub-regional centres. ▪ Recognising and starting to better utilise Auckland's “assets”, such as comprehensive redevelopment of the Auckland waterfront area with redevelopment of the viaduct harbour and proposed Western reclamation redevelopment.

3.2 Constraints and Challenges

In order to move in the right direction towards achievement of the end-state goals identified for the Auckland Region's built environment, a number of issues and constraints will pose challenges that will need to be addressed.

Our Issues	Our Challenges/Constraints
<ul style="list-style-type: none"> ♦ We are still living with a historical urban form of separation of land uses, and we are still reinforcing that pattern with 	<ul style="list-style-type: none"> ♦ The resulting suburban pattern of sprawl with households further away from town centres and employment opportunities is

<p>continued separation of where people live and opportunities for work, business, retail, recreation etc. As a result we have slowly eroded away the traditional concept of the “village” that provided opportunities for live, work and play.</p> <ul style="list-style-type: none"> ◆ The political nature of planning, and the 3-year political cycle, does not give adequate time for strategic planning and the implementation of long-term goals and visions. ◆ The systems of local government have not been conducive to Maori representation and thus Maori have been largely excluded from governance and decision-making processes. This has been to the detriment of the city in terms of distinctiveness and ability to see Maori identity in built environments. ◆ Developers generally have a short-term view of return from investment, where we need a more comprehensive longer-term view of land and property redevelopment in our growth areas. ◆ We don't have the supporting infrastructure (hard and soft) to aide successful intensification. ◆ There are physical constraints to Auckland's geography – the location of Auckland on an isthmus creates bottlenecks for infrastructure provision, particularly transport movement around the region. ◆ A lot of recent intensification has not been done particularly well – this has lead to a negative public reaction and aversion to higher density residential development. ◆ Our existing building stock both residential and business is not designed and built to be energy efficient and sustainable, and there are not the mechanisms or incentives in place to ensure new building stock is built more sustainably. ◆ There is a real concern that we have been destroying the character of our built environments – those that have a sense of place, that have their own distinctive qualities. We are in danger of “homogenising” all our built areas and making them indistinguishable and bland by not protecting, maintaining and building on the qualities that set them 	<p>making it much more difficult to integrate land use and transport.</p> <ul style="list-style-type: none"> ◆ Costs of growth are increasing – saying no to growth is not an option, but we need to be smarter in getting the outcomes we want delivered. To get innovative developments requires a radical change in funding mechanisms both at central and local government levels. ◆ A lot of the decision-making is inherently risk averse and done by those who are not necessarily skilled in the field or at the “leading edge” thinking of planning. ◆ Auckland has many tiers of government (local, regional and central), which makes it harder to get an agreed and co-ordinated approach. ◆ We need to turn barriers into opportunities – our region is bound by water yet we fail to fully utilise our harbours for alternative transport options. ◆ Although we have the Auckland Regional Growth Strategy and we have identified the need to contain growth and have identified growth nodes, we have not done enough investigation into how to actually make it happen. What remains constant is the suburban pattern and continued suburban growth occurring over much of Auckland. ◆ Our built environment needs to be more responsive to the different cultural needs and acknowledges that intensification and certain densities do not always meet the aspirations of some cultures – there is no one size fits all! ◆ There have been problems with implementing the Regional Growth Strategy and the community perception of intensification has struggled. There is still strong community desire for detached housing and opposition to higher density housing forms. ◆ We need to find new ways to fund New Zealand home ownership and for providing housing for different groups of society. ◆ We are constrained to achieve comprehensive redevelopment of identified centres/ corridors where land ownership is fragmented, and ad-hoc/quick gain development decisions are made. Mechanisms are needed to ensure redevelopment opportunities are able to be realised in strategic locations – even if
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<p>apart.</p> <ul style="list-style-type: none"> ♦ Housing affordability in Auckland is becoming a growing concern – land and property values are making home ownership less accessible, particularly in more desirable communities. ♦ The on-going costs of running/ operating homes is becoming an affordability issue with rising energy costs. 	<p>this needs to happen in several development phases over time.</p>
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4.0 Impact of the Forces

Six 'Forces of Change for the 21st Century' have been identified as part of the START project, and presented in a series of working papers for debate. These forces have been identified as being likely to impact the Auckland region and its people over the next century.

Considering the built environment in light of the Forces, the following potential impacts and opportunities emerge.

Climate change

Lifestyle aspirations of living close and accessible to coastal and beach areas are potentially threatened by climate change. Impacts of climate change are likely to cause conflicts for society, such as where people want to live (along north-eastern coastlines, on fertile floodplains, and on exposed ridgelines) and where they can live safely. This could negatively impact our ability to continue to develop built environments to support some of our lifestyle aspirations.

There is a need to start responding to the impacts of Climate Change within our built environments – however these are not insurmountable. This is required at both the individual building level and also for our neighbourhoods and communities in the way that they are structured/organised/ serviced allowing for greater resilience to sudden shocks.

Resource Availability

Aucklanders are heavily reliant on oil-based transport and our current urban form is based on "cheap oil" - this makes it difficult to transition to more sustainable transport options. However rising oil prices and diminishing oil resources can help facilitate the shift to deliver built environments that are serviced and connected by a more sustainable transport network. This can provide the opportunity to strive for well-defined built environments that reflect and support communities and neighbourhoods, recognise settlement hierarchies and facilitate better connections between nodes/ centres.

The challenge of more effectively harnessing the use of resources and better handling the demand and supply side of resources can be directly linked to our aspirations for developing more sustainable options for both the building and functioning of our houses, workplaces and neighbourhoods.

Globalisation

To compete on the global stage it will be critical for Auckland to maintain its natural/physical attributes and the lifestyle opportunities associated with living here. This strongly co-relates to a desired goal of providing a built environment which

reflects the NZ lifestyle aspirations and protecting the valued natural features that are part of Auckland's built environment. The ability for Auckland to develop built environments that enable jobs to be provided in order to allow people to meet their lifestyle aspirations will therefore be a significant contributor to Auckland's global competitiveness.

Fostering the creativity, knowledge and technical skills of people will be enhanced through built environments that encourage creative and innovative business and ways of working.

Technology

Technology already provides many opportunities for more localised and greener approaches to how our built environments function – however the constraint to adopting these has often been the investment and reliance on more centralised networks and systems which we have heavily invested in financially.

The transformation of cities to be organised around economies of scope (where costs fall because of synergies between complementary activities occur, or because overhead is spread across a number of activities), directly aligns to our aspirations for seeking more localised solutions and the development of “complete communities” and developing built environments that foster creativity and innovation.

Demographic changes

As a population we are becoming older and more ethnically diverse. How are the built environments that we have inherited, as well as the building forms and typologies we are currently advocating for, matching our changing populations needs. Whilst it is universally agreed that many parts of urban Auckland do not have the necessary densities to sustain viable public transport, does pushing to achieve the highest density (rather than aspiring to increase density) necessarily leave us with a resilient and adaptable building typology in the long term? As Auckland's population grows it is critical we provide housing that is affordable, culturally appropriate, adaptable to changing needs over time and resilient to the uncertainties of the future.

World Views

The fundamental premise for Auckland to move toward ecological sustainability requires a significant shift in our social values in order to make the necessary changes to our society and economy. The goals we envisage for the built environment require a shift in values – principally the desire to seek more localised solutions as opposed to centralised systems/ networks. Creating neighbourhoods that operate as “complete communities” i.e. containing business, living, amenities, community, social and cultural uses as integral parts – reinforcing a neighbourhood mosaic is essential.

5.0 Actions and Responses

Actions, strategies and responses as means of achieving the end state goals for the region's built environment have been identified in four categories that cover and address the hierarchy of environments. A key action or imperative is the recognition that no aspect of the built environment should remain unchanged, but that some aspects will need to change more than others.

Land and Buildings

- Promote land and site amalgamation over subdivision into smaller lots within existing urban environments through for instance land banking, encouraging subdividers in identified areas to amalgamate sites, require consolidation of ownership by developers before subdivision.
- Setting and enforcing building quality standards for new and existing buildings, and adopting performance standards for buildings and tools that will assist consent decision-making.
- Promoting building systems and design and construction approaches that can facilitate change, adapt to changing uses, or can be cost-effectively replaced.
- Providing positive and negative incentives for individual households to adopt Beacon standards – funding support justified by life-cycle cost/benefit not just initial subsidy cost.
- Ensuring that information and communication technology accessible by all households.
- Promoting public spaces and buildings that cater for specific ethnic, cultural and lifestyle requirements.
- Investing in iconic public buildings and precincts that highlight Auckland's history and competitive strengths.
- Identifying and promoting a range of housing types within each community that provide an appropriate level of social and economic choice for a broad mix of household needs and types.
- Ensuring continuing maintenance, renewal and repair of houses and buildings by valuing durable design and construction, educating owners about repair and maintenance, offering financial and service support for buildings at risk from under-investment, and acknowledging and rewarding owners that maintain their buildings.
- Provision of affordable housing opportunities for people who work within the community in essential services, and for those members of a community who are unable to access the housing market.
- Developing and implementing planning criteria that allow for key Maori cultural values to be observed within the built environment (e.g. connecting wings for extended families, kaumatua flats).
- Incorporating more renewable resource capture and recovery systems in dwellings and building e.g. solar power, rainwater collection, brown water recycling.

Environments and Communities

- Promoting greater development densities through high-quality housing and building intensification in proximity to centres and transport corridors in existing urban areas.
- Maintaining, preserving and enhancing the public realm and spaces by locality-specific and area-wide improvement projects together with active management plans and approaches.
- Increasing the amount of public/private space in natural habitat as a means of protecting indigenous biodiversity.

- Retaining and enhancing natural watercourses and local natural features, and improving accessibility to, and amenity value of, the natural environment where it exists in local areas.
- Minimise the need to travel beyond neighbourhoods particularly for basic needs, by providing for and promoting local shops and affordable, well-located essential services.
- Making sustainable waste/water/energy systems an active and visible part of the built environment at neighbourhood and community level.
- Ensuring that public spaces and heritage sites are actively identified in neighbourhoods and highlight Maori occupation and use of significant sites.
- Creating partnerships with tangata whenua in developing design briefs for neighbourhood urban environments.
- Maintaining the identity of individual communities by strengthening those aspects of the natural and built environment that makes them unique through the preparation and implementation of local area design and development codes.
- Identifying points of difference in the built environment in terms of design, layout and construction between Auckland and other competitive Pacific cities and build on them through district plans, design codes and informed development investment.
- Benchmarking Auckland against other Pacific cities on key 'liveability' and 'community wellbeing' indicators.
- Locating buildings and services within each community that provide for the needs of young people and allow for the needs of the elderly.

Networks and Connections

- Anticipate and provide for changes in the distribution of activity in the region.
- Reducing dependence on motor vehicle through improved walkability, local transit systems, community connections to sub-regional centres and hubs.
- Minimising volume and transit of waste by more localised treatment systems and peak flow management in each community or neighbourhood as appropriate and viable.

Management and Governance

- Community and urban renewal programmes recognised and incorporated as a systemic part of the regional planning process, not just a one-off or ad hoc responses.
- The recognition of the importance of developing and implementing structure and master plans for the built environment that are directly linked to LTCCP's, involve commitment from other key delivery and infrastructure agencies, and increase the vertical integration between building and site to the local environment and regional patterns so that outcomes are optimised and negative impacts minimised.
- Leadership and commitment to master-planning and local area development planning to manage change at community, sub regional and regional levels.

- Creating a formal built environment and design 'champion' group at a regional level to drive improvements in the built environment at all levels.
- Identifying and implementing a small number of visionary building and area master-planning projects to be delivered in 5-7 years that have scale, grab attention, highlight the opportunities and identity of the region.
- Increasing local participation in arts, culture, recreation and sporting activity.
- Forming a regional iwi forum to preside over the development of planning criteria and design guidelines to accommodate Maori and iwi values.
- Establishing or opening up Marae/education centres within communities that enable Auckland to understand its bicultural basis.
- Maximising community participation in community affairs including recognition and support for older peoples participation in community activity.
- Establishing effective neighbourhood and community development and management mechanisms that allow for development and re-development of neighbourhood and community built environments that actively involve stakeholders (residents, business, services).
- Promoting legislative changes to drive more sustainable forms of building and development, and encourage innovative and responsive development proposals and solutions.

Built Environment Expert Group

The built environment expert group consisted of the following people:

- ◆ Kay Saville-Smith, Centre for Research, Evaluation and Social Assessment (CRESA)
- ◆ Nick Collins, Beacon Pathway
- ◆ Martin Udale, McConnell Property
- ◆ Rau Hoskins, Designtribe
- ◆ Stephen Brown, Stephen Brown Environments Ltd
- ◆ Neil Gray, Neil Gray Strategic Projects
- ◆ James Lunday, Common Ground Ltd

The group Convenors were:

- Lesley Jenkins, North Shore City Council
- Matthew Everett, Ministry for the Environment

The group Navigators were:

- Ross Moffatt, North Shore City Council
- Vanita Ranchhod, Waitakere City Council

Assisted by Phil Chung, North Shore City Council

Appendix Two: Historical Background

What can we learn from the past?

There are problems with implementing the Auckland Regional Growth Strategy and the community perception of intensification has struggled. Some explanations to this include:

- ◆ The political nature of planning. A lot of the decision making is driven by politicians who are inherently risk adverse and not at the cutting edge of planning. The 3-year cycle of politicians does not give adequate time for any sort of strategic planning and the implementation of long-term goals/visions.
- ◆ The progressive mono-cultural overlay associated with Auckland's growth has resulted in a city, which lacks distinctiveness within its built environment and fails to give tangata whenua a sense of ownership or pride in their city. Governance systems which lock in Tangata whenua representation at all levels are required to bring the Tamaki Makau Rau back into Auckland.
- ◆ We don't have the supporting infrastructure in the Auckland region to aide intensification.
- ◆ A lot of intensification has not been good.
- ◆ The tiers of government (local, regional and central) make it difficult in comparison to similar cities like Brisbane, which has a unitary authority.
- ◆ There are technical difficulties associated with growth.

Communities need to be more representative and self-contained, self-sustaining like a village which have local employment, serving the needs of the local population. We are still not providing this in our developments. Segregation and exclusivity are real detractors from getting good results.

We should be looking at greenfield and brownfield options, as there are opportunities here and it is too difficult to recast the suburbs which is the dominant pattern of development in Auckland. The challenge of a compact city form is to move towards a transit oriented development/polycentric type of development, but not try and rebuild the suburbs.

There is a strong need for capacity modelling, especially when the growth nodes were identified. We have never really looked at what capacity was really available and what needed to happen to realise that potential.

How much has changed? What has remained constant?

Although we have the Auckland Regional Growth Strategy and we have identified the need to contain this growth and have identified growth nodes, we have not done much thinking on how to make this happen. What remains constant is the suburban pattern and continued suburban growth occurring over much of Auckland.

What choices did we make? And what were the consequences (both positive and negative)?

We have continued with our suburban developments, sprawling out further away from city centres or places of employment, business, retail, recreation etc. As a result, we have slowly eroded our traditional town planning.

We have not looked at innovative ways to fund infrastructure, and the result is that this infrastructure is expensive and difficult to put in place. We should be looking at ways to get the infrastructure to pay for itself.

A lot of our decisions and their thinking were 'old-school', and were driven by conservative community values. The result is this suburban pattern with sprawling households further away from town centres making it that much more difficult to integrate land use and transport planning.