

Integrating Health Impact Assessment in Urban Design and Planning: The Manukau Experience

A report prepared in 2010 by
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for the Ministry of Health

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1. INTRODUCTION

1.1 Urban form and public health

This paper explores how a health impact assessment (HIA) process was used to forge closer links between health and urban design agendas in Manukau City. The case study reveals many common interests among public health and urban designers/planners, and also reveals how a public health-oriented approach was able to engage people across a range of sectors, along with Māori stakeholders, to influence long-term planning for a city centre.

The HIA informed the design approach to the city centre and became a catalyst for a greater integration of urban design, planning and health. The process was able to establish links between urban designers and the health and social sectors, which flowed into a subsequent and more expansive HIA process in neighbouring Wiri. These HIA processes laid an important foundation for further collaboration in the newly established Auckland Council, which spans the entire Auckland region.

Over the past decade there has been growing interest in how urban form links with the health and wellbeing of New Zealand populations. People from research, policy and community interests have expressed common concerns about how the design of urban areas can both promote and hinder human health. These concerns were crystallised by the Public Health Advisory Committee (2010):

The way we plan our cities and towns affects the health of New Zealanders. There is a strong link between urban design and aspects of poor health that place a large burden on our communities and health services. In our urban areas, people are walking less, there are more cycle crashes on our roads, and urban air pollutants contribute to the increasing burden of respiratory illness. Cities and towns can be designed in ways that will improve the health of New Zealanders and reduce health service costs.

These issues are also reflected in debate and developments on the international stage, where the Healthy Cities movement has led attempts to create more liveable, walkable urban environments that reduce reliance on private transport and improve the quality of urban spaces. In New Zealand, the Urban Design Protocol provides national guidance for quality urban design, and simultaneously gives voice to health aspirations.

These public health aims are shared by modern thinking in urban design. Charles Landry, writing in *The Art of City Making*, predicted that health and urban design agendas will increasingly come together to shape urban decision-making:

Health-promoting urban design will emerge as a central planning issue over the next decades, underpinned by arguments for containing the car, increasing pedestrian-friendly environments, controlling out-of-town shopping, creating local facilities within walking distance, making cities more compact and investing in public transport (Landry 2006).

1.2 Background

Spatial structural plans are used by urban planners to determine the shape and position of buildings relative to the topography and natural environment. They also provide an opportunity to bring the health and urban design agendas together in a very practical way.

In 2008 Manukau the Healthy City¹ commissioned a health impact assessment to explore the potential health impacts arising from the Manukau Built Form and Spatial Structure Plan. This plan will guide the development of Manukau's city centre for the next 50 years. The HIA explored the potential health issues that needed to be addressed as part of the implementation of the Built Form and Spatial Structure Plan. This approach was seen as being critical to ensuring close alignment of urban design outcomes with population health outcomes, thereby creating a city centre that melds a vibrant city life and active promotion of healthy living, within a landscape that fosters a high-quality public realm, connectivity and adaptability.

The HIA process brought together stakeholders from interests as diverse as disability service providers, health promoters, urban designers and planners, transport planners, community development specialists, researchers, representatives of Māori organisations and health service providers. Important outcomes of the HIA included:

- informing the development of a public domain manual
- bringing Māori engagement into spatial planning in the area
- providing a springboard for a follow-up HIA based in adjoining Wiri, led principally by Manukau the Healthy City staff.

Importantly, the HIA also provided a reference point for concerns about and aspirations for the area at a time when local government in Auckland was undergoing significant change through the establishment of the Auckland 'Super City'.

Manukau the Healthy City commissioned the HIA as part of its overarching intention to place health and wellbeing high on the political and social agenda of Manukau City by promoting intersectoral collaboration and focusing on healthy urban planning. Synergia Ltd led the HIA on behalf of Manukau the Healthy City, and partnered with Hapai te Hauora Tapui to incorporate elements of whānau ora health impact assessment. The Ministry of Health's Health Impact Assessment Support Unit funded the HIA through its Learning by Doing fund.

This paper opens with descriptions of health and wellbeing and then outlines health impact assessment and various concepts in urban design in New Zealand. This is followed by a discussion of the connections between urban form and health, and a profile of the Manukau Built Form and Spatial Structure Plan.

1. Manukau the Healthy City is an initiative that was established in 1989 with the signing of the first Healthy City Charter for Manukau City. It was based in the Manukau City Council and jointly funded by the Manukau City Council and the Ministry of Health. It is now based in the Auckland Council.

The paper then goes on to describe the HIA process used, summarise the key findings of the HIA, and briefly present the Māori perspectives on health and urban form that emerged as a result of the HIA. Finally, the paper explores how the HIA is informing ongoing urban design in Manukau and the opportunities presented by the Auckland Super City for further integration of health and urban design.



2. HEALTH AND WELLBEING

The health and wellbeing of people and communities are shaped by the influences of individual health behaviours, health service access and delivery, and – crucially – by the environments within which people live and work.

Figure 1 shows the different influences on health and wellbeing, ranging from genetic and behavioural factors, through to familial and environmental factors (Dahlgren and Whitehead 1991). The further away the influences are from the individual, the less control the individual has over those factors.

Figure 1: Social model of health



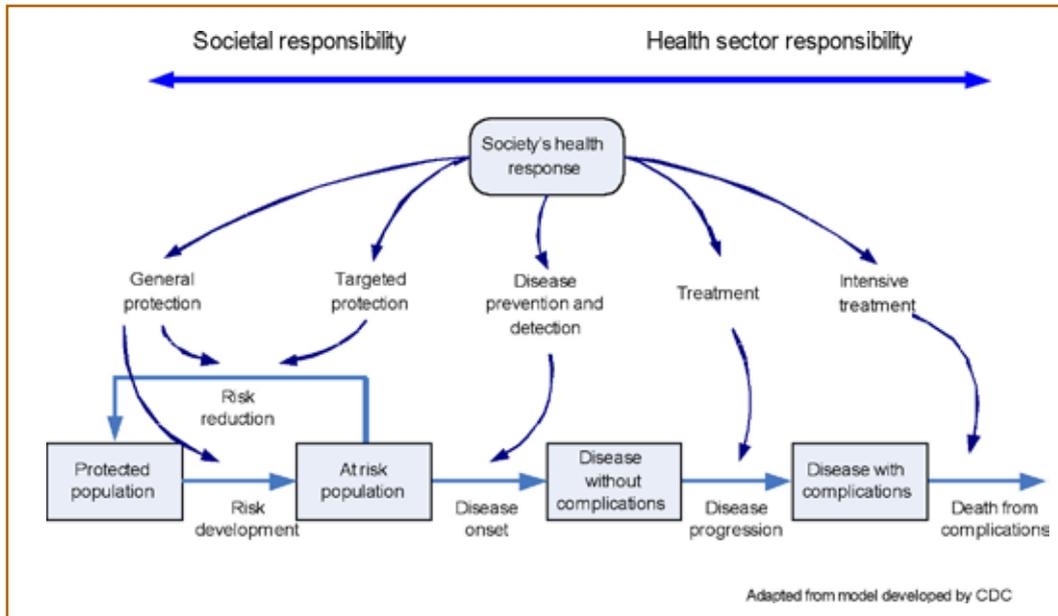
Source: Dahlgren and Whitehead 1991

These broader determinants of health and wellbeing have impacts on people throughout the life course. Figure 2, adapted from a model developed by the Centers for Disease Control in the United States, highlights the influence that different sectors have on the progression of long-term illnesses such as diabetes and cardiovascular disease over a person's lifetime (Milstein 2008).

At the left-hand end of the continuum there is the 'protected population' – those who are generally healthy and not experiencing illness or impairment. Further along the continuum are people who are more at risk of contracting disease, who may progress to the initial stages of disease, and if not managed appropriately may develop advanced disease with complications. The further along the continuum people travel, the greater the responsibility of health services in maintaining their health and wellbeing. Conversely, for the protected and at-risk populations (left-hand side), wider societal factors play a critical role in supporting health and wellbeing.

It is at this 'protected' end of the continuum that there is a societal responsibility to protect the health of the population. This includes policies and planning such as urban design, transport, social assistance, environmental management and housing.

Figure 2: A systems-based health progression model



Undertaking a health impact assessment of a proposed policy or project can help to identify the range of influences, both in the health sector and in wider society, and determine the effects the proposed policy or project could have on health and wellbeing outcomes.

3. HEALTH IMPACT ASSESSMENT

Health impact assessment (HIA) is a systematic way of identifying and predicting the potential health impacts of a proposed policy, strategy, plan, project or programme. It offers a mix of methods and tools by which to judge a proposal's anticipated effects on the health of a population, and the distribution of those effects within a population (Public Health Advisory Committee 2005). HIA is a tool used to assist better policy making and planning, based on evidence, to support improved health outcomes and foster greater collaboration between sectors and stakeholders.

The aim of HIA is to enrich the processes of policy and planning, providing a broader base of information in order to make explicit the trade-offs between health and other interests. It also enables decision makers to identify how to enhance potentially beneficial effects on health and wellbeing and to reduce or mitigate potential harmful effects with innovative solutions (Public Health Advisory Committee 2007).

The HIA process draws on knowledge (based on expert advice and/or the published literature) about the potential health impacts and effective interventions to support health, as well as community knowledge of an area or issue. The four key stages of HIA are:

1. screening – the initial selection process to assess an initiative's suitability for HIA
2. scoping – highlighting the key issues that need to be considered when defining and shaping the HIA
3. appraisal and reporting – identifying the relevant influences on health, using tools to identify potential health impacts, then assessing the significance of these impacts and drawing out practical changes to the policy
4. evaluation – assessing how the process was undertaken and the extent to which the recommendations were taken up by the policy makers.

HIA can be applied at the project level (such as urban housing or roading developments), or at the policy level (such as public transport policy or strategies, or housing assistance policy).



4. CONCEPTS IN URBAN DESIGN

Urban design focuses on the physical form of a city: how the layout of buildings, roads, open spaces and physical infrastructure can be best devised so as to maximise environmental sustainability, economic opportunity and social wellbeing. Urban design is fundamentally about creating a vision for an area and then deploying the skills and resources to realise that vision.

In New Zealand the Urban Design Protocol (Ministry for the Environment 2005) has provided a focus for quality urban design in our towns and cities since 2005. The protocol highlights the potential of quality urban design to help urban areas become:

- competitive places that thrive economically and facilitate creativity and innovation
- liveable places that provide a choice of housing, work and lifestyle options
- a healthy environment that sustains people and nature
- inclusive places that offer opportunities for all citizens
- distinctive places that have a strong identity and sense of place
- well-governed places that have a shared vision and sense of direction.

The seven essential qualities for urban design emphasised by the Protocol are:

- **context:** ensuring that buildings, places and spaces are part of the whole town or city
- **character:** reflecting and enhancing the distinctive character, heritage and identity of our urban environment
- **choice:** ensuring diversity and choice for people
- **connections:** enhancing how different networks link together for people
- **creativity:** encouraging innovative and imaginative solutions
- **custodianship:** ensuring design is environmentally sustainable, safe and healthy
- **collaboration:** communicating and sharing knowledge across sectors and professions, and with communities.

The Urban Design Protocol highlights the role of multiple sectors in delivering quality urban design. This includes central and local government, developers and investors, consultants, professional and educational institutes, sector organisations, iwi and communities (Ministry for the Environment 2005).

This approach of working intersectorally is consistent with international thinking in urban design, and is held in common with HIA methodologies, which have a commitment to dialogue with communities, other professions and sectors (see, for example, the approach taken by English Partnerships and Housing Corporation 2007). These approaches recognise that the role of the 'designer' is one voice among many that need to be considered in integrated planning for urban environments (Landry 2006; Smith 2008).

A foundation of modern urban design is that creating liveable cities requires thinking about the needs of people first – not the movement of transport. This means thinking about how we operate, navigate and understand the environment at the different scales and settings of our everyday lives (Soholt 2008). Figure 3 emphasises the different human needs in an urban environment, which although drawn from a design outlook are strongly aligned to public health perspectives. Central to this approach is operating at a human scale, which supports human interaction with an environment in a range of ways and is not restricted to a single function, such as retail or recreation.

Figure 3: Urban form and health



Source: Soholt 2008

5. BUILDING ON THE LINKS BETWEEN URBAN DESIGN AND HEALTH

The way in which urban areas are designed and laid out shapes people's life choices. It affects where people live, how they travel to work or school, how active they are, the quality of the air and water, and what shops or facilities they use. Many of New Zealand's urban areas that have been built over the past 50 years were planned around an expanding population and advances in engineering, particularly cars and other private vehicles. Such neighbourhoods often have poorly connected street networks (eg, cul de sacs rather than grid-like street) and low-density housing that is beyond walking distance to shops, workplaces and public transport. As a result, residents drive to work, school or the shops and have few opportunities for physical activity as part of their daily life (Public Health Advisory Committee 2010).

There is a growing body of evidence showing that the health of communities can be improved through urban design, and that there are many commonalities between urban design agendas and public health strategies for improving the health of communities. For instance, the Urban Design Protocol's emphasis on connections and choice is consistent with the public health focus on promoting walkable communities with easy access to services, facilities and amenities that provide the essentials of daily life.

In terms of how health is distributed in populations, it is very clear that not all communities are the same. Communities in more socioeconomically deprived neighbourhoods (as well as communities with high Māori and Pacific populations) experience higher rates of obesity and chronic conditions and are often exposed to environmental factors that exacerbate ill health. For some population groups, factors such as financial limitations, limited mobility or dependence on others to provide assistance means they are more constrained than others in getting around urban areas. These groups include children, older people and people with disabilities. Urban design needs to be aware of and take into consideration the needs of these groups (Public Health Advisory Committee 2010).

It is therefore important that healthy urban design approaches are delivered in a way that benefits communities with the poorest health rather than reinforcing already significant health inequalities between communities. The permanence and cost of community infrastructure (such as housing, roads, schools and community facilities) mean that decisions about urban design need to take into account the potential long-term effects on health and health equity, alongside impacts on the environment, economy and society. This is a major challenge. However, it is more easily achieved if urban designers and planners and the health sector work together, in partnership with colleagues in other sectors.

The approaches described above are occurring overseas. The World Health Organization (WHO) recommends that governments place health and health equity at the centre of urban governance and planning. The United Kingdom's National Health Service developed a Healthy Urban Development Unit to improve co-operation between city planning and the health sectors to respond to the challenges of population change, development pressures, environmental constraints and the delivery of health care

services. At the federal level in Australia, the Government's preventive health strategy calls for better links between health and urban planning (Public Health Advisory Committee 2010). At the state level this is supported by such initiatives as Health in All Policies in South Australia.

In New Zealand many cities and districts have taken up this challenge. For example, regional transport planners have proactively worked with the health sector in the development of regional land transport strategies, and have commissioned, collaborated or led health impact assessments in these areas. The focus of this paper, the *Manukau Built Form and Spatial Structure Plan Health Impact Assessment*, is another example of urban design and health working together and building on common interests.



6. THE MANUKAU BUILT FORM AND SPATIAL STRUCTURE PLAN

6.1 What are spatial structure plans?

Spatial structure is a concept relating to the design of an area, with particular regard to the shape and positioning of buildings relative to the topography and natural environment. The spatial system is the main organising frame of a city, comprising the arrangement of streets, open spaces and transport corridors in relation to the topography of the landscape. This arrangement can have implications for accessibility, safety, environmental sustainability, cultural creativity and economic prosperity.

From an urban design perspective, Manukau city centre currently has very little spatial structure and is characterised by parking lots, big-box commercial and industrial developments, and large-scale intersections. This has the detrimental effect of reducing pedestrian accessibility, communal activity and the general safety of the area.

A spatial structure plan is a three-dimensional strategic design for an area. The plan achieves this by setting out the proposed street and block patterns, together with building 'envelopes' (the boundaries between indoor and outdoor space) in the context of the existing landform and development. It does not deal with the detailed architectural design of buildings, but it does relate building envelopes to their proposed uses, such as commercial or residential.

In urban design the spatial system is the key component in establishing identity and variety. This occurs through the way in which the streets are organised over the land, in relation to human sight lines and buildings. Spatial structure plans should set out street patterns, open space, building envelopes, parking capacities and possible entrances. Well-designed spatial structure plans:

- enable development capacity to be maximised and/or optimised by ensuring there is no 'wasted' land
- provide certainty for the developer and community
- facilitate easier and speedier consent processes
- enable the creation of public spaces that are 'legible' (meaning that people can easily understand and find their way around), and that have the potential to be safe and well used
- enable street systems that support existing and proposed uses, and that maximise accessibility to community facilities, schools, shops and transport systems, thereby creating a basis for variety and identity
- support public safety by building in 'eyes on the street' (where many people are able to see what is occurring in the neighbourhood, thereby providing informal surveillance of streets and open spaces)

- minimise the impact of density through street layouts and clear view lines so that people feel comfortable, even where population/building densities are high
- provide greater opportunities to ensure natural light, outlook and privacy in buildings
- provide financial benefits, including maximising land efficiency, optimising land development and streamlining resource consent processes.

6.2 Overview of Manukau Built Form and Spatial Structure Plan

Lying at the centre of a number of key transport routes, the Manukau city centre has the potential to be a nexus in the development of greater Auckland. At the time of the HIA, Manukau City was a separate local authority; from November 2010 it became part of the new Auckland Council.

The Manukau Built Form and Spatial Structure Plan (BF&SSP) created a new vision and design concept for the long-term development of the Manukau city centre area. The BF&SSP seeks to transform the area through steady incremental change over time, reconnecting the city centre to the rest of Manukau City by reducing car dominance, enhancing accessibility and providing public open spaces and parks. At the time the HIA was undertaken, Manukau City Council owned the majority of the land available for development, providing an important opportunity to deliver on the aims of the BF&SSP.

Prior to the HIA, the BF&SSP was endorsed by Manukau City Council and will inform development of the Manukau city centre over the next 50 years. The plan aims to invigorate the city centre's urban, cultural and social forms, while establishing the Manukau city centre as a unique and integrated component of the greater metropolitan network.

The BF&SSP represents a paradigm shift in the future direction of the city centre. For example, pedestrian-focused alternatives to vehicular management must be implemented if Manukau is to be transformed from its current state as a suburban operational centre to a vibrant and truly urban city centre. This requires a fundamental rethinking of the current land-use patterns. Currently the norm is for big-box commercial and industrial developments, with wide roads designed in curves to slow and control traffic. However well this design is suited to cars, it is impractical for people to navigate as pedestrians or public transport users.

The BF&SSP sets out in three-dimensional form the long-term direction for:

- urban structure – the future shape and 'bone structure' of the area, which addresses the proposed street layout, block and lot patterns, the open space network and layout, view corridors, significant elements and special sites
- built form – the three-dimensional commercial and residential building envelopes (defined by height, depth, length and use)
- environmental initiatives for buildings, such as water use and energy standards

- the public domain – the layout of public open spaces and street landscapes
- design details for the street system (lighting, street furniture paving, signage and planting).

The BF&SSP is intended to support the longer-term development of Manukau in order to:

- create an appealing and walkable CBD
- unlock regional economic potential and attract investment
- stimulate employment and educational opportunities
- provide public transport choices and accessibility
- embrace features of local ecology (such as the nearby Puhinui stream) into future developments
- reveal Manukau’s cultural character.

The plan has a range of interlinked elements, including:

- a territorial and local analysis, urban strategies and an outline of the proposed precincts (Randles Straatveit Architects 2008)
- an examination of the current position of Manukau City, including geomorphology, ecology, topography, land-use pattern and heritage analysis (Boffa Miskell Ltd 2008)
- a *Public Domain Manual* to inform the spatial configuration of public open spaces and street typologies.

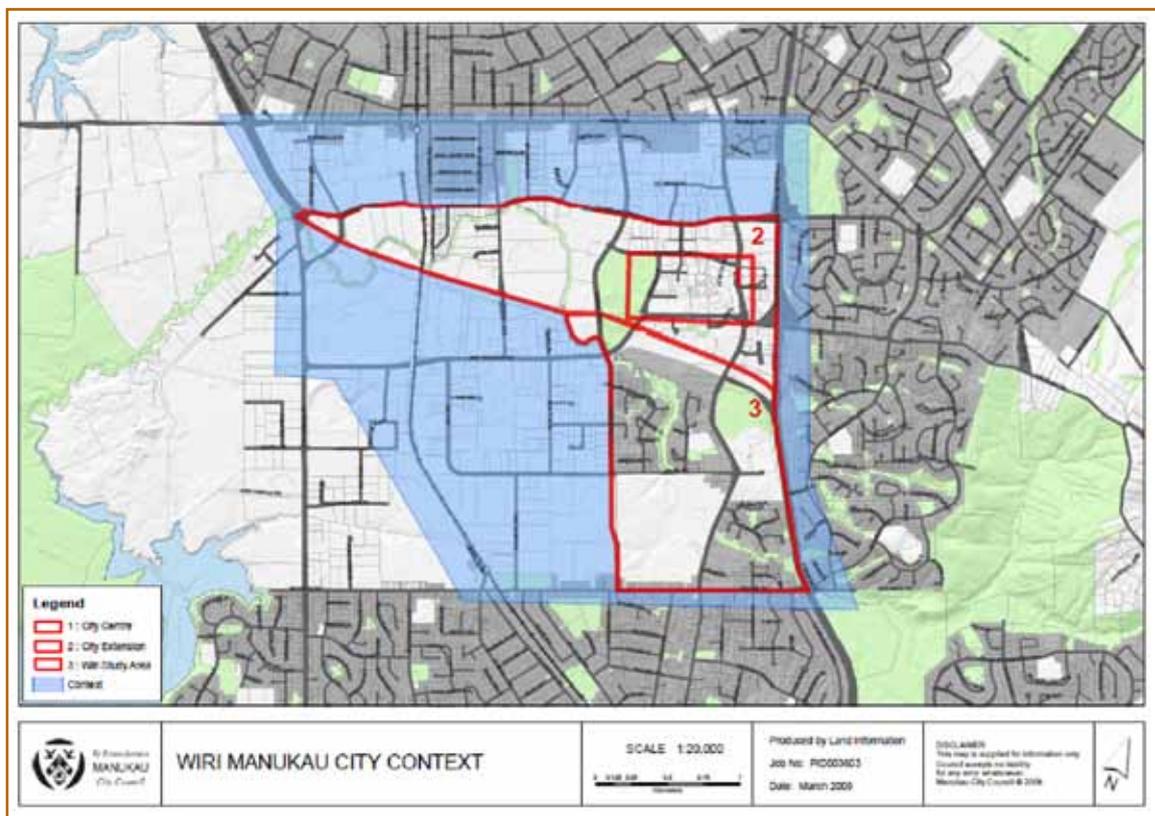
Figure 4 shows the BF&SSP, centred on the city centre area of Manukau, which is defined as the 40-hectare area bordered by Ronwood Avenue to the north, Great South Road to the east, Wiri Station Road to the south and Lambie Drive to the west. A second area of future development planning will extend in a wedge-shaped area from the city centre area through to Manukau Harbour. A third area of future development planning will focus on the Wiri area. The map in Figure 4 highlights the initial focus of the BF&SSP (areas 1 and 2) and the surrounding areas that will also be affected by the plan, along with future initiatives in the area.



For Manukau City to become a place where people want to live and work together, the BF&SSP identified a need for pedestrian-scale street networks, which include streets with reduced and navigable corners, active edges, well-designed paving, good lighting, and consistently aligned buildings. In addition, by constructing the city centre to have greater building densities and encouraging mixed land use, the intention is to encourage residents to meet their daily basic needs without resorting to private vehicles.

The new pedestrian focus outlined in the BF&SSP is intended to coincide with the construction of a new rail link. This is a branch line from the main north–south rail line, which will extend towards the city centre. This new rail link is intended to increase connectivity with the other urban centres around Auckland and reduce the transport burden on the roads around Manukau City. To ensure adequate usage, the railway station must be fully integrated into the design of the city centre.

Figure 4: Area within Manukau city centre covered under the Built Form and Spatial Structure Plan (areas 1 and 2)



7. PROCESS AND FINDINGS FROM THE HEALTH IMPACT ASSESSMENT

At the time the HIA was undertaken the BF&SSP had already been completed. This provided an immediate challenge to conducting an HIA in a way that would influence longer-term decision-making rather than simply critique the detail of the plan itself. With this challenge in mind, the focus of the HIA was to identify the key health issues that need to be considered throughout the implementation of the BF&SSP over the next 50 years.

The HIA set out to analyse the assumptions and practical applications of the plan in order to identify the implications for health and potential health inequalities, and to recommend actions to maximise positive health outcomes and reduce negative health outcomes. In this way, the HIA offered practical benefits to the ongoing development and implementation of the BF&SSP.

This section describes the process of conducting the HIA, the main findings, and the Māori perspectives on health and urban form that were identified during the HIA.

7.1 The HIA process

The HIA followed the process outlined in section 3: screening, scoping, appraisal and reporting. The initial screening confirmed that the plan was suitable for undertaking an HIA. During the scoping phase it was agreed by stakeholders that the HIA would focus on:

- accessibility – to identify opportunities for increasing accessibility for visitors and residents to be able reach services, amenities and facilities that support healthy living
- active transport² and mobility – to identify opportunities for enabling greater levels of active transport within Manukau City centre, and for enhancing access and mobility, particularly for such groups as people on low incomes, older people, families and people with disabilities
- safety – to identify opportunities for ensuring the optimal safety of residents and visitors within the city centre
- liveability and vitality of the area – to identify opportunities to improve the social, cultural and environmental character of Manukau City in order to create a healthy city (Field et al 2009).

The appraisal phase of the HIA brought together mainstream stakeholders, Māori and primary school children. The stakeholders who participated in the HIA were drawn from agencies and organisations such as the Auckland Regional Public Health Service, Manukau City Council, Counties Manukau District Health Board, Living Streets Aotearoa, Auckland Regional Transport Authority, ACC, Royal New Zealand Foundation for the Blind, SafeKids NZ, Te Ora o Manukau (Māori partners in Manukau the Healthy City), Hapai te Hauora Tapui Ltd (a Māori public health provider) and Vaka Tautua (a Pacific disability service organisation).

2. Active transport includes non-motorised forms of transport involving physical activity, such as walking and cycling. It also includes public transport for longer-distance trips (Public Health Advisory Committee 2010).

This wide-ranging engagement process was supplemented by analysis of the literature on the links between urban environments and health, and a profile of the Manukau area and its people.

7.2 Key findings of the HIA

The consultation undertaken for the HIA revealed significant support for the changes to the environment of the city centre proposed under the BF&SSP. The BF&SSP was seen as an important opportunity to change, over time, the way people use the Manukau city centre area.

However, there was wide agreement among stakeholders that achieving the vision of the BF&SSP will require commitment by decision makers to reshape the city centre in a way that will create a more walkable city centre supporting a diversity of uses beyond its present retail dominance. There was a consistent view expressed across all the consultations that the current urban structure of the city centre does not foster positive health outcomes. For example, the schoolchildren consulted had a heavy reliance on cars to transport them across the city centre areas, and they repeatedly raised concerns about safety (both personal and road safety) being a barrier to their use of many parts of the city centre.

The HIA stressed the importance of planning for the city centre to build more active lifestyles as part of daily life, to support a diversity of uses of the city centre, and to create a safer experience for people in the area. This will be essential if the city centre is to be an attractive place to live in years to come.

A central finding of the HIA was that the long-term development of the Manukau city centre area should be focused on ensuring accessibility for families and people with disabilities, by taking steps such as:

- making pedestrians the first priority and breaking up carpark areas
- improving the ability to get from one end of the city centre to the other without danger or obstacles
- creating connected walkways
- reducing the number of roundabouts and 'free' left turns for vehicles
- planning 'destination to destination' transport infrastructure
- providing transport access outside high and low demand periods
- creating spaces for children of all ages to play, and so that they can walk to parks and schools safely across the city centre area
- promoting the flexible use of common spaces.

Taking these steps will support the development of an environment that is accessible and health promoting for all population groups. To support these requirements, there is a need for a range of mobility options (such as walking, cycling and public transport) to support access to the city centre, as well as improved connectivity across the city centre.

Stakeholders felt that the city centre area needs to provide hubs (functioning centres of activity) and attractors (destinations that make people actively seek the centre). The city centre needs to be able to move from a predominantly retail experience to a mixed-use, multi-experience model of urban form. There was strong support for better provision of open space in the city centre area, including improving the safety and accessibility of Hayman Park and the revitalisation of the Puhinui Stream.

The HIA process highlighted the convergence of outcomes sought by health promoters and the urban design approaches fostered by the BF&SSP. A key area of agreement was the promotion of more walkable environments. Planners and urban designers favour a walkable environment mainly from an environmental sustainability perspective, to create urban spaces that are less reliant on motor vehicles and their attendant impacts. Health promoters seek to make walking and cycling a part of daily life in order to reduce the incidence and impact of many long-term health conditions.

The HIA also drew attention to a convergence within Manukau of the aspirations of the BF&SSP and a range of locally based programmes and initiatives that seek to increase physical activity. These include the Creating a Better Future programme run by the Counties Manukau District Health Board; the CM Active physical activity, sport and recreation programme, led by an alliance of local government, central government and health agencies; and the John Walker Find Your Field of Dreams Foundation, which funds a wide range of sport and recreation programmes for young people.



7.3 Māori perspectives on health and urban form

From a Māori perspective, hauora (health) is an all-embracing concept that embodies the importance of wairua (spiritual), whānau (family/community), hinengaro (mental) and tinana (physical) aspects (Public Health Advisory Committee 2005). As part of the overall HIA process, a whānau ora health impact assessment workshop was held to bring together Māori health and wellbeing perspectives on the BF&SSP. This was led by Hapai te Hauora Tapui Ltd, a Māori public health provider.

There is a long-established recognition of Māori aspirations in legislation and policy in New Zealand. Examples include the Local Government Act 2002, which establishes processes for consultation; the New Zealand Public Health and Disability Services Act 2000, which supports Māori participation in the health and disability support sector; and social sector policies such as Whānau Ora, which recognise the diversity of factors that influence the health and wellbeing of Māori families. Given the high Māori population within Manukau, incorporating Māori perspectives in the HIA was seen as an essential perspective of wellbeing in the area, one that recognised Māori as tangata whenua and

kaitiaki (guardians) of the environment. The BF&SSP was notable for its inclusion of Māori world views, and this was acknowledged by the participants.

The Manukau landscape lives through the stories and histories of the mana whenua who first occupied the area. These stories capture the meaning of the land and the relationship the people have with it: when the landscape is well designed and cared for, people's wellbeing will be protected and nurtured. Māori participants in the whānau ora workshop gave support to the concept of an 'indigenous imprint' in the design of the city. Such an imprint was seen as providing important design for both tangata whenua wellbeing and the overall wellbeing of a community.

The importance of cultural connectedness was a key theme identified by Māori participants. There was perceived to be a lack of cultural identity within the Manukau City precinct, with the exception of a waharoa (gateway) placed outside the Manukau police station. Participants also suggested a need for more Māori signage that identifies original place names and sites of significance.

Manukau City Council has its Treaty of Waitangi Standing Committee and Te Ora o Manukau, and participants were keen for groups such as these to play an active role in ensuring mana whenua and Māori perspectives are incorporated into decision-making in the city's design.

The Puhinui stream was seen by Māori participants as an important historical element of the city and central to the area's significance as a food basket. The ongoing health of the stream was seen as a key marker of the role the community and council play as kaitiaki of the environment. As with other participants, Māori participants strongly endorsed the revitalisation of the Puhinui stream as a major element of the city's long-term development.

Māori participants identified issues that have an impact on toi ora (healthy lifestyles), including:

- traffic and pedestrian injuries caused by poor footpaths and lack of safe places to cross (such as crossing to Hayman Park)
- the impact of our 'car culture', and the increasing levels of noise and air pollution
- the high cost of housing and rental accommodation affecting the ability of whānau to own their own homes, which has led to increased overcrowding within homes in the Manukau City area
- a lack of safe spaces for our tamariki (children) to play, and for rangatahi (young people) to be themselves
- the importance of reconnecting tamariki with the natural environment and enabling them to be active.

A further theme from the Māori consultation was the need to reduce the working silos that often separate government departments, providers and communities. Groups such as Te Ora o Manukau provide important collaborative activities that enable Māori perspectives to be heard across a range of issues that have an impact on whānau ora.

8. INFLUENCING URBAN DESIGN IN MANUKAU

8.1 Initial HIA outcomes

In December 2009 the HIA was endorsed by the Manukau City Council's Planning and Activities Committee. There was widespread agreement within the council that the HIA added value to the urban design processes of the council.

In many respects the HIA was a catalyst for stronger links between health and urban design in the city. Following are some of the key outcomes of the HIA process.

- The HIA fostered constructive discussion and debate between the city council and interested individuals and organisations outside the council, as well as between council departments, in ways that more formal consent and planning processes are unable to do.
- The consultation process was able to point to many common areas of interest between health, urban design and planning, in particular a desire to shift the paradigm away from private cars to a range of mobility options, especially active transport.
- The HIA informed further urban design initiatives in the council, starting with the *Public Domain Manual*, by providing principles to guide development of open spaces in the central city area.
- The HIA provided a basis for bringing the evidence base for health outcomes related to the urban environment into a dialogue between local government and health-related sectors. The HIA brought together both the published evidence of urban environments and health and the experience of people using the centre.
- The approach supported cross-sectoral dialogue and ownership of solutions, as well as identifying potential impacts.
- Over time the city centre will become home to 10,000 residents. The HIA provided a means of asking how the community of the city centre will come to life.
- Strategic links were identified between urban design and planning and the city's social wellbeing outcomes, particularly in relation to fostering physical activity among its young population.



- The process provided one of the first opportunities in the city where children were able to talk about their experiences of the city centre and provide insights into the impact of the current urban form.

The HIA was seen by the urban design team as an important statement of key principles of health and wellbeing relating to the urban environment, exploring existing conditions of the city centre and how to improve them from a health perspective.

8.2 Building momentum: the Wiri Spatial Structure Plan HIA and the super city

Following the success of the Built Form and Spatial Structure Plan for Manukau city centre, the urban design team were keen to apply HIA processes to spatial structure plans being developed in other parts of Manukau.

Over May to September 2010, staff from the urban design team and Manukau the Healthy City led an HIA of the Wiri Spatial Structure Plan, with widespread stakeholder involvement from local communities, schools, older people, Māori and Pacific populations. This was supported by the Ministry of Health's Learning by Doing Fund.

Because the Wiri Spatial Structure Plan was at an earlier stage of development, the Wiri HIA was able to have a direct impact on the plan's content and direction. As a result of the engagement undertaken through the Wiri HIA, the development of the Wiri Spatial Structure Plan incorporated the following issues:

- the use, location and size of community facilities
- the orientation of housing to promote warm, healthy living environments
- landscaping that reflects the cultural diversity of the area
- a mixture of land uses
- increased safe pedestrian areas, and planning for active transport development
- improved safety through urban design.

The HIAs in Manukau city centre and in Wiri provided reference points for concerns and aspirations for these areas, which will continue to have relevance despite the amalgamation of regional and local government in the Auckland region into a single Auckland Council. These HIAs have laid important foundations for collaboration between urban designers and the health and social sectors. With the transition to Auckland Council from November 2010, the Healthy City advisor maintains an active presence in the organisation and is well placed to forge health and urban design partnerships into the future.

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