

**The Impact Evaluation of the Christchurch
Urban Development Strategy
Health Impact Assessment**

Community and Public Health
Canterbury District Health Board
under contract from the Ministry of Health

Authorship

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Executive Summary

Introduction

In 2005 the Canterbury District Health Board's 'Community and Public Health' (C&PH) division worked with the partners of the Greater Christchurch Urban Development Strategy to pilot the Health Impact Assessment (HIA) process on the Greater Christchurch Urban Development Strategy Options paper (UDS)(Urban Forum 2005). It looked at the impact of the two options of concentration versus 'business as usual' on health – focussing on water, air, housing, transport, social connectedness and Māori. A report of this HIA was made to the Urban Forum in December 2005. The HIA was the most ambitious HIA to have been performed in New Zealand at that time. It has been published in two peer-reviewed journals and been presented widely in New Zealand and Australia.

Why perform an evaluation of the impacts of the HIA?

HIA is a relatively new tool seeking to ensure policy makers consideration of health determinants and potential impacts. Although it has had strong drivers and support for its use by the Ministry of Health (Ministry of Health 2000; Public Health Advisory Committee 2005) there has been very little published in New Zealand and internationally on the effectiveness of HIA in achieving policy change, and more importantly policy implementation(Quigley and Taylor 2004; Signal, Langford et al. 2006). Can HIA deliver what it promises?

A prospective process evaluation of this HIA was completed in 2005. It found that the HIA had received a strong level of support for the process and report produced, and that it was very effective in catalysing and synergising cross-sectoral relationships and work. It was completed in less than five months with the moderate resource of approximately \$NZ75 000. Now over two years since the HIA was undertaken, sufficient time has lapsed to allow evaluation of the impacts of this HIA. Objectives of this impact evaluation are:

- to consider how and to what extent the HIA impacted on the UDS
- to consider the detail of these changes and why they were or were not accepted
- to describe and where possible measure unintended consequences of the HIA in partner organisations as well as in the wider Canterbury region
- to learn how to do things better and decide whether this type of HIA is a worthwhile input into strategic level policy

How did we evaluate impacts of the HIA?

Information for this evaluation was gathered by semi-structured key informant interviews, a document analysis and a workshop with key stakeholders. The document analysis principally reviewed the final Urban development strategy and action plan (Greater Christchurch Urban Development Forum 2007) to determine to what extent the HIA recommendations had been incorporated into the policy and action points. These findings were summarised into a table. Other impacts of the HIA were also considered. There was a high level of intersection of content between key informant interviews and workshop outputs and themes were therefore synthesised into common themes.

Findings of the HIA Impact evaluation

The HIA had significant direct and indirect impacts – related to policy change, culture change in partner organisations, relationships between health and local government in Canterbury region and the use of HIA more widely in New Zealand. A total of 24 of the 32 recommendations of HIA were included into the final UDS. Of these 17 were translated into action points in the final strategy, with attached responsibilities and timelines.

Another key impact was the inclusion of a new section into the final strategy titled “Health and well-being” authored by the HIA project leader (Greater Christchurch Urban Development Forum 2007). This Section on Health and Wellbeing includes an explanation of Health’s inclusion, Growth Issues, Key Approaches and an Actions table with timelines.

There is also evidence of the HIA impacting policy in local government more widely. A key informant at Environment Canterbury described the HIA process and resulting relationships as contributing to amendments made to the recharge zoning of the Natural Resources Regional Plan (NRRP) Groundwater Allocation and Policy Implementation (Environment Canterbury 2007).

Workshop participants identified cross-sectoral collaboration as the single most important impact of the HIA. This was also a prominent theme in key informant interviews. The importance of intersectoral work recurred in discussions on how to further the HIA approach in the future. The ‘Dreaming’ section of the workshop provided ideas on how to achieve more effective cross-sectoral collaboration and relationships to further integrate of health and health determinants into planning in local government.

Despite such strong support for cross-sectoral work this was one of the most significant omissions from the final UDS. There were three recommendations around intersectoral working groups in the HIA – none of which were included into the final UDS policy. These recommendations supported cross-sectoral advisory groups in natural resource management (air and water), and for selected health determinants. These are significant omissions in the UDS policy and many would regard as likely to lead to negative health impacts over time.

Conclusion

This evaluation found a strong level of support for the HIA among partner organisations. It had significant impact on the final Urban Development Strategy with health determinants forming a significant component of policy and action points. It also had notable indirect effects – the most significant being the improved cross-sectoral relationships and collaboration – as well as being a contributor to the increased recognition of health determinants in local government policy.

This evaluation also indicated that a health determinants approach has yet to fully permeate UDS partner organisations in both health and local government. This will be necessary for the innovative, health- promoting planning which is essential to achieve long-term health outcomes. Future opportunities to advance an HIA approach include shared cross –sectoral work such as a City Health Plan and ongoing tracking of assigned responsibilities in the Urban Development Strategy.

Recommendations

1. That all levels of government organisations work together to ensure development of key cross-sectoral relationships and shared projects.
2. That the concept of a City Health Plan for Christchurch is developed further between cross-sectoral partners that include local government and CDHB.
3. That an integrated monitoring programme of health markers related to the HIA in areas such as air quality, cyclist and pedestrian safety and health is commenced by CDHB.
4. That partner organisations of the UDS develop strategies to integrate HIA approaches more broadly and deeply into their larger organisation.
5. That all new major policy and infrastructure projects in local government and CDHB are screened for their impact on health and health determinants using steps recommended in the HIA Toolkit.
6. That formal evaluation and documentation of the impacts of the HIA (including actions taken in response to policy changes) are built into all HIAs undertaken in Canterbury.
7. That a full-time position jointly funded by local government and health is created to support Health impact assessment in Canterbury – ideally located in CDHB.

1.0 Introduction

What is HIA?

Health Impact Assessment (HIA) has been described as ‘a formal approach used to predict the potential health effects of a policy, with particular attention paid to impacts on health inequalities’ (Public Health Advisory Committee 2005). It uses formal academic tools as well as community consultation to identify and where possible quantify a policy’s direct and indirect impacts on health (Signal and Durham 2000). There has been a strong drive in New Zealand to appraise policies using the Health Impact Assessment tool. This has been supported in Central Government strategic documents such as the New Zealand Health Strategy (Ministry of Health 2000) and in support and tools offered by the Ministry of Health such as the Public Health Advisory Committee books (Public Health Advisory Committee 2005; Public Health Advisory Committee 2007) and in the establishment of the Health Impact Assessment Support Unit (<http://www.moh.govt.nz/hiasupportunit>). One of the objectives of the HIA Support Unit is to build up an evidence base of information, case studies and good practice and contribute to the provision of new research that will inform and improve judgements about the potential impacts of policies, programmes and projects on health. This impact evaluation of the Christchurch UDS HIA will contribute to this evidence base. Despite these significant ‘drivers’ for Health Impact Assessment – until 2005 there had been almost no HIAs undertaken in New Zealand. The Canterbury HIA on the Urban Development Strategy was a national ‘first’ in size and potential impact.

Background on the Greater Christchurch UDS

In 2005 the Canterbury District Health Board’s ‘Community and Public Health’ (C&PH) division gained agreement from the Greater Christchurch Urban Development Strategy to pilot the HIA process on the Greater Christchurch Urban Development Strategy Options paper (Greater Christchurch UDS)(Urban Forum 2005). It was led by a public health medicine trainee and supported by Policy Advisors from the Christchurch City Council.

The Greater Christchurch UDS is a collaborative initiative involving all the local government stakeholders (Christchurch City Council, the regional council, Environment Canterbury and District Councils) as well as Transit New Zealand. It seeks to guide urban development and growth in the Greater Christchurch region over the next forty years. Currently 380 000 people live in Greater Christchurch – by 2041 it is predicted this around 500 000 people will make the Greater Christchurch area their home (Greater Christchurch Urban Development Forum 2004). In April 2005, a consultation document on four possible options for growth and development in the greater Christchurch region was released to the public for their consideration. It summarised key issues and presented three options for managing growth: concentrations, consolidations and dispersal, as well as the ‘business as usual’ option. Of 3250 feedback forms, 62% chose Option A – which focussed on development within Christchurch city and other larger towns in Waimakariri and Selwyn districts (60% of new housing in urban renewal and 40% in new subdivisions).

It was undertaken immediately after the first round of community consultation on the Greater Christchurch UDS Options paper in mid 2005. The HIA considered the two options of Concentration (Option A in the public consultation responses) and

'Business as Usual' (urban growth patterns largely unregulated and determined by private developers.) The Urban Development Strategy team supported and welcomed an HIA on these two Options and worked collaboratively with CDHB staff to optimise the HIA process. The HIA focussed on making recommendations around health determinants for the final Strategy. Specific objectives of the HIA were:

- To provide evidence for decision-making about the link between urban development and health; and
- To assess the positive and negative health impacts of the Urban Development Strategy and provide recommendations to increase positive and decrease negative inputs.
- To strengthen partnerships working between sectors and ensure appropriate participation of the community including those that are vulnerable;
- To involve Māori in all levels of the HIA process; and
- To build capacity and knowledge of HIAs in Christchurch and New Zealand

Urban planning plays an important role in shaping the environmental, social and economic health determinants in cities (Turshen 1989; Duhl and Sanchez 1999; Sclar and Northridge 2001). The differential effect of urbanisation on the poor was also noted one hundred and fifty years ago although the term 'health inequalities' is a relatively new one. A contemporary atlas of deprivation demonstrates that there are significant gradients of inequality within Greater Canterbury (Crampton, Salmond et al. 2004).

The HIA was performed following a four-step methodology of screening, scoping, appraising and evaluation. The initial screening and scoping workshop was key in engaging key stakeholders and securing the future process within local government and health partners. This HIA model was rapid, pragmatic, prospective and used multiple agencies and disciplines as resources and time precluded primary research. The model included:

- Screening and scoping the UDS as suitable for an HIA
- Rapid appraisal workshops in technical areas e.g. air or waste
- Literature reviews and summaries
- Report-back to workshop participants via the Internet and a summary meeting
- Circulating the draft HIA report to key stakeholders
- Printing report and presenting to Urban Development Strategy team and Forum (Stevenson, Banwell et al. 2005)
- Prospective process evaluation

Scoping of the HIA led to the six agreed HIA determinants of air, waste, water, social connectedness, housing and transport. Later waste was omitted due to resource constraints. The practical incorporation of Treaty of Waitangi principles into everyday life is implicit in the HIA process. A key output of this HIA was the development of a second work stream around engaging with local Māori. This was seen as essential to this assessment. Māori make up 7.3% of the population of Greater Canterbury and have the poorest health status of any group in New Zealand, yet only 1.5% of the 3250 respondents to the UDS Options Consultation were Māori.

The Greater Christchurch UDS seeks to strategically plan urban development of the Christchurch region with an anticipated increase of 120 000 people into the region by 2041. The results of this HIA were presented as a submission to the Urban Forum in December 2005 and the final report was accepted by that group. The HIA report was published by CDHB and Christchurch City Council in 2006 (Stevenson, Banwell et al. 2006).

Evaluation of HIA

Evaluation is a formal part of Health Impact assessments yet evaluations of Health Impact Assessments have been infrequently performed, and even less often published. HIA researchers and practitioners identify evaluation as the area of HIA that most urgently requires attention (Mahoney and Morgan 2001; Joffe and Mindell 2002; Taylor and Quigley 2002; Quigley and Taylor 2003; Taylor, Gowman et al. 2003; Quigley and Taylor 2004). Impact evaluations consider whether and how HIA recommendations are incorporated into policy, and whether in turn that policy is converted into actions and remain the key marker of HIA effectiveness (Wismar 2004; Mannheimer, Gulis et al. 2007).

This HIA planned prospectively for a process evaluation. A process evaluation of the HIA was undertaken concurrently in 2005 (Mathias 2005). The researcher was a public health physician employed by the Canterbury District Health Board (CDHB). The same researcher was contracted to perform this impact evaluation in 2008.

Process evaluation

Objectives of the process evaluation were to assess whether this HIA achieved its objectives, to identify critical success factors and opportunities for improvements in the process and to quantify resources used in the HIA (human and financial). The process evaluation showed on balance a high level of endorsement and support of the HIA by participants. Interviews, observation of workshops and outputs demonstrated that the HIA used a good process that was enjoyable and educational and engaged a wide range of stakeholders. Participants recognised the HIA as an important and groundbreaking initiative and the importance of the relationship building, particularly as part of the Māori work stream. There was strong support for the cross-sectoral workshops with a significant number of participants reporting this was a 'first ever' occasion where all the people working in a work stream such as 'waste' were seated together in one room. This was felt to lead to increased opportunity for working together. The primary issue identified limiting the HIA's impact was its scant resource allocation. The HIA was completed in a very tight four months, with a team equivalent to one person working for five months full time.

Why an impact evaluation now?

It is timely now, over two years after the HIA was undertaken to perform an impact evaluation of the UDS Health Impact Assessment. Two years is sufficient time to see changes to plans and implementation, but not so long that the impact of the HIA has been forgotten. The objectives of this impact evaluation are:

- to consider how and to what extent the HIA impacted on the Urban Development Strategy
- to consider the detail of these changes and why or why not they were accepted
- to describe and where possible measure any unintended consequences of the HIA in partner organisations as well as in the wider Canterbury region
- to learn how to do things better
- to decide whether this type of HIA is a worthwhile input into strategic level policy based on perceptions of decision-makers

2.0 Methods

Three main sources of information were used to evaluate impacts of the HIA. These were interviews with key informants, document analysis, and a workshop.

Semi-structured interviews were carried out with 20 key informants. Three of the four people of the original HIA working group were still with the same organisations. They identified key people who had had a significant role in the HIA or Urban Development Strategy. The key informants and their roles (relevant to the UDS) are listed in Appendix One. They were interviewed over a period of three weeks by one interviewer using a semi-structured format. Interview schedules used are available in Appendix Two and Appendix Three. Hand-written notes were made of all interviews and findings were analysed for key themes. Cross-checking of findings was held against thematically grouped results to ensure maximum data capture. Key informant interviews showed a saturation of prominent themes after approximately twelve interviews – but were continued to include a further twelve people to ensure new data was not emerging.

The document analysis considered key documents related to the HIA. Documents were identified by the HIA working group. Documents were cross-checked for relevant content using hand-searching techniques as well as Tables of Contents, and Index sections. A list of documents reviewed is listed in Appendix Four.

The impact evaluation workshop used an appreciative inquiry¹ format to consider impacts of the HIA – and ongoing areas for joint work. Appreciative inquiry focuses on positive impacts and outputs of projects or organisations and was chosen to allow a focus on positive achievements of the HIA which would lead to a constructive visioning of the future of HIA in Canterbury. People invited to the workshop included members of the HIA steering group, working group, staff of partner organisations and consultants used for the HIA. Appendix Five lists those who attended the workshop while workshop outputs are found in Appendix Six. Some small discrete areas of information in this evaluation were collected from the internet (for example, review of the South Island Public Health Analysis information base report web hits.)

¹ Appreciative Inquiry involves a cooperative search for what is best in people, their organizations and the world around them. It focuses on strengths. See <http://appreciativeinquiry.case.edu/> for further information.

Impacts of the HIA fell into several key themes. Triangulation of the different data methodologies showed a high level of intersection and agreement between the workshop outputs and interviews with key informants as illustrated below: The key themes that emerged from key informant interviews in order of frequency were:

1. Cross-sectoral relationships
2. Changes in organisational functioning
3. Changes made to UDS policy
4. High profile HIA
5. Increased engagement and relationship with Māori

The key impacts of the HIA identified by workshop participants in order of priority were:

1. Cross-sectoral relationships
2. Leadership (influencing impact)
3. PHP role established in CCC and CDHB (organisational functioning)
4. CCC doing HIA regularly (organisational functioning)
5. Legitimised HIA as a tool
6. Influential initiative and well documented (High profile HIA)
7. Improved relationships (with Māori/ other)

It is apparent that there is a high level of intersection between the impacts identified in each form of inquiry and similar prioritising of impacts is also evident. The findings of key informant interviews and workshop findings were therefore synthesised together. Where relevant the data source of specific findings is described.

3.0 Results / Findings

The findings of the impact evaluation can be considered from several perspectives. To assess whether the HIA achieved its objectives we can consider impacts against the following HIA objectives:

- To assess the positive and negative health impacts of the Urban Development Strategy and provide recommendations to increase positive and decrease negative inputs.
- To build capacity and knowledge of HIAs in Christchurch and New Zealand
- To strengthen partnerships working between sectors and ensure appropriate participation of the community including those that are vulnerable;
- To involve Māori in all levels of the HIA process;

The findings of this impact evaluation report specifically on impacts of this HIA on the final UDS policy (both policy formulation and policy content), on capacity and knowledge of HIAs regionally and nationally – (including impacts on partner organisations), impacts on intersectoral collaboration/ partnerships and on engagement with Māori. Other findings summarised below include aspired impacts that the HIA was not able to deliver as well as a summary of unintended / less tangible impacts of the HIA. A final section of results describes workshop outputs on possible future directions for HIA in Canterbury.

This evaluation uses multiple qualitative methods. Data was used to support findings as follows: the document review findings are limited to the Policy Changes section which summarises summarising changes to policy which can be connected to the HIA. The remaining sections are informed by key informant interviews and workshop outputs.

3.1 Policy formulation

A final draft copy of the Health Impact Assessment report from CDHB was formally presented to the Greater Christchurch UDS team in November 2005. A printed copy was formally published and disseminated in April 2006. Acceptance of the HIA was particularly evident in the CCC – this was illustrated by the fact that the CCC also printed a four page summary of the HIA which captured key findings and recommendations. This was used in a number of UDS policy planning events particularly the “Inquiry by Design” workshops. Health board staff participated in these workshops by ‘infiltrating’ the working groups of other areas of expertise like public transport and open space.

Key informants within the CCC describe the process of how the HIA was built into the final UDS. Generally it was described as a less formal process where staff writing the UDS had read the HIA report and recommendations and kept these in mind when preparing the specific sections or editing the document. In some sections such as housing and health the HIA recommendations were directly translated into the UDS. A number of the key recommendations from the HIA were translated into key approaches for the various sections of UDS but not necessarily into the action tables. The review of the UDS in 2010 will provide an excellent opportunity to ensure that more health issues are included into the next strategy including those recommendations that were not translated into the current document. Work on this should proceed in early 2009 and provides an opportunity to improve the health content of the UDS policy.

Several key informants described the HIA as 'giving permission' for social and health principles to be included to a greater extent in CCC strategies and programme particularly those from the Healthy Environment portfolio /programme and includes strategies on open space, surface water and water supply.

3.2 Policy changes resulting from HIA

“The HIA provided permission and a platform for further work in Council linking to health. It provided momentum and relationships and a shared vocabulary.”

Senior Policy Analyst, CCC

“It (HIA) was a tool that came along at the right time for the CCC. The way of thinking was of use in the Social Housing strategy as well as the Strengthening Communities strategy and obviously in the UDS.”

Strategy and planning manager, CCC Role (at time of HIA)

The Greater Christchurch Urban Development Strategy (Greater Christchurch UDS) included significant policy components that had been recommended by the HIA. These cannot all be directly attributed to the HIA but their inclusion indicates an acceptance of the importance of health determinants in the UDS. There was agreement among key informants that serious consideration of how urban planning could impact health determinants had not occurred prior to the HIA, and that health 'content' of UDS policy increased significantly after the HIA was performed.

A key impact of the HIA within the final UDS was the inclusion of a new section in the final strategy titled “Health and well-being” authored by the HIA project leader (Greater Christchurch Urban Development Forum 2007). This Section on Health and Wellbeing includes an explanation of Health’s inclusion, Growth Issues, Key Approaches and an Actions table with timelines.

Reviewing the six streams of the HIA in turn, this evaluation considered how recommendations in the HIA were located within the final Greater Christchurch Urban Development Strategy and Action Plan 2007 (Urban Development Forum of Greater Christchurch 2007). City Council staff recommended strongly that the activity on policy implementation was primarily on those ‘Approaches’ that had been developed into Actions with Timelines. Only seventeen of the 33 HIA recommendations were covered by these Action Points. Four of the Top Twenty Priority Actions were linked HIA recommendations – but these Actions were all only loosely connected.

Appendix Four summarises the HIA recommendations, their inclusion or otherwise in the UDS Key Approaches (policy) and action tables, and inclusion in the Top Twenty Priority Actions of the final UDS.

Table 1. Summary of HIA recommendations and mapping to the recommendations included in the UDS Key Approaches, Actions and Top Twenty Priority Actions (Greater Christchurch Urban Development Forum 2007)

HIA health determinant and number of recommendations	Number of recommendatio	Number UDS Actions addressing	Number of Top Twenty
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	ns included in UDS Approaches	HIA recommendations	Actions linked to HIA recommendations
Summary	1 of 4	1	0
Air	4 of 6	2	0
Water	4 of 5	2	1
Social connectedness	6 of 6	5	2
Housing	3 of 4	2	1
Transport	5 of 7	4	0
Māori	1 of 1	1	0
TOTAL	24 of 33	17	4

Overall section on Health and Well-being – this was included in the Enrich Lifestyles section of the UDS. Notably health indicators were not mentioned in the Top Twenty Priority Actions at Number Thirteen where other similar generic indicators were located: (13) Develop an integrated programme for monitoring demographic, social, economic and environmental change together with development activity across Greater Christchurch that enables effective measurement of the outcomes of strategy implementation.

While many local government planners may consider health indicators as a sub-set of social change but inclusion of health indicators explicitly is likely to increase focus on health outcomes. Actions included show lead agencies in parentheses and include an integrated monitoring programme (CDHB), ongoing support in local service mapping (MSD), assessment of local and regional government policies for suitability for health impact assessment (CCC) and formal links as a 'health action forum' between the CDHB, Primary Health Organisations and local government to monitor health issues (CDHB). Action on commencing an integrated monitoring programme has not yet been taken by the CDHB.

HIA Summary recommendations –of the four HIA recommendations, only the one recommending that the HIA tool is incorporated into the development and analysis of UDS policy is explicitly included. There is one action point linked to a recommendation in this section. Broad recommendations that there are cross-sectoral working parties to advise on health determinants, the need for resourced HIAs for selected health determinants and training for UDS staff in HIA were not included.

Air Quality – four of six HIA recommendations are included in the UDS but only two of these translate into action points. A recommendation on the need for cross-sectoral collaborative working groups is not included and the recommendation that links between air quality and relevant health outcomes are monitored is only partially included.

Water Quality – four of five HIA recommendations, with two related action points are included in the UDS. The recommendation supporting a cross-sectoral steering group, including Ngāi Tahu, (the Māori iwi/tribe of the Canterbury region) is not included. Water is included in Number Eighteen in the Top Twenty Action Priorities and generically discusses management of water resources.

Social Connectedness – all six HIA recommendations with five linked action points are included in the UDS. Top Twenty Priority Actions included two generic actions around social connectedness (Numbers Sixteen and Nineteen)

Housing – three of four HIA recommendations with two action points are included in the UDS. The recommendation supporting design of new buildings to enhance physical access is not included. Two of the Top Twenty Priority Actions are linked to housing (Numbers Nine and Fifteen).

Transport – five of seven HIA recommendations are included in the UDS with four action points linked to these. Recommendations supporting cycleway/ pedestrian access design to improve safety are not specifically included and a recommendation to monitor impacts of transport on health is not included. Number Seven in the Top Twenty Priority Actions considers transport broadly, although not directly in relation to HIA transport recommendations.

Engagement with Māori – the single HIA recommendation, with a linked action point that Māori values are incorporated into urban design is included in the UDS. None of the Top Twenty Priority Actions deals explicitly with Māori development/ concerns.

There are also other impacts of the HIA on policy in local government. A key informant at Environment Canterbury described the HIA process and resulting relationships as contributing to amendments made to the recharge zoning of the Natural Resources Regional Plan (NRRP) Groundwater Allocation and Policy Implementation (Environment Canterbury 2007). Amendments were described as resulting from the HIA, the entire UDS community conversation, and good planning.

Other impacts on policy

A number of key informants described the HIA and its' process as leading to a deeper consideration of health and social perspectives in other City Council policy. Some policies or processes can draw a direct attributive link to the HIA (such as the proposal of a Christchurch City Health Development Plan, 2008 (Christchurch City Council 2008) while for other policies HIA was described as one of several contributing factors – such as the Inquiry by Design workshops held in September 2006 (where the CCC publication summarising the HIA report was provided to all participants), the Health Promotion and Sustainability through Environmental Design: a Guide for Planning publication (Billante 2008) and the CCC Community Charter (2006). HIA as a tool has also been incorporated into the CDHB's 'Healthy Eating Active Living' plan.

3.3 HIA impacts on capacity and knowledge of HIA regionally and nationally

“This has been the most ambitious HIA done in New Zealand to date – and what’s more the ambitious size and scope of it were matched by its delivery. It also appeared to me that it (HIA) gave C&PH a clearer role and authoritative voice on health issues in Canterbury – that hadn’t been present before the HIA.”

HIA consultant, Canterbury

“Its quality was high enough for the HIA methodology and tool to be more widely accepted in Canterbury and beyond – and builds significantly into the strength of HIA in New Zealand.”

HIA consultant, Wellington

There was energetic dissemination of the HIA results and methodology resulting in publications, presentations and both national and international recognition of the assessment. Many of the key informants felt that this HIA had given credibility to the approach of HIA among policy makers – particularly at the level of Local government both regionally and nationally. Many key informants described the Christchurch HIA as high profile and felt that this had benefited both the process and consequent impacts. An HIA consultant working at national level described it as the biggest and most ambitious HIA performed to date. The HIA is universally described as ‘successful’ and a number felt it’s ‘success’ was key to the acceptance of the HIA process at least in Canterbury.

Factors contributing to the success of this HIA were described. Several key informants identified the strong leadership of the HIA as being a key to its subsequent impact and effects. In the workshop leadership was identified as one of the key strengths and impacts of the HIA. The ongoing role of the HIA Project Leader who was subsequently employed with a joint role in both CCC and CDHB was felt to have ‘nurtured’ many of the impacts. It was described that this HIA opened the door to further HIAs in the region including the Central Plains Water Scheme (CPWS) HIA² (Humphrey 2008) and the HIA input into the South West Area Plan of the CCC.

Another key success factor described was the strong inter-sectoral relationships. Two members of the HIA working group described how leaders of the CCC and CDHB identified the constructive inter-sectoral relationships and shared work facilitated by the HIA and marked it up as a ‘political win’. For example the launch of the Health Promotion and Sustainability through Environmental Design guide in early 2008 (Billante 2008) was personally supported by the Chief Executive officer of the CDHB and the Mayor of the CCC.

A third key success factor described by both workshop and key informants was the thorough documentation of the HIA – which included a formal process evaluation, writing up of the HIA process in peer-reviewed journals. A key informant based in Australia confirmed that the HIA had received acclaim in Australasia – and felt that this HIA provided an important milestone in the acceptance and credibility of HIA in Australasia. A significant number of presentations, workshops and papers were generated by the HIA. Some of the more significant of these are described below:

Presentations

- Planning Health into Melbourne 2030 : Disseminating preliminary research findings of the HIA – Keynote presentation – (December 2005)
- HIA report presented to the Urban forum and described by project leader of the UDS Forum as a ‘foundational document’ for UDS planning (December 2005)

² The Canterbury Central Plains Water Trust has applied for a number of resource consents relating to the construction and operation of a large scale irrigation scheme. The applicants propose irrigating 60 000 hectares of land between the Rakaia and Waimakariri Rivers, and the Malvern Hills to State Highway One. The hearings were heard in February 2008.

- The Christchurch HIA has been used as a key teaching case study of HIA in the two day HIA training provided nationally in NZ (ongoing)
- CDHB Submission on UDS to Urban Forum - (February 2007)
- Lecture using HIA case study to Diploma of Public Health Students 2005-8, Christchurch School of Medicine

Publications

- Report in 'The Christchurch Press' on HIA – (December 6, 2005)
- Two peer-reviewed publications in Social Policy Journal of New Zealand (Stevenson, Banwell et al. 2006) and in the New South Wales Public Health Bulletin (Stevenson, Banwell et al. 2007).
- The Christchurch HIA has also been discussed in peer reviewed journals (Signal, Langford et al. 2006; Harris-Roxas and Harris 2007).
- HIA used as case study at Healthy Cities Short Course (April, 2008)

Workshops

- Healthy Urban planning workshops at CCC – (November 2007)
- HIA report circulated to and presented to participants of the City Council 'Inquiry by Design stakeholder consultation process (August, 2006)

3.4 HIA impacts on partner organisation's functioning

It 'feels' like we're bringing health into our planning more consistently and organically - especially at the CCC office level – but there's lots more to do at an executive and political level."

Programme Manager – CCC

We have the current Christchurch city mayor as chair of the UDS Forum. He's a champion of the UDS and he will specifically support HIA. This is new for the Council

HIA Working Group member, CCC

Christchurch City Council, Environment Canterbury and C&PH describe a change in ways of working within sections of their organisations that has arisen to some extent due to the HIA. We can consider changes described in the CDHB and CCC below:

CDHB

HIAs were described as now being formally part of C&PH core business and supported by the organisation. This project was felt to have catalysed a shift in the way C&PH works – the Division now has a focus on long term sustainability issues. The Service plan 2006 – 2009 (Agreement with the Ministry of Health) states:

"Local government under its new legislation is required to have Long Term Council Community Plans and to identify community outcomes...the tool of Health Impact Assessment is being used to address impacts of policy."

Building on organisational experience and capacity in HIA the CDHB has also recently completed an HIA on the Central Plains Water Scheme. This has had a high

profile with significant media interest (Humphrey 2008). An HIA on the Christchurch Transport Interchange project has also been commenced.

Community and Public Health (C&PH) informants felt the HIA had contributed to a change in the way of working of the Risk Management Committee. They now have a more strategic focus provide input on higher level policies. Movement of staff between the CDHB and the CCC – as well as the Public Health Physician with her joint appointment by both organisations was seen as both cause and consequence of the new ways of relating and working between the organisations. Several key informants described a cross-pollination of ideas through this process.

Christchurch City Council

Key informants described the HIA as a tool that has synergised well with the relatively new Local Government Act (2002) and its focus on four well-beings. There was a strong feeling of there being an increased understanding and awareness of the health impacts in planning policy. Other examples of impacts of the HIA include the use of Healthy Housing Index on Council Housing stock and HIA training for six CCC staff (several staff have completed Beginners and Advanced HIA training).

Workshop attendees felt the HIA gave the CCC and C&PH organisational relationships and experience in HIA – providing traction for further HIAs. Several informants described an increased role and acceptance of HIA as a tool that can be used alongside social impact assessments. Several described a change in the way of working within the CCC, so that equity/ inequalities became routinely considered.

3.5 HIA impacts on cross-sectoral relationship building

It has acted like a wedge – it’s been a way for health to get wedged into Local government, MSD (Ministry of Social Development) and Education.”

General Manager, C&PH, CDHB

Part of the success has been local government and health learning to speak each others languages.

Strategy Support Manager – Strategy and Planning Group, CCC

“We realised there was another whole sector that could swing in support of the UDS.... to have health people there mucking in behind in support of densification and consolidated urban design option was really fantastic”

Energy and Transport Planning Manager, Environment Canterbury

A stronger relationship between health and local government has increased the commitment to work together collaboratively. Workshop discussions and key informants described how working inter-sectorally had strengthened each others work. Workshop participants described the extra evidence and justification for the intensification option (supported by Policy and Strategy staff at Environment Canterbury) that was provided by the public health people through the Health Impact Assessment. It was similarly felt that a presentation by an HIA working group

member at the UDS Hearing gave strong, unequivocal support for healthy urban design.

Workshop and key informants described frequent contact between organisations on a wide range of work areas that has been facilitated by the HIA UDS relationships. A CDHB health protection officer described almost daily telephone conversations with local authority staff –and feels this was less the case prior to the HIA. Many identified the establishment of a permanent joint role for a Public Health Physician at CCC as a good example of the good-will and effective relationships between health and local government. This is a New Zealand first appointment with a joint role shared by a health board and local authority.

Local authority and health board key informants described learning a new vocabulary or even language. For example local government talk of ‘social development’ and “equity” where health people would use the terms ‘health outcomes’ and ‘health inequalities’. Talking together both ‘sides’ describe that they can understand each other’s work better – and can also work collaboratively recognising it is toward the same large objectives.

A key informant at Environment Canterbury felt that health and local authority working together on the ‘concrete’ project of Variations on the groundwater aquifers in the NRRP as leading to with frequent interactions and a stronger relationship

The relationships built during workshops and interactions around the UDS were felt to have been an essential base to the launching of the electronic network, the South Island Public Health Analysis (SIPHAN) Information Base which provides an interactive bulletin board, information archive, and discussion group services primarily for the public health community and local government throughout the South Island. PHAN is split up into a number of discrete categories and subject areas according to interests and requirements of different user groups. Public Health Environmental Discussion (PHED) is facilitated by a Health Protection Officer at Community and Public Health although Environment Canterbury also has administrative rights.

Analysis of web-hits of the SIPHAN information base on 8 April, 2008 showed the following statistics. There were 71 Users and 152 Posts, viewed a total of 1793 times site. The four most active areas were:

- PHED 6: Conferences / Training / Notices - General Notices (541 views)
- PHED 3: The Water Environment - Drinking Water (239 views)
- PHED 5: The Social Environment - Health Impact Assessment (233 views)
- PHED 4: The Air Environment - Climate Change (168 views)

3.6 HIA Impacts on engagement with Māori

It was not so much the event but the process of the HIA which has cemented relationships”

Māori consultation stream leader, Public Health Physician, CDHB

While Ngāi Tahu had been invited to be part of the UDS Forum their contribution and role prior to the process of the HIA was fairly limited. Several key informants felt that the HIA’s strong focus on participation and partnership with Māori facilitated the

subsequent re-engagement of Māori in the UDS Forum and final policy. This engagement was illustrated with the inclusion of a two page endorsement of the UDS by Mark Solomon, Kaiwhakahaere of Te Runanga o Ngāi Tahu (Greater Christchurch Urban Development Forum 2007).

A Māori urban design meeting facilitated by CDHB and CCC in 2006 was considered by several key informants as an impact of the HIA. Other informants described the HIA as one step among many that led to the formal establishment of a Māori and Local government consultation group which is now part of Ngāi Tahu – Mahaanui Kuritaiao (Ltd).

3.7 What the HIA did not achieve

Key informant interviews and the workshop identified aspects of the HIA where hoped for impacts were not achieved.

UDS and HIA weakened by poor priority/ legislation

Why do we get neighbourhoods sprouting in the middle of farmland that are so obviously detrimental to social and health aspirations? ...There are economic forces bigger than planners and transport people ...As well as a fantastic vision, we need very tough and targeted regulations to get results like they have in Vancouver
Public Health Physician – CDHB

Several key informants discussed the limitations of a strategic plan like the UDS – and felt that it is still bound and limited by legal frameworks like the Resource Management Act and decisions made in the Environment Court.

Workshop attendee's felt that greater priority should have been given to the HIA – through adequate resourcing (human, financial and non-competing work) from the outset as well as stronger political support. This could have extended and increased the impacts significantly. Generalised lack of organisational responsiveness was also described as a factor diminishing the potential impact of the HIA

Poor diffusion of the HIA into some aspects of the partner organisations

Whilst the HIA has now developed as a stronger work stream within C&PH, several informants described that this had achieved minimal integration into the larger CDHB. This was also echoed within the CCC where HIA was considered strong in some areas and almost unheard of in others. Another key informant felt the HIA and UDS had little to offer smaller district councils with an overly strong city focus. This lack of diffusion of the HIA approach was also repeated by key informants working in HIA nationally who also expressed disappointment that HIA has almost not been used by Central Government in New Zealand.

Inequalities and the HIA

One key informant felt that the HIA did not go far enough in its exploration of inequalities and urban design. He described issues consequent to the densification of urban dwellings such as the limited private open space available for people using rental housing (often low-income households) and considered all equity issues were not adequately explored. Other differential equity issues described that could have

been explored further included the impacts of urban densification on storm water run-off leading to damp housing, as well as energy standards and regulation around solid fuel burning.

3.8 Indirect impacts

Most key informants and workshop attendees felt a large part of the HIA impacts were intangible but important. Many have been included in the findings above. 'Footprints' (intangible impacts) identified in the workshop are listed below:

- Everyone knows what HIA is now
- Council planners had a changed view of social and health determinants.
- There are many more 'behind the scenes' conversations about health in local government
- There is more energy for HIAs in Canterbury
- Increased agreement about what are obvious requirements for health and local government to work together
- Improved regional relationship with Māori
- Health has a clearer place in local government

3.9 Future directions

A final section of the HIA Impact Evaluation workshop focussed on what should be done differently to achieve significant changes in health determinants - and in what directions partner organisations of the HIA could go in the future. Greater detail of the workshop is located in Appendix Six. Some of the small group statements crafted to describe a vision of the future for HIA in Canterbury are recorded below:

"A City with shared outcomes and agreed priorities that uses a health and wellbeing approach as a fundamental principle underpinning decision making."

"Our community and the key organisations within it are enabled to work together to develop and implement plans for where we live that are healthy and sustainable."

"Organisations understand, respect and support other agencies statutory responsibilities and reflect them in their planning activities, to allow the City's Vision to be achieved."

"Leaders of health and local government organisations are responsive, visionary and brave."

Some ideas generated in a brain-storming session to elaborate on ways these 'vision statements' could be built into current organisation functioning are recorded below:

- Before local government write their LTCCPs they could be required to engage with strategic partner organisations - and ideally their partners remain engaged throughout the process so that LTCCP incorporates their viewpoints (especially health). The result of this is that HIA is so embedded in process at early stages that it is not required for the end product.
- Another idea was that each organisation at the time of developing strategic plans, invites other partners to share strategic vision and imperatives and therefore to inform planning. This was expanded with an idea that a

percentage of each employees time is allocated to work in another organisation to achieve mutual shared objectives and leading to breaking down barriers of vocabulary and culture as well as cross-pollination possibilities. This could be extended to include secondments or a percentage of an employee's job description being allocated to cross-sectoral work. Other ideas to enhance cross-sectoral working included the availability and use of common public information portals e.g. linked Intranet for all public agencies.

A final small group session in the workshop focussed on areas for action and innovation in the future. All three groups independently came up with an action plan that focussed around the concept of a City Health Plan. Each group had variations on this and groups proposed it include the following features:

1. A cross-sectoral collaborative forum for decisions and implementation of the City Health Plan – this would need committed and significant funding from all partner organisations
2. It would need commitment from highest levels of City leadership – mechanisms could include awareness raising to Leaders Forums – e.g. Mayoral Forum
3. In forming the plan we should profile other cities successful plans e.g. Livingstone in London – and link the plan to statutory goals to increase accountability
4. Underneath the larger plan, working groups would be required that work with a mandate for stretch targets
5. Organisational clarity on each organisations' responsibilities is important

4.0 Discussion

The HIA on the Greater Christchurch UDS has had significant direct and indirect impacts – related to policy change, organisational culture change among partners, relationships particularly between health and local government in Canterbury region and the use of HIA more widely in New Zealand. We can discuss specific issues around non-inclusion of HIA recommendations, and possible reasons behind this as well as methodological issues with this evaluation. It is also valuable to consider future directions pointed by this evaluation.

4.1 Cross-sectoral collaboration

The heavy priority assigned to cross-sectoral collaboration as an HIA impact during the workshop was also a prominent theme in key informant interviews. This was also a recurring idea seen as pivotal to furthering the HIA approach in the future. The 'Dreaming' section of the workshop provided ideas on how to achieve more effective cross-sectoral collaboration and relationships to further integrate of health and health determinants into planning in local government. It was considered requisite for the proposal of a City Health Plan.

Despite such strong support by all partners for cross-sectoral work this was one of the most significant omissions from the final UDS. There were three recommendations around intersectoral working groups in the HIA – none of which were included in the final UDS policy. These recommendations supported cross-sectoral advisory groups in natural resource management (air and water), and for selected health determinants. (See Appendix Four for details). Possible reasons for omission are that such groups require significant time and energy to establish as truly representational and to function well; and they are likely to involve a degree of loss of control by local government of decisions (governance of natural resources by a diverse regional group). Other possible reasons include the endemic low priority for intersectoral work, regulatory restriction on cross-sectoral work (such as the structure of the RMA), reporting constraints, tight timelines for projects, governance of partner organisations that does not value of cross-sectoral work and lack of clarity on who has overall responsibility for health determinants. These are significant omissions in the UDS that are likely to lead to negative health impacts over time. This would be a fruitful area for further research.

4.2 Other HIA recommendations not included in the Urban Development Strategy and Action Plan

Two of the HIA recommendations not included from the UDS specifically sought policy to include design in public spaces and housing for physically disabled people. While this was not overtly included in policy it is likely to be considered in design of public spaces and housing through other regulatory mechanisms and is likely an oversight rather than a rejection of the HIA recommendation.

Other significant omissions are the lack of explicit inclusion of priority and resourcing for the tool of HIA and a notable absence of any monitoring of health indicators within the Top Twenty priority actions. The recommendation on monitoring mechanisms within transport and health more broadly was also not included. This requires further leadership by the CDHB.

The Top Twenty Priority Actions within the UDS were described by several key informants as the most important activities and priorities of the Urban Forum. While some of the broad health determinants of the HIA are included in the Top Twenty there is a significant absence of Priority Actions around HIA recommendations and specific health focus on health determinants. This suggests that although the HIA was described as a foundational document of the UDS, there is still a long way to go before it is obvious that health is being considered as a key outcome of local authority planning.

4.3 Why are HIA recommendations not included more obviously in the Urban Development Strategy and Action Plan

A policy implementation approach considers whether the HIAs objectives are achieved, irrespective of what extent the HIA recommendations are included in a final policy document. This evaluation has been able to map to what extent HIA recommendations were included in both the UDS policy and action plans. Perhaps more enduring and telling though is evidence that the HIA has impacted planners' ways of thinking with an explicit inclusion of health determinants approach. Several key informants in the CCC and Environment Canterbury felt that this HIA and the process around it had impacted on planning and policy making more generically. Specific examples of this were provided with the HIA leading to an explicit section on health in the final UDS, in HIA being seen as one factor leading to changes in the NRRP and in CCC natural resource planning processes, arising from the Inquiry By Design workshops.

Whilst there was general agreement that HIA is an important tool which has led to significant change in planning and policy in areas of the City Council, C&PH and perhaps in Environment Canterbury, this evaluation identifies that impacts have been less than hoped for. Reasons for this are likely to be multiple and diverse. Lack of diffusion of HIA as a tool was reported within key HIA partners of the CDHB, CCC and Environment Canterbury as one of the areas where the HIA had not delivered hoped for impacts. Another reason voiced during group discussion in the workshop was institutional inertia (lack of responsiveness by staff and management) as a significant barrier to greater acceptance and use of HIA. Working party members described that while the HIA itself had strong leadership, leaders of the partner organisations of the HIA also need to be convinced and enthusiastic for the HIA to have achieved greater penetration and adoption.

Future dreaming and planning identified strong, courageous leadership as a key to a future with HIA integrated into planning. It also identified that organisational planning should be opportunistic and nimble. These qualities are seemingly requisite for more effective integration of an HIA approach to planning.

4.4 Future directions for HIA in Canterbury

This HIA impact evaluation provided opportunity for key HIA partner to discuss the HIA and its impacts over two years after it was undertaken. It presented an opportunity to 'take the pulse' of HIA in the region and consider future directions.

Indirect impacts of the HIA are perhaps among the more significant ones. Workshop attendees as well as a number of key informants identified that planners within local government have an increased understanding of health determinants. While this has not been able to be substantiated with evidence of increased consideration of health determinant in resource consent applications, there is consensus among key

informants in CCC that the HPSTED document (Billante 2008) and HIA tool have increased planner 'buy-in' and explicit understanding of health determinants among planners. The HPSTED document specifically is a potentially powerful tool to increase inclusion of health into planning – it is a slow process, but there is evidence of progress.

The two most dominant workshop 'outputs' were the need for ongoing cross-sectoral work and the concept of a City Health Plan for Christchurch. The latter provides an opportunity for a shared cross-sectoral project and some work has begun on progressing this idea by the manager in CCC and CDHB with the Healthy Christchurch network. A policy such as a City Health Plan has potential to increase transparency of policy formulation and implementation as well as strengthen partnerships across sectors.

There was strong support from nearly all key informants and workshop participants that the HIA was worth doing. It was an important first step in HIA and it is important that more HIAs are done. The suggestions in the Future thinking session of the workshop underline possibilities for what should be done differently. These include creating and taking opportunities for cross-sectoral collaboration, strong and brave leadership of organisations, responsiveness to opportunities, shared strategic planning and clearly assigned responsibility for outcomes. While HIA has potential to slow project planning by adding another step, it can also provide doorways and synergies in the planning process that demand 'nimble' responses. This largely successful HIA has been a key to ongoing support and use of the HIA tool.

4.5 Limitations of this evaluation

This evaluation used a mixed qualitative methodology to gather information on the impacts of the HIA. All of the following factors have potentially limited the depth and breadth of the analysis and evaluation –

- Competing work priorities limited attendance of the workshop and also meant some workshop participation was piecemeal.
- Some people identified as pivotal key informants were not available at the time of research.
- Key informants at times had limited time availability for interviews and the evaluator also was working to complete the work in a fixed amount of time.
- The evaluator has been a previous employee of C&PH within CDHB which is may have influenced analysis and interpretation.

5.0 Conclusions

The Health Impact Assessment of the Draft Greater Christchurch Urban Development Strategy has had wide and significant impact at a range of levels. It provides evidence of effective cross-sectoral partnerships that have been strengthened and synergised through the HIA process. These have led onto further cross-sectoral initiatives, including a new position created for a Public Health physician in the Christchurch City Council and work commenced by CDHB and CCC on a City Health Plan. This has been a high profile HIA with regional, national and international recognition that this process has been successful and effective.

This HIA has contributed to a more prominent role for health on the local government agenda and improved knowledge of the causes of ill-health (social model of health) by non-health professionals and the public. Significantly a majority of the HIA recommendations have been adopted by the policy body – the Greater Christchurch Urban Development Forum. The HIA process has also contributed to policy implementation such as amendments made to the recharge zoning of the Natural Resources Regional Plan (NRRP) Groundwater Allocation and Policy Implementation (Environment Canterbury 2007). There has been improved engagement and relationship with Māori which has been illustrated through improved consultation mechanisms between health, local government and Māori.

Permeation of a health determinants approach (as provided by the HIA tool) into the tissue of the larger UDS partner organisations is yet to happen. Currently most 'health' organisations continue to be dominated by health services provision with little focus on changing health determinants. Ongoing and even greater commitment to changing health determinants by health and local government is essential to achieve long-term health outcomes.

The inclusion of the health determinants defined in this HIA into the long-term Greater Christchurch Urban Development Strategy increases opportunity for a healthy urban environment, and therefore healthy citizens of the Greater Christchurch area.

6.0 Recommendations

1. That all levels of government organisations work together to ensure development of key cross-sectoral relationships and shared projects.
2. That the concept of a City Health Plan for Christchurch is developed further between cross-sectoral partners that include local government and CDHB.
3. That an integrated monitoring programme of health markers related to the HIA in areas such as air quality, cyclist and pedestrian safety and health is commenced by CDHB.
4. That partner organisations of the UDS develop strategies to integrate HIA approaches more broadly and deeply into their larger organisation.
5. That all new major policy and infrastructure projects in local government and CDHB are screened for their impact on health and health determinants using steps recommended in the HIA Toolkit.
6. That formal evaluation and documentation of the impacts of the HIA (including actions taken in response to policy changes) are built into all HIAs undertaken in Canterbury.
7. That a full-time position jointly funded by local government and health is created to support Health impact assessment in Canterbury – ideally located in CDHB.

Appendix One - Semi-structured interview participants (and role at time of HIA)

1. Karen Banwell Senior Policy Analyst - CCC
2. Vincie Billante Environmental Health Advisor, CCC
3. Dr Cheryl Brunton Public Health Physician, Workshop Facilitator, CDHB
4. Jane Cartwright Strategy Support Manager, CCC
5. Dr Lynley Cook Public Health Physician, Workshop Facilitator, CDHB
6. Evon Currie General manager, HIA Steering group, C&PH CDHB
7. Frances Graham HIA support unit – Ministry of Health
8. Carolyn Ingles Programme manager, Liveable Cities, CDHB
9. Laurie McCallum Programme Manager, UDS, Environment Canterbury
10. Terry Moody Principal Environmental Health Officer
11. Dr Ramon Pink HIA working group, Workshop facilitator CDHB
12. Dr Robert Quigley Consultant, Quigley and Watts, Wellington
13. Ben Roxas-Harris CHETRE, NSW, Australia
14. Louise Signal Director Health Promotion and Policy Research Unit & HIA, Research Unit, University of Otago, Wellington
15. Mary Sparrow Policy Analyst, Waimakariri District Council
16. Dr Anna Stevenson HIA project manager, Public Health Physician, CDHB / CCC
17. Siobhan Storey Senior Policy analyst, CCC
18. Martin Ward HIA consultant, Contractor
19. Dr Daniel Williams Public Health Physician, Workshop Facilitator, CDHB
20. Malcolm Walker Health protection officer – Risk Management Assessment group

Appendix Two - Interview schedule – Key Informants in Christchurch

- From your knowledge how was the Christchurch HIA used in policy development and advice?
- Proximal impacts - More specifically - how was the UDS (as the policy proposal) changed as a result of the HIA?
- To what extent that you are aware, were the recommendations of the HIA accepted and implemented by policy makers? Also do you know of any mitigation measures undertaken?
- What do you see as more distal impacts / 'side spin-offs' of the Christchurch HIA? E.g. synergies / partnerships/ increased role of health on the agenda...
- Are there ways you can think of that this HIA did not fulfil or meet expectations? Can you elaborate?

Appendix Three – Interview Schedule - Key Informants outside Christchurch

- To what extent that you are aware, were the recommendations of the HIA accepted and implemented by policy makers? Also do you know of any mitigation measures undertaken?
- What do you see as more distal impacts / 'side spin-offs' of the Christchurch HIA? E.g. synergies / partnerships/ increased role of health on the agenda.
- Are there ways you can think of that this HIA did not fulfil or meet expectations? Can you elaborate?
- Can you describe impacts of this HIA on HIA use generally or more widely in NZ and Australia? e.g. perceptions of its usefulness in decision-making
- What are your perceptions of HIAs credibility; understanding of healthy equity and the determinants of health in local government and other policy 'bodies'
- In what way do you feel this Christchurch HIA has contributed to other HIAs in NZ/ Australasia?

Appendix Four - Document Review - UDS and Recommendations in HIA

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
Overall view of health and urban design	A section on Health and Well-being authored by the HIA leader was included in the Final UDS	Section on Health and Wellbeing includes an explanation of Health's inclusion, Growth Issues, Key Approaches and an Actions table on pages 47 – 49. Action points are present Actions include (lead agencies in parentheses): an integrated monitoring programme (CDHB), ongoing support in local service mapping (MSD), assessment of local and regional government policies for suitability for health impact assessment (CCC) and formal links as a 'health action forum' between the CDHB, PHOs and local government to monitor health issues (CDHB)	(13) Develop an integrated programme for monitoring demographic, social, economic and environmental change together with development activity across Greater Christchurch that enables effective measurement of the outcomes of strategy implementation. NOTE : THIS PRIORITY DOES NOT MENTION HEALTH EXPLICITLY I.E. RECOMMENDATION NOT INCLUDED IN TOP TWENTY PRIORITY ACTIONS
Summary recommendations	Cross-sectoral working parties are established for selected health determinants to provide advice to the development and preparation of the strategy.	Develop intersectoral projects that specifically focus on significant public health issues (p48) RECOMMENDATION ONLY PARTIALLY INCLUDED No action points included (p49)	
	Health impact assessments for selected health determinants should be carried out with adequate resourcing	RECOMMENDATION NOT INCLUDED No Action point included (p49)	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	All staff participating in the Greater Christchurch Urban Development Strategy should be trained in the principles of health impact assessment	(not found in UDS document although records show that 6 CCC staff have received Beginners and / or Advanced HIA training) RECOMMENDATION NOT INCLUDED No action points included (p49)	
	Health impact assessment should be incorporated into the development and analysis of policy for the UDS	Ensure our planning encourages and promotes healthy lifestyles (p48) Ensure existing and proposed local and regional government policies are assessed for their potential impacts on health outcomes, and their suitability for formal health impact assessment (p48) Action point present (p49)	
Air Quality	Develop cross-sectoral collaborative project based working groups	RECOMMENDATION NOT INCLUDED No action points included	
	Improve the capacity to monitor the links between air quality and relevant health outcomes	Central, regional and local government work with the industrial sector to reduce emissions to air and improve air quality. No action points included (p88) RECOMMENDATION ONLY PARTIALLY INCLUDED	
	Sponsor energy efficient housing	Develop and implement building codes that require clean and efficient heating systems and research options for centralised heating systems (p88) Encourage insulation, double glazing and solar water heating ion all homes(p88) No action points included (p88)	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Reduce the reliance on solid fuel burners while ensuring availability of affordable and healthy alternative heating options.	Promote energy efficient incentives that provide better air quality, such as the Clean Health Project (p88) Action points: Clean Heat Strategy for Kaiapoi and Rangiora (ECan) (p89)	
	Promote public and active transport	Localise and provide facilities to minimise the need to travel and support sustainable travel i.e. greater use of walking, cycling and public transport (p118) with Action Point (p120) Use demand management initiatives to facilitate modal shift and reduce the relative need to travel (p119) with Action point (p120) Provide transport infrastructure and services to ensure a multi-modal transport system that enables a range of transport mode choices.(p119) Action point on Travel Demand Management and Strategy (p120)	
	Advocate upgrading the building code	Develop and implement building codes that require clean and efficient heating systems and research options for centralised heating systems (p88) Urban design standards require new developments are sited for energy efficiency and for optimal use of solar gain.(p88) No action points included	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
Water Quality	Protect groundwater (aquifer) catchments zones	Ensure land use does not impact on drinking water zone established in the NRRP and recharge zones in other districts (p112) – No action points included (p112) (Note – in a variation to NRRP which is now in the Regional Policy Statement there are aligned maps between districts and local government with a mutually supportive relationship and function.)	(18) Prepare Integrated Catchment Management Plans to assist with coordinated decision-making in relation to surface water management.
	Integrate water management with urban planning	An integrated sustainable approach to the three urban waters (p112) Action point included around this approach (p112)	
	Support water resource planning and management with a cross-sectoral steering group (incl. Ngāi Tahu)	THIS RECOMMENDATION NOT INCLUDED No action points included	
	Adhere to sustainable development models for water management including monitoring and accounting for predicted climate change	An integrated, sustainable approach to the three urban waters (water supply, wastewater and storm water) so that the use or discharge of one does not impact on the other.(p112) Action points included (p112)	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Improve monitoring and reporting of water quality and quantity in the greater Christchurch area	<p>Closely monitor and research emerging issues. Preview the approach to drinking water management and distribution management in the context of emerging research findings(p112)</p> <p>Sufficient drinking water supply planning and investment to support intensified growth in a planned, rather than a reactive manner.(p112)</p> <p>No Action Points included.</p>	
Social Connectedness	Develop community spirit within neighbourhoods	<p>Develop community spirit and social cohesion within neighbourhoods, through the provision of well-positioned schools, elements of local identity and use of public spaces (p59) Action point around health and social services plan present (p61)</p>	(19) Develop a community engagement programme to take into account the principles of collaboration and to develop awareness and understanding of issues as a foundation for agreement, commitment and action.
	Provide an efficient public transport system connecting people of all incomes to their neighbourhoods and the wider city	<p>Bus priority measures will be implemented to improve service levels (p75)</p> <p>The Central City Bus exchange and interchanges will be expanded (p76)</p> <p>New buildings....include design principles that decrease crime while improving safety and social interaction (p75)</p> <p>Urban design is incorporated into activity centres...supported by public passenger transport, cycling and walking facilities and commercial and retail activities (p70)</p> <p>Action points present (p76,77)</p>	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Design for a 'sense of place' using elements of local identity such as indigenous planting and public art	<p>Improve the quality of urban design in town centres, particularly the provision of adaptable built form and attractive public space and street frontages.(p75)</p> <p>Councils invest in high quality public spaces associated with town or activity centres. (p70)</p> <p>The process of identification, consultation and engagement of Māori in identifying Māori heritage that has a cultural and traditional significance (p66) Included in Action points (p66)</p>	(16) Develop an urban design strategy to apply the principles of good urban design reflecting the character and diversity of the communities in the Greater Christchurch
	Incorporate universal design principles when planning and designing public spaces to allow access for all people	<p>Encourage and promote accessibility for all including people with disabilities, youth, older people and families with young children (p48). Not included in Action points RECOMMENDATION ONLY PARTIALLY INCLUDED</p> <p>No action points included</p>	
	Plan a range of housing types (size and price) that reflect and promote community diversity	<p>Conserve the character and diversity of established neighbourhoods not included in intensification areas (p75)</p> <p>Plan a range of housing types that reflect and promote community diversity. (p59)</p> <p>Action points present around this recommendation (p76)</p>	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Involve residents in the design of new communities.	<p>Encourage civic participation (p59)</p> <p>Involve the community in key decisions to avoid community displacement and severance (p59)</p> <p>An environment is created that encourages community interaction on growth management issues (p125)</p> <p>The community participates in key decision-making processes as a partnership (p125)</p> <p>Action points present (p61,p126)</p>	
Housing	Profile and utilise current NZ housing research to inform planning	<p>Publicise examples of well-designed affordable housing (p53)</p> <p>Action point present p54</p>	
	Ensure affordable housing options for all	<p>Promote an appropriate housing mix that reflects a range of size, price, density and locations (p53)</p> <p>Promote affordable, high-quality housing for the community(p53)</p> <p>Promote housing for multi-generational and extended families as well as an ageing and ethnic population (p53)</p> <p>Promote housing that integrates all socio-economic groups. Recognise the importance of social and community networks and providing this close to where people live. (p53)</p> <p>Provide housing for the elderly including retirement villages, accessible communities, apartment living and suburban housing (p53)</p> <p>Action points present (p54)</p>	<p>(9) Implement the Central City Revitalisation Strategy by providing directives, information and incentives for achieving the density targets while providing affordable housing and protecting neighbourhood identity</p> <p>(15) Carry out a study of housing affordability options around d inclusive zoning, increasing the stock of social housing...a nod monitoring the supply and demand of affordable housing at local and regional levels.</p>

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Strengthen building codes locally to build quality-housing stock that is highly energy efficient	Minimise energy consumption of new buildings (p99) Incorporate passive solar and other ecological design principles (p53) No action point present	
	Introduce universal design principles into all new buildings to reduce inequities in access.	RECOMMENDATION NOT INCLUDED No action points included	
Transport	Promote active transport – particularly cycling and walking	Localise and provide facilities to minimise the need to travel and support sustainable travel i.e. greater use of walking, cycling and public transport (p118) Use district plans and other mechanisms, to integrate public passenger transport routes and infrastructure, and walking and cycling infrastructure in all new developments (p119) Action points present (p120)	(7) Amend the Regional Land Transport Strategy to reflect the adopted UDS, this may include a transport strategy for Greater Christchurch and travel demand management strategy and actions plans.
	Promote the use of public transport	Provide transport infrastructure and services to ensure a multi-modal transport system that enables a range of transport mode choices.(p119) Provide good access to public passenger transport that contributes to reducing social isolation (p59) Action points present (p120,121)	
	Reduce reliance on private cars, particularly in the centre of Christchurch and towns	Use demand management initiatives to facilitate modal shift and reduce the relative need to travel (p119) Action point present (p120)	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
	Produce road, footpath and cycleway design strategies that improve safety	<p>Ensure proposals are consistent with the Safe Waimakariri Strategy and Safer Christchurch Strategy. The key goals are injury prevention, road safety...(p48)</p> <p>Ensure the principles of sustainability, integration, safety, responsiveness and targeted investment underpin all activities in the transport system (P118)</p> <p>Design and plan street edges to enhance the pedestrian environment.(p99)</p> <p>RECOMMENDATION ONLY PARTIALLY INCLUDED IN UDS</p> <p>No action points present</p>	
	Protect communities from the effects of constructing and developing arterial roads	<p>Ensure community needs are recognised and met when developing and constructing roads (p59)</p> <p>Physically connect surrounding residential neighbourhoods to the activity centre (p99)</p> <p>Avoid severing communities from facilities by major highways (p53) No action points present</p>	
	Ensure planning anticipates changes in transport costs, demand and modes	<p>Development of modes is selected based on their ability to meet levels of demand and travel patterns in an affordable and sustainable manner (p118)</p> <p>Use demand management initiatives to facilitate modal shift and reduce the relative need to travel (p119) Action points present (pgs 120,121)</p>	
	Monitor impacts of transport on health such as vehicle emissions and injury rates	<p>RECOMMENDATION NOT INCLUDED IN UDS</p> <p>No action points present</p>	

HIA Topic	Recommendation	UDS policy detail (Key Approaches)	Inclusion in Top Twenty priority actions (Pages 35,36)
Engagement with Māori	Incorporate Māori values in urban design	<p>The process of identification, consultation and engagement of Māori in identifying Māori heritage that has a cultural and traditional significance (p66)</p> <p>Recognise and provide for Papakainga housing (p53)</p> <p>Partnerships between Tangata Whenua, the Crown and local government provide for the practical exercise of kaitiakitanga.(p125)</p> <p>Action points present (p64,66)</p>	

Appendix Five - HIA Workshop attendance

Name	Organisation/representation
Karen Banwell	CCC
Cheryl Brunton	CDHB
Richard Budd	Independent (Ex ECan Councillor)
Alan Bywater	CCC
Jane Cartwright	Partnership PHO (ex-CCC)
Evon Currie	CDHB
Paula Hawley-Evans	Ministry of Health
Laurie McCallum	Environment Canterbury
Kaaren Mathias	CDHB
Rob Quigley	Quigley and Watts
Anna Stevenson	CCC/CDHB
Siobhan Storey	CCC
Keith Tallentire	Environment Canterbury
Martin Ward	HIA Consultant

Appendix Six - HIA Workshop report

1 April 2008

9.30 am – 3.30pm

Appreciative interview findings

(Workshop participants interviewed each other in pairs with a prompted interview schedule)

HIA process

- HIA training was good but not multi-sectoral on the whole
- It gained momentum as it went
- It was FUN
- New languages and vocabulary came out of HIA
- HIA gave credence to UDS
- Contributed to community outcomes

Leadership

Was and is vital to the success of this HIA. Key features of this leadership include:

- Political
- Professional
- Resourcing
- Visionary
- Strategic

Therefore GM's and CEOs need to be laterally aware, big picture, to take changes, to be policy entrepreneurs and enablers. The concept of 'nimble' leaders were discussed – who like a good rugby player, see and seize an opportunity and move quickly in that direction. In the same way, organisations working in 'HIA' way need to move to new ways of operating, to be responsive and nimble and to be able to move resources (human and financial) quickly in response to opportunities.

Key features for ongoing collaborative work were identified as:

- It is essential to embed health into local authority processes
- Health should be upfront in urban planning
- Currently the health sector is siloed and this significantly reduced effectiveness
- Cross-sectoral process/ integration was essential
- We need to build cultural change into partner organisations e.g. increase active transport by employees of all organisations involved in UDS

How could the HIA have been more effective?

- RMA not always helpful
- It should be built into Regional Policy Statements
- How to make HPSTED/ consideration of health outcomes by local authority and private developers enforceable?

Questions regarding impact

- What are the most important findings and impacts of the HIA?
- What are some of the less tangible footprints left behind by the HIA?
- What were some of the challenges limiting impact of the HIA?

Most important impacts of the HIA

PHP role	***
CCC doing HIA regularly	*
Catalyst to HPSTED and Healthy Cities	-
Legitimised HIA as a tool	*
Collaboration between agencies	*****
Leadership (influencing impact)	*****
Influential initiative nationally	*
Well-documented	*
Improved relationships (with Māori/ other)	*
Process allowed lateral thinking	-

Footprints

- Legitimised process
- HPSTED Document
- Energy for HIAs in Canterbury
- Increased agreement about what is obvious
- Relationship with Māori
- Health has a place in Local government

Challenges

- Time / resource pressures
- Priority for HIA
- Cross-sectoral working groups
- Sustainability/ well-being

Themes and Ideas that emerged in Dreaming Time

Some of the responses to the following instruction: “In small groups craft a statement that reflects your vision of the perfect future in terms of maximising the opportunities offered by health impact assessment approaches in Canterbury”

“A City with shared outcomes and agreed priorities that uses a health and wellbeing approach as a fundamental principle underpinning decision making.”

“Our community and the key organisations within it are enabled to work together to develop and implement plans for where we live that are healthy and sustainable.”

“There is agreement between organisations on each others roles and responsibilities, with commitment to delivery of agreed outcomes”

“Organisations understand, respect and support other agencies statutory responsibilities and reflect them in their planning activities, to allow the City’s Vision to be achieved.”

“Leaders of health and local government organisations are responsive, visionary and brave.”

“Regional collaboration activities between Central and Local government demonstrates effective models for promotion by Central Govt. Leaders.”

This was followed by a brainstorming time considering what needs to change to make these ‘Dream states’ possible. Responses are grouped by theme.

Suggestions for embedding Health into TA processes

1. Political leaders and professionals understand how their organisations activities influence community health and wellbeing.
2. Before TAs write their LTCCPs they are required to engage with strategic partner organisations - and ideally their partners remain engaged throughout the process so that LTCCP incorporates their viewpoints (especially health) → HIA is so embedded in process at early stages that it is not required for the end product.

Suggestions for cross-sectoral processes

1. All relevant parties plan together and deliver according to those agreed plans.
2. In each organisation – when developing strategic plans, the other partners are invited to share their strategic vision and imperatives to inform planning.
3. Cross- sectoral / Cross-fertilisation (eg a percentage of each employees time is allocated to work in another organisation to achieve mutual shared objectives....breaks down barriers of language and culture.
4. Commit funding to the collaborative forum
5. Priority on relationship building
6. Common language used by policy makers can lead to quality advice
7. Common public information portals e.g. linked Intranet for all public agencies.
8. A final small group time focussed on areas for action and innovation. Participants working in small groups were encouraged to draw up a plan using a matrix with the following headings:
What will be done/ Person responsible/ Completion date/ Help needed from specific others.

All three groups independently came up with an action plan that focussed around the concept of a City Health Plan. Each group had variations on this but there was strong unison of the importance of features of a City Health Plan that were proposed included the following features:

1. A cross-sectoral collaborative forum for decisions and implementation of the City Health Plan – this needs committed and significant funding
2. Maybe it should be wider than a City Health Plan and be a Canterbury Health Plan
3. It needs a focus on sustainability
4. Such a plan would need commitment from highest levels of City leadership – mechanisms could include awareness raising to Leaders Forums – e.g. Bob Parker at Mayoral Forum
5. In forming the plan we should profile other cities successful plans e.g. Livingstone in London – and link the plan to statutory goals to increase accountability
6. Underneath the larger plan, working groups would be required that work with a mandate for stretch targets
7. It would be important to have organisational clarity on goals' responsibilities (Note -have conversations with partners at beginning of process so they are involved IN the process, and own it, rather than submitting on them)
8. Sharing and cross-fertilising resources within and between organisations E.g. Secondments would be a way to make this happen (Examples of where staff would go: P&F (DHB) , Education, Internally)
9. Job Descriptions within partner organisation would include a percentage of time working cross-sectorally
10. City Health Plan partner organisations would have shared strategic planning e.g. by CEOs
11. Part of the plan would include engagement with Tangata whenua and Pacific to ensure the plan is culturally responsive and relevant

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