

**Review
of the
Healthy Built
Environments Program**

Centre for Population Health

NSW Ministry of Health

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Contents

ACRONYMS.....	3
EXECUTIVE SUMMARY	4
INTRODUCTION	6
BACKGROUND	6
Health and the Built Environment.....	6
The Healthy Built Environments Program.....	7
HBEP Objectives.....	7
HEBP Staffing and Governance	8
THE HBEP REVIEW	9
Scope	9
Review Method.....	9
Qualitative Analysis.....	9
DISCUSSION.....	11
Meeting Program Objectives.....	11
Working with and Influencing External Stakeholders.....	18
Health Investment in the Built Environment.....	19
Governance.....	20
Future Investment in the Healthy Built Environment.....	21
CONCLUSION	21
Appendix 1.....	23
Appendix 2.....	24
Appendix 3.....	25
Appendix 4.....	26
Appendix 5.....	33
REFERENCES.....	34

ACRONYMS

AHURI	Australian Housing and Urban Research Institute
ARC	Australian Research Council
CHETRE	Centre for Healthy Equity Research and Training
CPH	Centre for Population Health
CRC	National Cooperative Research Centre
FTE	Full-time equivalent
HEAL	Healthy Eating and Active Living Strategy
HBEP	Healthy Built Environments Program
LHD	Local Health District
MoH	Ministry of Health
NSW	New South Wales
PCAL	NSW Premier's Council for Active Living
PHO	Public Health Officer
UNSW	University of New South Wales

EXECUTIVE SUMMARY

The built environment is increasingly being recognised as an important determinant of health. As populations face rising rates of obesity, diabetes and chronic disease associated with lifestyle behaviours, the need to create environments that promote health and well-being is gaining momentum.

The Healthy Built Environments Program (HBEP) ('the Program') is an innovative inter-disciplinary collaboration that has sought to better integrate the health and urban planning sectors. The Program was formally established in January 2010, with funding backdated to October 2009, within the City Futures Research Centre, Faculty of the Built Environment, University of New South Wales (UNSW), with core funding over five years from the NSW Ministry of Health (MoH). HBEP's primary areas of activity were research, workforce development and education, and leadership and advocacy in the healthy built environment field.

The Program concludes on 30 September 2014. The Centre for Population Health (CPH), commissioned a qualitative Review of the HBEP ('the Review') in order to determine the Program's effectiveness in achieving its objectives and in working with and influencing external stakeholders. The Review also sought to appraise the overall value of NSW MoH investment in the Program.

Two external independent Expert Reviewers ('the Reviewers') were engaged to undertake the Review. A range of data collection sources and evaluation strategies were employed including a review of HBEP's key achievements and portfolio which showcased some of HBEP's key achievements against its three core areas of activity. Two investigators within the CPH interviewed 14 key stakeholders across NSW in order to ascertain their views. The CPH contracted the Sax Institute to prepare a detailed thematic analysis of the transcripts of the key stakeholder interviews. The Reviewers also conducted a site visit with HBEP to supplement their review of the portfolio and key achievements.

The Review found that the Program delivered an extensive body of work across each of its three core areas of activity. In particular, HBEP delivered a comprehensive array of healthy built environment research activity. HBEP's most notable research achievement was the comprehensive review of healthy built environment literature ('the Literature Review') and accompanying fact sheets, which received the Planning Institute of Australia's (NSW Division) 'Cutting Edge Research and Teaching Award' in 2012. Other research achievements included the HBEP Mapping Project, and the Indicators Project - a work in progress due for completion in September 2014.

HBEP also delivered a range of activities aimed at enriching the knowledge base and skills of the NSW Health workforce. Key achievements included the *Planning for Health and Wellbeing* workshops which were delivered across the State from late

2012 and through 2013, the opportunity for NSW Health staff to undertake the postgraduate healthy built environment course at the UNSW gratis and the healthy built environment online e-learning strategy.

The Review determined that HBEP consistently displayed effective and wide ranging leadership and advocacy in its efforts to promote healthy built environments in NSW, and demonstrated influence in both the planning and health sectors. HBEP delivered numerous conference presentations, seminars, workshops and public lectures, and was successful in forging international links.

The location of HBEP within the UNSW Faculty of the Built Environment was found to be instrumental in influencing the planning profession in varied ways. The Review determined that HBEP was also instrumental in strengthening the healthy built environment field as a legitimate policy focus for a range of government and non-government agencies.

Of most significance was HBEP's contribution to the NSW planning system reform agenda which culminated in the inclusion of a health objective in the *NSW Planning Bill 2013* ('the Planning Bill'). HBEP played a strategic role in establishing the evidence base and creating an alliance of agencies to act as a single peak expert voice.

The Reviewers determined the need for further health investment in the healthy built environment to consolidate and extend the work begun by HBEP. In particular, further leadership, collaboration and education will be required to leverage the health objective and to ensure that health is embedded into relevant planning decisions across NSW.

INTRODUCTION

The built environment is increasingly being recognised as an important determinant of health, particularly as populations face rising rates of obesity, diabetes and chronic disease associated with lifestyle behaviours. Health professionals are seeking to collaborate with planners to influence the design of cities to promote better health.

The Healthy Built Environments Program (HBEP) ('the Program') is an innovative and inter-disciplinary initiative of the NSW Ministry of Health (MoH) that has sought to better integrate the work of the health and planning sectors. The Program is situated in one of Australia's largest faculties of the built environment and receives its core funding from the NSW MoH.

HBEP was formally established in January 2010, with funding back dated to October 2009 for a period of five years to build workforce capacity and drive policy relevant research in the healthy built environment. The NSW MoH commissioned a review of HBEP in order to evaluate its success over the five years of its tenure and appraise the value of its investment in the Program.

This Paper details the findings of the HBEP Review with suggestions for future health investment in the healthy built environment.

BACKGROUND

Health and the Built Environment

Chronic and lifestyle related diseases have emerged as the leading cause of ill health in Australia and indeed the developed world.¹ Obesity is rapidly becoming the major health burden for NSW.² Overweight and obesity increase the risk of developing chronic diseases such as type 2 diabetes, hypertension, heart disease and some cancers.³

Research has demonstrated links between chronic disease and the way of life in cities characterised by car-dominated transport, reduced opportunities for exercise, increased fast food availability and lack of social connection.⁴ As such, the role of the built environment in supporting human health as part of everyday living is increasingly gaining momentum.⁵

The NSW MoH is committed to creating environments which reduce the impact of lifestyle related chronic disease, and promote population health and wellbeing. Building environments to support healthy eating and active living is a key component of the *NSW Healthy Eating and Active Living Strategy* ('HEAL').⁶ Central to HEAL is the creation of healthy built environments which facilitate healthy lifestyles, for example, active travel facilities and amenities, mixed land use planning, quality public open/green space and access to healthy affordable food.

The Healthy Built Environments Program

Following a formal tender process, the NSW MoH, Centre for Population Health (CPH) selected the City Futures Research Centre, Faculty of the Built Environment, University of New South Wales (UNSW) to establish the HBEP.⁷ HBEP was set up as a research and workforce development program to support collaboration between the health and built environment professions.⁸

A five year contract was awarded to an interdisciplinary consortium from academic, government, private and non-government organisations with expertise across health, urban planning and design, under the leadership of two principal investigators, Associate Professor Susan Thompson (an urban planner) and Professor Tony Capon (a public health physician). The NSW Ministry of Health provided HBEP with core funding to a total of \$1.5 million over five years to 30 September 2014, with infrastructural support from UNSW. Professor Capon subsequently left the Program and Associate Professor Thompson was appointed Director.

HBEP's stated vision is that "...built environments will be planned, designed, developed and managed to promote and protect health for all people".⁹ This vision is pursued through the HBEP's three core areas of activity:

- i. Research
- ii. Leadership and Advocacy
- iii. Education and Workforce Development

HBEP Objectives

The objectives of HBEP as specified in the original Funding and Performance Agreement are as follows:

i. Research

- Develop, in partnership with stakeholders a policy relevant strategic research plan on the links between the built environment and health in light of the current evidence base.
- Manage the implementation of the strategic research plan by steering current research activity, influencing future research and leveraging funds to undertake research projects which address key policy issues.
- Support the translation of research into policies and programs which support good health alongside other social, economic and environmental aims by providing key decision makers with the evidence and information emerging from the research program.

ii. Education and Workforce Development

- Contribute to building the knowledge and skills of the NSW Health workforce to enable it to more effectively influence the development of built environments which are supportive of health.

iii. Leadership and Advocacy

- Work with networks of key decision makers and practitioners to ensure that new evidence is responded to and taken into account in developing policies and strategies in relation to the built environment.

HEBP Staffing and Governance

Core HBEP staff comprise the HBEP Director [0.5 Full-time equivalent (FTE)] and the HBEP Senior Research Officer [1.0 FTE]. Research assistants were employed on a needs basis. Research personnel employed under other grants, which sat within the HBEP, were also part of the Program.

The Director of HBEP is also accountable to UNSW as part of the City Futures Research Centre and holds the position of Associate Director (Healthy Built Environments) in the Cities Futures Research Centre.¹⁰

In this dual role, the HBEP Director identifies and links activities which provide value-add to both organisations. Activity links between the two roles are strongest for research and teaching. For example, teaching of the HBEP course is done as a faculty member and as HBEP Director.

Consortium

HBEP is supported by a Consortium of partners from government, industry and non-government organisations across the built environment and health sectors as well as representatives from within the Faculty of the Built Environment. Consortium partners support different aspects of the Program and have been called upon to provide input and advice on a needs basis.

Advisory Board

The HBEP Advisory Board was established in 2010 and comprises key healthy built environment stakeholders including representatives from the South Western Sydney and Northern Sydney Local Health Districts, University of Melbourne, UNSW, NSW Department of Planning and Environment, Transport for NSW, Studio GL, Planning Institute of Australia, Premier's Council for Active Living (PCAL) and the National Heart Foundation.¹¹

Reporting Requirements

Each financial year HBEP prepared annual business plans detailing its proposed work program under its three core areas of activity. Every quarter, HBEP prepared a detailed report of its achievements against milestones in the respective business plan. An Annual Report was also prepared at the end of the calendar year summarising HBEP's major achievements. End of financial year reports were also prepared annually.

THE HBEP REVIEW

Scope

The current Funding and Performance Agreement between the Health Administration Corporation and UNSW will conclude on 30 September 2014. The NSW Ministry of Health commissioned a review of the HBEP in order to evaluate the success of the HBEP, appraise the value of health investment in a program such as HBEP, and inform future health investment in healthy built environments.

The HBEP Review was undertaken within the context of major changes to health funding including the cessation of Commonwealth funding to the states and territories under the *National Preventive Health Partnership Agreement*, effective 1 July 2014.

The HBEP Review specifically aimed to determine the following:

1. How effective was HBEP in meeting its objectives across the three program areas of focus?
2. How effective was HBEP in working with and influencing external stakeholders?
3. Is investment in a program like HBEP an effective and efficient approach for Health to influence the healthy built environment field?

Review Method

A qualitative Review of the HBEP ('the Review') was commissioned by the CPH. Two external independent Expert Reviewers ('the Reviewers') were invited to tender for the Review and were subsequently appointed. One Reviewer was a Local Health District (LHD) representative from Sydney with expertise in health promotion and research. The other Reviewer was an independent consultant with expertise in research, health promotion and the social determinants of health. Both Reviewers had some experience with, or exposure to, HBEP.

The Reviewers were individually responsible for critically appraising HBEP in accordance with the three overarching review questions (listed above). A set of sub-questions and indicators were developed with suggested primary data sources to assist the Reviewers.

Process and impact elements of the HBEP program were assessed using a range of data collection sources and evaluation strategies. These are detailed below.

Qualitative Analysis

i. Review of Documentary Evidence

HBEP prepared a comprehensive summary document describing the Program's key achievements over the course of its tenure ('Key Achievements Report').¹² The

Reviewers compared the contents of the Key Achievements Report with the HBEP contract specifications and annual work plans, in order to determine the extent to which the Program delivered what was required.

HBEP compiled a portfolio showcasing some of their key achievements in research, education and workforce development, and leadership and advocacy. The portfolio consisted of a few examples of output from each key focus area, the exact composition of which was determined by HBEP. The specific contents of the portfolio included examples of HBEP's research achievements and publications, web links and brochures as well as examples of submissions and conference papers (see Appendix 3 for more detail).

The Reviewers critically appraised the outputs included in the portfolio, and considered their contribution to achieving the overall purpose of the Program and their wider value to the population health field. A pro-forma with criteria for assessment was provided to the Reviewers for their use.

ii. Site Visit

The Reviewers conducted a site visit with HBEP to supplement their review of the portfolio and key achievements. The site visit afforded the Reviewers the opportunity to speak with HBEP staff, clarify any issues, and collect any additional information required to inform their review. The Reviewers also had the opportunity to meet with staff from the Faculty of the Built Environment.

iii. Key Stakeholder Interviews

Two investigators internal to the CPH conducted in-depth interviews with a diverse group of key stakeholders ('the interviewees') in order to ascertain their perceptions regarding the Program's success, impact and value, as well as perceived barriers. Information regarding process elements including procurement, contract management and governance were also sought.

To be eligible for participation, the interviewees were required to have had knowledge of HBEP or some interaction with HBEP such as attendance at an education session or involvement in governance. LHDs were given the opportunity to volunteer to participate in the key stakeholder interviews and nominate staff eligible for participation.

Fourteen interviewees were then purposefully selected and interviewed by the investigators based on their connection to, or experiences of, HBEP. Interviewees included representatives from the HBEP, the HBEP Advisory Board, the NSW MoH, program end-users namely representatives from five LHDs across NSW, and others involved in the operation of the Program or serviced by the Program. Others included industry representatives, government departments and non-government organisations.

A semi-structured interview schedule was used to guide the interviews (see Appendix 1 for details). Each interview was transcribed by the CPH investigators and de-identified to protect confidentiality. Confirmation was sought from interviewees that transcripts were an accurate representation of their respective interview.

iv. Thematic Analysis

The CPH contracted the Sax Institute to conduct a detailed thematic analysis of the transcripts. The transcripts were analysed by the independent consultant using a data-driven, inductive approach to identify emergent themes relevant to the aims of the Review.

Each transcript was read at least twice. Detailed notes were taken, broad categories were developed and coding was performed by the independent consultant (see Appendix 2 for details). Direct quotes were only used with the express permission of the respective interviewee.

The Reviewers used the thematic analysis to inform their expert opinion.

DISCUSSION

Meeting Program Objectives

The Review found that HBEP delivered an extensive body of work across each of its three core areas of activity in accordance with the requirements of its Funding and Performance Agreement.

i. Research

The Review found that over the past five years, HBEP undertook a comprehensive array of healthy built environment research activity (see Appendix 4 for more details). HBEP's key research achievements are summarised below.

a) Listening Tour and Stakeholder Review

HBEP's early achievements included the conduct of a 'Listening Tour'¹³ and 'Stakeholder Review'¹⁴. The Listening Tour involved focus group interviews with key staff engaged in the delivery of healthy built environments across all eight former Area Health Services in NSW.

The Stakeholder Review involved in-depth interviews with 16 healthy built environment stakeholders across NSW. It sought to assess stakeholder understanding of the healthy built environment and the use of evidence in practice and policy making.

b) Literature Review

HBEP's later achievements included a comprehensive review of healthy built environment literature ('the Literature Review')¹⁵, and related fact sheets summarising key themes from the Literature Review.

The Literature Review aimed to "establish an evidence base that supports the development, prioritisation and implementation of healthy built environment policies and practices".¹⁶ It focused on three key domains namely healthy built environments and "getting people active", "connecting and strengthening communities" and "providing healthy food options".¹⁷ The Literature Review highlighted that research on the impact of the built environment and physical activity is more advanced than that of the built environment and social connectivity and healthy eating.

The Literature Review was widely distributed and used regularly by practitioners to support research and other work including evidence-based policy development, planning proposals and educational purposes. The Literature Review was described by interviewees as the Program's foundational piece of work, and was regarded as comprehensive, excellent and academically credible. It supported their program goals, collated the evidence, guided action, promoted key messages, and provided the evidence base for advocacy.

The Reviewers identified that a key strength of the Literature Review was the inclusion of a wide variety of literary sources from both the planning and health fields. The Reviewers also noted that the document represented an important and commendable focus on Australian contexts and issues.

In 2012, the Literature Review and fact sheets received the Planning Institute of Australia's (NSW Division) 'Cutting Edge Research and Teaching Award'. HBEP continues to publish a fortnightly review of new literature relating to healthy built environments on their website.

c) Research Strategy

The findings of the Listening Tour, Stakeholder Review and Literature Review were used to inform the development of the *HBEP Research Strategy 2012 -2014* ('the Research Strategy').

The Research Strategy aimed to lead policy relevant research on healthy built environments by identifying strategic research directions. Specifically, it identified gaps in knowledge and evidence, as well as opportunities for future research particularly in the areas of physical activity, obesity, social isolation and interdisciplinary collaboration.

The *Research Implementation Strategy 2012* ('the Implementation Strategy') was subsequently developed, identifying two major research projects namely, "Mapping

of Healthy Built Environment Activities in NSW”¹⁸ (‘the Mapping Project’) and “Indicators for a Healthy Built Environment Project”¹⁹ (‘the Indicators Project’).

However, several interviewees reported that HBEP had not been successful in securing collaboration for the Research Strategy due to the competitive nature of academic research. Academics were said to have been sensitive about a research strategy that openly charted and directed their research.

Consequently, interviewees were of the view that the Research Strategy and the accompanying Implementation Strategy were not as effective as had been originally intended.

d) Mapping Project

The HBEP Mapping Project²⁰ described the activities delivered across NSW to support healthy built environments. These activities included policy and program work across the three domains identified in the Literature Review.

Several interviewees regarded the Mapping Project as an important resource for understanding and describing the extent of work being undertaken across NSW in the healthy built environment field. It was commented that this resource was useful for health professionals seeking to create links with colleagues in the healthy built environment field, as well as for those wishing to identify existing gaps for further action.

e) Indicators Project

The Indicators Project aims to determine a set of specific measures for tracking progress across the domains of physical activity, social interaction and nutrition specifically within the NSW context.

A draft report has been produced outlining the rationale for the use of particular indicators as well as a table that describes the relationships between various indicators. The indicators reflect both urban planning and health related measures.

The Reviewers commented that the Indicators Project, when complete, will provide a useful and practical means to assess the ‘health’ of the built environment for both health and planning professionals alike. The Indicators Project is due for completion in September 2014.

f) Primary Research and Leveraging of Core Funding

In 2011, HBEP successfully sought Australian Research Council (ARC) Linkage Grant funds to the value of \$534,897 over three years for the *Planning and Building Healthy Communities* project. Project partners included UrbanGrowth NSW, The National Heart Foundation and the South Western Sydney Local Health District.

HBEP also collaborated on several research initiatives including the:

- ARC Linkage Project to evaluate urban cycling infrastructure²¹
- National Cooperative Research Centre for Low Carbon Living, and
- Australian Housing and Urban Research Institute (AHURI) project on healthy housing²².

HBEP worked with the Centre for Health Equity, Training, Research and Evaluation (CHETRE) on a submission to the National Health and Medical Research Council, however was unsuccessful in receiving funding.

Some interviewees, however, stated that they expected HBEP to produce more original research. Within the Program, primary research was reportedly conducted principally by post graduate students. HBEP staff actively mentored and supported postgraduate research students.

Other interviewees expressed concern that the Program had not leveraged sufficient additional research funds or research return, reiterating the importance of leveraged funds on ensuring the Program's viability and ongoing sustainability.

Some interviewees reported that HBEP experienced difficulty in overcoming institutional competition in the context of bidding for research funding in a highly competitive academic research environment.

g) Publications

HBEP produced a quarterly newsletter which featured the work of the Program and was used to advertise upcoming events and emergent research.

HBEP also published a regular column with the professional planning journal *New Planner*. The Review found this regular column to be a notable achievement. It was considered a valuable form of direct and credible communication with the planning profession on healthy built environments.

In addition, HBEP produced a wide range of publications of national and international significance, including peer review and professional journal articles, books and book chapters, monographs and conference papers (see Appendix 2 for more details).

Overall, most interviewees had a general impression that the Program was prolific in generating publications. However, some expressed concern that these publications did not report primary research. They were of the view that HBEP publications were mainly focused on synthesising current evidence and promoting healthy built environment messages rather than reporting original research.

h) Research Dissemination

Interviewees cited the HBEP website as the main mechanism by which healthy built environment research was collated and disseminated. The website provides a comprehensive resource for health and built environment professionals, researchers and students, and was reported to be credible and useful.

It was suggested that website utility could have been improved by the use of social media and apps.

During the course of its tenure HBEP accomplished a comprehensive array of healthy built environment research including an award winning review of healthy built environment literature and a range of scholarly publications.

HBEP successfully sought ARC Linkage funds for a healthy communities project and collaborated on several other research initiatives.

HBEP's research impact could have been strengthened by the conduct of more original research, greater research collaboration and the leveraging of additional research funds.

ii. Education and Workforce Development

The Review found that HBEP undertook a range of activities aimed at enriching the knowledge base and skills of the NSW Health workforce, particularly the public health and health promotion workforce.

Most interviewees agreed that HBEP had successfully engaged LHD staff, and commented that several LHDs are now doing healthy built environment work either directly, or indirectly, as part of an overall overweight/obesity strategy. LHD staff attendance and enthusiasm at local seminars was also seen as indicative of engagement.

While the primary focus of the workforce development program was the health workforce, HBEP also sought to engage other disciplines including planners, private industry and government.

a) Workshops

In 2012 - 2013, HBEP delivered ten capacity building workshops titled '*Planning for Health and Wellbeing*' in various locations across NSW, with 217 participants (see Appendix 3 for more details). These workshops aimed to equip health professionals across the State to better engage with the NSW planning system and introduced participants to the *Healthy Urban Development Checklist*²³. The topics covered in the workshops included the overarching principles of planning through to the details of

how development applications are assessed and how health personnel might intervene most effectively in the planning of particular developments.

Workshops also included a mix of attendees from local government and private industry. The Reviewers observed that feedback collected in the workshop evaluations indicated the high value of the learning as well as the inter-disciplinary connections attendees made at the workshops, particularly local government.

HBEP received complaints from health professionals based in regional NSW about the accessibility of courses and seminars held in Sydney. In response, HBEP ensured that the *Planning for Health and Wellbeing* workshops were accessible to health professionals across NSW. Three workshops were conducted across Greater Sydney, and seven workshops were held across regional NSW.

b) Undergraduate and Postgraduate Courses

HBEP also delivered both undergraduate and postgraduate healthy built environment courses at UNSW. Each year HBEP offered six free places in the post-graduate course to NSW Health staff interested in increasing their knowledge and skills in the field.

Feedback collected in evaluations found that the combination of planning and health professionals attending the course was beneficial. HBEP also mentored two Public Health Officer (PHO) trainees. HBEP also mentored an international PHO trainee from Canada.

a) Online Training

In an effort to increase the reach of its training activities, HBEP developed a strategy for the collation and presentation of e-learning resources ('e-Learning Strategy'). The resources on the HBEP website include videos, lectures and research documents.

The e-Learning Strategy formalises and organises existing and new resources. It consists of 15 modules and is accessible to anyone interested in healthy built environments.

HBEP successfully engaged LHD staff through the delivery of a range of healthy built environment education and workforce development initiatives aimed at enriching the knowledge base and skills of the NSW Health Workforce.

HBEP delivered a series of capacity building workshops across the State, undergraduate and postgraduate healthy built environment courses, and developed an e-Learning Strategy.

iii. Leadership and Advocacy

The Reviewers determined that HBEP consistently displayed effective and wide ranging leadership and advocacy in its efforts to promote healthy built environments in NSW. HBEP provided strategic and expert input into a range of legislative and policy reform initiatives.

HBEP's contribution to the NSW planning system reform agenda was its most significant leadership and advocacy achievement. This involved coordinated advocacy through the establishment of a professional network, in conjunction with PCAL, known as the *Expert Healthy Planning Working Group*, extensive stakeholder consultation and the preparation of detailed submissions.

Reform of the planning system has been a multi-stage process and the Reviewers found that HBEP was active at all stages. The outcome to date has been overwhelmingly positive, in so far as health has been included as an objective in the *NSW Planning Bill 2013* ('the Planning Bill'). Interviewees commented that this achievement "*exceeded all expectation*" and that "*there is no way that that would have happened pre-HBEP*", "*they might have talked about liveability ... but the word 'health' would not be a headline without HBEP*".

Further, interviewees considered HBEP to be instrumental in consolidating the evidence base for the integration of health as an objective in the Planning Bill. The Planning Bill has established leverage points for state-wide action which will potentially have long term impact.

HBEP also made submissions to a number of other key policy development processes including the Sydney Metropolitan Strategy, reform of the NSW strata scheme laws and the development of the National Urban Policy²⁴.

Over the course of its tenure, HBEP delivered numerous conference presentations, seminars, workshops and public lectures (see Appendix 2 for more details). This activity on the part of HBEP, and in particular the Director, commanded much esteem and was regarded by several interviewees as effective in leveraging interest and inspiring action.

HBEP also fostered international links with an array of internationally respected experts in the field including Professor Hugh Barton (University of the West of England), Dr Rodney Tolley, (International Conference Director, Walk 21) and Professor Andrew Dannenberg (University of Washington).

HBEP displayed effective and wide ranging leadership and advocacy over the course of its tenure. HBEP provided strategic and expert input into a range of legislative and policy reform initiatives, most notably in relation to the reform of the NSW Planning system and the inclusion of a health objective in the NSW Planning Bill.

Working with and Influencing External Stakeholders

Overall, the Reviewers found that HBEP was very effective in working with a range of external stakeholders and had demonstrated influence both in the professional field of urban planning and in the health sector.

The Reviewers agreed that the most significant influence occurred during the reform of the NSW Planning system. HBEP played a significant role in activating the *Expert Healthy Planning Working Group* which brought together a range of professionals across the health and planning sectors. Stakeholders included academic institutions, non-government organisations, and a range of government departments. Members of the Group were motivated and equipped to provide collective input into the various stages of the NSW planning process which culminated in the unprecedented inclusion of a health objective in the Planning Bill.

The Review found that HBEP's credibility enabled its influence. The HBEP Director's personal capital was regarded as one of the Program's greatest assets. The Director's niche expertise in Planning, combined with an applied focus enabled her to work with planning and health professionals alike. The Reviewers found that a personal passion for the topic gave the Director ability to enthuse and inspire engagement.

The location of HBEP within the Faculty of the Built Environment at UNSW also served to influence the planning profession and affirmed their participation in the promotion of healthy built environments. The alternative may have been to locate the Program within a school of public health. Many interviewees commented that such an arrangement would have been less innovative and less influential. HBEP has also been active in teaching undergraduate and postgraduate students, many of whom have and will go on to become professional planners with exposure to the ideas of planning for health benefit.

The Reviewers agreed that HBEP was highly active in targeting public health professionals and successfully engaged LHD staff through various approaches including training initiatives, workshops and publications. The Reviewers acknowledged the high level of positive stakeholder feedback in relation to the quality of HBEP's formal training opportunities as well as the informal and ad-hoc instances of support from the Program.

Interviewees reported mixed impressions of HBEP's success in engaging the planners. However, it was acknowledged that program strategies had not directly targeted planners for workforce development, but instead had employed awareness raising strategies. The regular column in the *New Planner* was regarded as a critical strategy for professional engagement.

HBEP worked effectively with external stakeholders. The most significant case of influence occurred during the reform of the NSW Planning system.

HBEP's credible reputation and its location within the Built Environment Faculty facilitated its ability to influence external stakeholders including planning professionals.

Health Investment in the Built Environment

The NSW MoH invested \$1.5 million over five years in HBEP. NSW MoH investment in the built environment was regarded as affirming and symbolic of the health-planning nexus. Interviewees considered this investment as an enabling resource which gave health service employees permission to prioritise health and the built environment as an issue for action.

Prior to the inception of funding, healthy built environment work was said to have been pursued by individual professional advocates on an ad hoc basis. NSW MoH funding enabled the work of these advocates to be valued, consolidated, extended and sustained.

The Reviewers found that HBEP strengthened the field of the healthy built environment as a legitimate policy focus for a range of government and non-government agencies, an important practical concern for health promoters and planners, and a valid focus of academic endeavour.

HBEP achieved this by working hard during the course of its tenure to deliver a wide range of high quality outputs in all of its core activity areas. HBEP played a significant and important role in mobilising a strategic alliance of agencies to act as a single peak expert voice to advocate for the inclusion of a health objective in the Planning Bill.

HBEP was instrumental in consolidating the evidence base to support this legislative reform. HBEP produced a comprehensive combination of academic and professional publications, and received the Planning Institute of Australia Award for their Literature Review.

HBEP also contributed to the workforce development of health professionals across NSW in the healthy built environment, and influenced the training of the next generation of planners. However it is difficult to assess the impact that training has had on individuals and the decisions they may have made to prioritise healthy built environment issues in the ordinary course of their work.

Long term indicators of the HBEP's effectiveness will include observable changes in the built environment to support health and observable improvements in the health of the population, the full impact of which is too soon to assess.

HBEP successfully influenced the field of the healthy built environment, produced a wide range of high quality outputs in all of its core activity areas and demonstrated leadership which contributed to the inclusion of a health objective in the NSW Planning Bill.

HBEP contributed to the workforce development of health professionals across NSW and influenced the next generation of planners.

Governance

The Reviewers found that the reporting requirements outlined in the Program's original contract were "arduous and excessive". Several interviewees identified the need to streamline reporting activity to improve efficiency and suggested that brief annual activity and financial reporting was sufficient. Some interviewees suggested that the employment of an 'operations and communications manager' could have freed the HBEP Director to focus on research and content leadership.

The Reviewers determined that the goals of the Program were well articulated in the tender brief and were suitably high level. HBEP was appropriately required to use their expert skills to decide the specific details of program delivery.

Some interviewees observed that at times it was difficult to carve out which activities "belonged" to HBEP and which belonged to UNSW. These interviewees identified that the Program experienced tension in producing deliverables that met both sets of expectations. A set of activities served the purposes of both HBEP and UNSW, but some interviewees were of the view that they were valued differently by each.

Interviewees confirmed that Advisory Board participation facilitated the development of agency linkages essential for health and planning integration. However, some reported that Advisory Board dynamics were difficult whilst the MoH was represented on the Advisory Board. Advisory Board meetings were described to often be like a "performance review".

Several interviewees reported that Consortium members had been approached informally to become involved in HBEP activities. However, others expressed concern that Consortium members were not adequately engaged despite being a force behind the tender document. Formal meetings were said to be occasional. Some interviewees felt that Consortium members could have been more involved in the delivery of the Program or perhaps contracted by HBEP to undertake specific pieces of work on their behalf.

Interviewees regarded Associate Professor Thompson's personal capital as one of HBEP's greatest assets. Professor Capon's health expertise and experience was also regarded as invaluable to the Program. Interviewees considered that Professor Capon's departure from the Program left a significant gap in the Program particularly with respect to specific health system knowledge.

The HEBP Review determined that governance could have been improved through more efficient and streamlined reporting structures, clearer delineation of outputs funded by HBEP and more meaningful engagement of Consortium partners.

Future Investment in the Healthy Built Environment

The Review recommended the need for further health investment in the healthy built environment to consolidate and extend the work begun by HBEP.

The findings of the Review suggested that a key focus of activity over the next five years would be to work with key stakeholders to deliver practical pathways for giving effect to the health objective in the Planning Bill. This work would include exploring other policy and regulatory mechanisms for integrating health goals into planning processes.

The Review findings also pointed to the need to continue to build the capacity of LHDs to undertake healthy built environments work including strengthening workforce capacity. Evaluating LHD impact in the healthy built environment would be an important measure of work in this space.

The Review also determined the need for a program of original research activity that satisfies both planning and health objectives for a solid evidence base, is outcomes focused, and contributes to a measureable improvement in the built environment and the health of the people of NSW.

Building the capacity of the planning profession to promote health in built environment decisions and processes continues to be of strategic importance.

CONCLUSION

The results of the Review show a high level of correspondence between the specifications in the original contract and HBEP's outputs over the five years of its tenure. NSW MoH funding provided an enabling resource which of itself was regarded as a symbolic commitment to promoting healthy built environments, and provided an organisational imprimatur for the healthy built environment.

In addition, HBEP's academic profile and credibility enabled influence. So too did locating the Program within a built environment faculty which positioned it to engage strategically with the planning profession. Further, the NSW MoH's investment in a non-health entity communicated its commitment to sector integration, and was regarded as "innovative".

The results of the Review confirm that the Program has been an effective way to develop and affect the field of the healthy built environment. While the successes of

the current Program have been significant, it is acknowledged that achieving change is slow and incremental.

The results of the Review highlight that the inclusion of health as an objective in the Planning Bill is a major achievement for HBEP and all its partners. HBEP played a strategic role in lobbying for legislative change by establishing the evidence base driving the need for change, and by creating an alliance of agencies to act as a single peak expert voice. Once the Planning Bill is passed, the health objective will be the start of potential change requiring continued advocacy, collaboration and education to ensure the integration of health into future policy and planning decisions in NSW.

Therefore, continued health investment is necessary to advance the field and the agenda of the healthy built environment, build on the work begun by HBEP, and leverage the possibilities afforded by the inclusion of health as an objective in the Planning Bill.

Interview Schedule

Introductory question: knowledge about and attitude towards healthy built environments

1. What impact do you think that the built environment has on health?

Knowledge of the healthy built environments program at UNSW

2. Can you describe your involvement in the healthy built environments program?
3. From your perspective, what was the purpose(s) of the healthy built environments program at UNSW? What do you know about the HBEP?
4. How has your involvement in HBEP benefitted you or your organisation?
5. In your opinion, what are the most important activities of the HBEP? Please explain.

Factors influencing the program's ability to deliver the outputs

6. How successful do you think HBEP was in meeting its objectives?
7. Are there any factors that might have influenced the program's achievements?

Improving investment by Health in healthy built environments

8. In what ways has the HBEP met your expectations/ needs? Or those of [interviewee's organisation]?
9. In what ways has the HBEP failed to meet your expectations/needs? Or those of [interviewee's organisation]?
10. Can you think of anything that could be done differently or better to promote healthy built environments?

Thematic Analysis of Interview Transcripts:

General Themes

1. Perceived Success
 - a. Key Achievements

2. Program Strategies
 - a. Collation and Dissemination of Research
 - b. Leadership in Policy Based Research
 - c. Primary Research
 - d. Lobbying for State Policy and Legislative Change
 - e. Influencing Cultures and Standards of Practice
 - f. Workforce training

3. Enablers and Challenges
 - a. Timing and Momentum
 - b. Funding
 - c. Governance
 - d. Effective Partnership
 - e. Staff Team

4. Phase 2 investments
 - a. Focus for Phase 2
 - b. Suggested Strategies
 - c. Investment

5. Relevance to Core Evaluation Questions
 - a. Effectiveness in Meeting Objectives
 - b. Stakeholder Engagement and Influence
 - c. Investment in Phase 2

CONTENTS OF HBEP PORTFOLIO

Research

- HBEP Literature Review, Fact Sheets and PIA Award
- Scholarly book (national) – *Planning Australia*, 2nd Edition, 2012
- Scholarly book (international) – *Making Healthy Places*, 2011
- Scholarly paper (international) – *Journal of Occupation Science*, 2013-14
- Scholarly paper (national) – *Australian Planner*, 2013
- Scholarly book chapter – *Promoting health in Australian Health Care Design 2012-15*
- Scholarly research monograph – AHURI report, 2011
- Scholarly conference paper – Dublin Conference, 2013

Leadership and Advocacy

- HBEP Website
- *New Planner* – special issue June 2012; Healthy Built Environments column example
- Key submission – set of submissions on the NSW Planning Legislative Review
- Signed copy of Planning Bill 2013 key objectives that include health
- HBEP brochures

Education and Capacity Building

- Collaborative work – HBEP workshop in Kiama
- Public Health Officer output – Stakeholder Consultation Report, 2011; 6th SOAC Conference paper, 2013
- HBEP field trips, classes and workshops – a pictorial overview
- Planning Final Year Thesis Book: *Planning Visions*, 2012

Governance

- HBEP Advisory Board – example minutes and Terms of Reference
- HBEP Reporting – Quarterly Report example and Annual Report example

Key Research Achievements

i. ***Listening Tour***

In 2010, HBEP undertook a 'Listening Tour' of all eight former Area Health Services across NSW in order to examine the extent of their involvement in healthy built environments work, and their respective workforce development needs. The findings of the 'Listening Tour' informed the development of the *HBEP Research Strategy* and the *HBEP Workforce Development Strategy*.

ii. ***Stakeholder Consultation Report Informing a Research Strategy in NSW, June 2011 ('Stakeholder Review')***

In 2011, HBEP interviewed 16 experienced professionals working in the health and built environment sectors in NSW in order to ascertain their views; identify effective partnerships, strategies, tools and policy for improved collaboration in healthy built environments; and to develop policy relevant research questions to inform the development of the *HBEP Research Strategy 2012 -2014*.

iii. ***HBEP Research Strategy 2012 -2014 ('The Research Strategy')***

The Research Strategy sought to identify gaps in policy relevant research on healthy built environments; prioritise evidence building research projects and enhance research opportunities within the field. The Research Strategy was informed by the HBEP Literature Review, the findings of the Listening Tour, the Stakeholder Research Strategy and input from HBEP Advisory Board members and Partners.

The *Research Implementation Strategy* was subsequently developed as an action-oriented document.

iv. ***Kent, J; Thompson S M; Jalaludin B (2011) Healthy Built Environments: A Review of the Literature, Sydney, UNSW ('The Literature Review')***

The Literature Review is a comprehensive review of scholarly literature relating to the built environment and health. The Literature Review identifies gaps in research and policy recommendations. The Literature Review has been summarised into a series of fact sheets and its findings informed the development of the Research Strategy.

The original review was published in a handsome hard copy format that was designed to allow readers to engage at different levels of detail.

Since the Literature Review was published, HBEP has issued a fortnightly review of new literature relating to healthy built environments, available on the Program's website.

v. Healthy Built Environment Activities in NSW: A status review, June 2013 ('The Mapping Project')

The Mapping Project explores the scope of activities that are delivered to support healthy built environments in NSW. It involved data collection from 46 organisations across NSW. The Mapping Project is an important resource for understanding and describing the extent of work being done across the state in the healthy built environment field.

vi. Indicators for a Healthy Built Environment

This work is currently in progress and is due for completion in September 2014. The work is primarily concerned with the development of specific measures/indicators across the domains of physical activity, social interaction and nutrition. The project has produced a draft report outlining the rationale for the use of particular indicators as well as a clear and accessible table that delineates the relationship between various indicators.

vii. HBEP Website

Stakeholders cited the HBEP website as the main mechanism by which primary research was collated and shared. Stakeholders made many positive comments about the website. It was reported to be credible and useful. Health promotion professionals were said to use the website for project scoping and literature reviews. Fact sheets are reportedly used "all the time", and the video was considered an effective introduction to the Program. It was suggested that website utility could be improved by the use of social media and apps, and more regular literature updates.

viii. ARC Linkage Project – Planning and Building Healthy Communities (\$534,897 over 3 years)

This research project commenced in 2011 and is a multidisciplinary longitudinal study of the relationship between the built environment and human health. The aim of the research is to understand the role the built environment plays in supporting health and wellbeing as part of everyday living. The focus is on how the built environment facilitates physical activity, social interaction and access to fresh and nutritious foods. The research is being undertaken in partnership with Urban Growth NSW (formerly Landcom), the National Heart Foundation and South Western Sydney LHD, across four study sites: Airds Bradbury (suburban south-west Sydney); Rouse Hill (suburban north-West Sydney); Renwick (Southern Highlands of NSW); and Victoria Park (inner-urban south-east Sydney).

ix. Cooperative Research Centre for Low Carbon Living

HBEP substantially contributed to the successful application by the UNSW Faculty of the Built Environment for the establishment of the National Cooperative Research Centre (CRC) for Low Carbon Living. HBEP's ongoing involvement with the CRC

includes a major project to develop a co-benefits calculator which will assess health and associated benefits from low carbon living.

x. ARC Linkage Grant – Evaluating Urban Cycling Infrastructure

‘The Development and Application of an Evaluation Framework to Assess Transport, Health and Economic Impacts of New Urban Cycling Infrastructure’ (\$382,219 over 3 years from 2012). The grant strengthens collaborations between HBEP and the University of Sydney, the National Heart Foundation of Australia, the NSW Roads and Traffic Authority, the NSW Ministry of Health, the City of Sydney Council and the Premier’s Council for Active Living .

xi. AHURI – Health Impacts of Housing

HBEP partnered with the University of Western Sydney on this research project, funded by AHURI. The project used an investigative panel methodology and participation with researchers and policy makers from public health, housing and urban planning from Australia and New Zealand. The panel found international evidence that housing improvements can improve health. The review concluded that there was a lack of Australian evidence in relation to housing and health more generally. Based on input from the panel, the study authors devised principles to identify suitable research projects. Findings were published in 2011 in a final report to AHURI.

xii. Conference Organisation

Since 2010, HBEP staff have been on the organising committees of, and actively contributed to, the delivery of the following major conferences:

- Fenner Conference ‘Healthy Climate, Planet and People: Co-Benefits for Health from Action on Climate Change’ (June 2010)
- World Planning Schools Congress (July 2011)
- 3rd, 4th and 5th Making Cities Liveable Conferences (June-July 2011, 2012, 2013)
- 10th International Urban Planning and Environment Symposium (July 2012)
- 6th State of Australian Cities Conference (November 2013)

xiii. Publications

HBEP has published an extensive range of research material through conferences, seminars, research reports, books, periodicals and fact sheets to influence the wider healthy built environments community, including key decisions makers and practitioners.

Books

- Thompson, S.M., & Maginn, P. (2012). *Planning Australia - An Overview of Urban and Regional Planning (2 ed.)* Melbourne : Cambridge University Press.
- Kent, J., Thompson, S.M. & Jalaludin, B. (2011). *Healthy Built Environments: A Review of the Literature*. Sydney: Healthy Built Environments Program, City Futures Research Centre, UNSW.

Book Chapters

- Kent, J., Capon, A., & Thompson, S.M. (2013). 'Designing Health Promotion in Practice: An Australasian Perspective.' In K. Copeland (Ed.), *Australian Healthcare Design*. Brisbane: International Academy for Design and Health.
- Kent, J., Thompson, S.M., & Capon, A.G. (2012). 'Healthy Planning.' In S.M. Thompson & P.J. Maginn (Eds.), *Planning Australia: An Overview of Urban and Regional Planning (2 ed., pp. 381 – 408)*. Melbourne: Cambridge University Press.
- Thompson, S.M. (2012). 'Planning for Diverse Communities.' In S.M. Thompson & P.J. Maginn (Eds.), *Planning Australia: An Overview of Urban and Regional Planning (2 ed., pp. 226 - 253)*. Melbourne: Cambridge University Press.
- Thompson, S.M., & Maginn, P.J. (2012). 'What is Planning?' In S.M. Thompson & P.J. Maginn (Eds.), *Planning Australia: An Overview of Urban and Regional Planning (2 ed., pp. 17 – 33)*. Melbourne: Cambridge University Press.
- Capon, A.G. & Thompson, S.M. (2011). 'Built Environments of the Future.' In Dannenberg, A.L., Frumkin, H. & Jackson, R.J. (Eds.) *Making Healthy Places* (pp. 366-377). Washington DC: Island Press.

Refereed Journal Articles

- Thompson, S.M. & Kent, J.L. (In press 2013) 'Healthy Built Environments Supporting Everyday Occupations: Current Thinking in Urban Planning', *Journal of Occupational Science*, Vol, PP. TBA.
- Thompson, S.M. & Kent, J.L. (2013) 'Connecting and strengthening communities in places for health and well-being', *Australian Planner*, Vol TBA: 1-12.
- Kent, J.L. & Dowling, R. (2013) 'Puncturing automobility? Carsharing practices', *Journal of Transport Geography*, 32: 86-92.
- Kent, J.L. (In press 2013) 'Carsharing as Active Transport: What are the potential health benefits?' *Journal of Transport and Health*.
- Kent, J.L. (In press 2013) 'Review: Transport Beyond Oil - Policy Choices for a Multimodal Future', *Australian Planner*.
- Kent, J.L. & Thompson, S.M. (2012) 'Health and the Built Environment: Exploring Foundations for a new Interdisciplinary Profession', *Journal of Environmental and Public Health*. Volume 2012, Article ID 958175, 10 pages

- Capon, A.G. & Thompson, S.M. (2010) 'Planning for the Health of People and Planet: An Australian Perspective', *Planning Theory and Practice*, 11(1): 109-113.
- Thompson S.M., Whitehead A. & Capon A.G. (2010) 'The Healthy Built Environments Program: a joint initiative of the NSW Department of Health and the University of NSW', *NSW Public Health Bulletin*, 21(5–6): 134-8.
- Wheeler, A.R. & Thompson, S.M. (2010) 'The future health and environmental sustainability of South East Queensland: an evaluation of the Regional Plan', *Australian Planner*, 47(3): 152-161.

Refereed Monograph

- Phibbs, P. & Thompson, S.M. (2011) *The health impacts of housing: toward a policy relevant research agenda. AHURI Final Report: No. 173*. Melbourne: Australian Housing and Urban Research Institute.

Refereed Conference Papers

- Kent, J.L. (2013), 'Private Car Use as Resistance to Alternative Transport: Automobility's Interminable Appeal'. *6th State of Australian Cities Conference*. Sydney, November 2013.
- Dowling, R. & Kent, J.L. (2013), The Challenges of Planning for Autonomous Mobility in Australia. *6th State of Australian Cities Conference*. Sydney, November 2013.
- Thompson, S., Mitchell, E. & Crawford, B. 2013. Planning and Building Healthy Communities. *6th State of Australian Cities Conference*. Sydney November 2013.
- Thompson, S.M., Kent, J. L. & Lyons, C. (2013) 'Planning and Health: Forging New Alliances in Building Healthy and Resilient Cities.' *Joint European (AESOP) and American (ACSP) Congress*. Dublin, July 2013.
- Mitchell, E. (2012) 'Addressing the Dual Burden: Healthy Planning for Low and Middle-Income Countries.' *10th International Urban Planning and Environment Symposium*. Sydney, July 2012.
- Thompson, S.M. & Kent, J.L. (2012) 'Evidence Based Policy and Practice for Healthy Built Environments: The Three Domains.' *Healthy Cities Conference*. Geelong, June 2012.
- Kent, J.L. & Thompson, S.M. (2011) 'Fostering Effective Interdisciplinary Collaboration Between the Built Environment and Health.' *State of Australian Cities Conference*. Melbourne, November 2011.
- Kent, J.L. (2011) 'Biting the hand that feeds us: urban planning at the front line in the war against unhealthy eating.' *Universitas 21 Graduate Research Conference on Food*. Kuala Lumpur, June 2011.
- Kent, J.L. (2011) 'Biting the hand that feeds us – town planning at the front line in the war against unhealthy eating.' *World Planning Schools Congress*. Perth, June 2011.

- Thompson, S.M., Kent, J.L. & Jalaludin, B.B. (2011) 'Supporting Human Health: Focusing Effective Built Environment Interventions.' *State of Australian Cities Conference*. Melbourne, November 2011.
- Thompson, S.M., Kent, J.L. & Wheeler, A. (2011) 'Healthy Built Environments: Connecting and Strengthening Communities.' *World Planning Schools Congress*. Perth, June 2011.
- Wheeler, A., Kent, J.L. & Thompson, S.M. (2011) 'A Pathway for Practice: Translating Research Evidence into Healthy Planning Policy.' *World Planning Schools Congress*. Perth, June 2011.

Other Conference Papers

- Thompson, S.M. (2012) 'The Healthy Built Environments Program: An Interdisciplinary and Connected Way-of-Working.' *49th International Making Cities Livable Conference*. Portland, Oregon, May 2012.
- Thompson S.M. & Capon A.G. (2010) 'Designing a Healthy and Sustainable Future: A Vision for Interdisciplinary Education, Research and Leadership.' *ConnectED 2010, 2nd International Conference on Design Education*. Sydney, June - July 2010.

Other Reports and Articles - Practice and Professional Journal Articles

- Capon, A.G. & Thompson, S.M. (2012) 'Our habitat, our habits, and our health', *Diabetes Connect*, Autumn 2012: 12-13.
- Thompson, S.M. & Capon, A.G. (2012) 'Designing for Health: Knowledge and Resources for Built Environment Professionals', *Landscape Architecture Australia*, 134:26.
- Wheeler, A. (2012) 'The life and death of the Australian backyard', *Urban Morphology*, 16: 173-174.
- Rose, N., Thompson, S.M. & Capon, A.G. (2010) 'Urbanism and Health', in *The Health of the People of New South Wales: Report of the Chief Health Officer*. Sydney: NSW Department of Health (pp.34-43).

New Planner 'Healthy Built Environments' Column

- Thompson, S.M. & Klarenaar, P., 'Healthy Built Environments – 2013: A Watershed in Healthy Planning', *New Planner*, December 2013: 28.
- Thompson, S.M. & Byun, R., 'Healthy Built Environments - Adding up the Numbers: Health and Wellbeing Data for Planners', *New Planner*, September 2013: 26.
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments - The Value of Planning for Interdisciplinary Understandings', *New Planner*, June 2013:26.
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments - Getting the Balance Right: 21st century planning for human wellbeing', *New Planner*, March 2013:26.

- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: From Rhetoric to Reality: Mind the Gaps!', *New Planner*, December 2012: 21.
- Capon, A.G. & Thompson, S.M., 'Healthy Built Environments @ Rio+20', *New Planner*, September 2012: 13.
- Thompson, S.M. & Harris, P. (Eds), Healthy Urban Environments Special Issue, *New Planner*, June 2012.
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: Putting Children First', *New Planner*, March 2012: 22-3
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: The Built Environment and Access to Healthy Food: What's the Evidence?', *New Planner*, December 2011: 16-7
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: The Built Environment and Strengthening Communities: What's the Evidence?', *New Planner*, September 2011: 20-1
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: What's the Evidence?', *New Planner*, June 2011: 12-3
- Thompson, S.M. & Capon, A.G., 'Healthy Built Environments: Supporting planning policy and practice', *New Planner*, March 2011: 10-1
- Thompson, S.M. & Capon, A.G., 'A Healthy Built Environments Year', *New Planner*, December 2010: 10-1
- Thompson, S.M. & Capon, A.G., 'Housing and Health', *New Planner*, September 2010: 10-1
- Capon, A.G. & Thompson, S.M., 'Food and the city', *New Planner*, June 2010: 10-1
- Thompson, S.M. & Capon, A.G., 'Human Health is a new connection for planning in NSW', *New Planner*, March 2010: 18-9

**Planning for Health and Well-being: A Workshop to Understand how the NSW
Planning System Works**

Workshop Location	Date	Enrolment Number	Certificates Awarded for Full Day Attendance
Port Macquarie	10 December 2012	13	10
Canterbury/Bankstown	21 February 2013	24	18
Newcastle	19 April 2013	24	19
Shellharbour	21 May 2013	25	21
Penrith	23 May 2013	21	20
Albury	1 July 2013	23	19
Griffith	3 July 2013	18	17
Sydney CBD	4 September 2013	36	36
Queanbeyan	1 October 2013	39	26
Dubbo	6 November 2013	36	31
Total		259	217

REFERENCES

- ¹ NSW Department of Health (2009) *Healthy Urban Development Checklist: A guide for health services when commenting on development policies, plans and proposals*
- ² NSW Ministry of Health (2013) *NSW Healthy Eating and Active Living Strategy: Preventing overweight and obesity in NSW South Wales 2013-2018*
- ³ Ibid
- ⁴ Ibid
- ⁵ Kent, J. Thompson, S.M. and Jalaludin, B. (2011) *Healthy Built Environments: A review of the literature*, Sydney: Healthy Built Environments Program, City Futures Research Centre, UNSW
- ⁶ NSW Ministry of Health (2013) *NSW Healthy Eating and Active Living Strategy: Preventing overweight and obesity in NSW South Wales 2013-2018*
- ⁷ Ibid
- ⁸ Ibid
- ⁹ Ibid
- ¹⁰ Ibid
- ¹¹ Ibid; HBEP website
- ¹² HBEP (2014) *Key Achievements Report: HBEP Evaluation*
- ¹³ HBEP (2010) *Healthy Built Environments Listening Tour*
- ¹⁴ HBEP (2011) *Stakeholder Consultation Report Informing a Research Strategy in NSW*, June
- ¹⁵ Kent, J. Thompson, S.M. and Jalaludin, B. (2011) *Healthy Built Environments: A review of the literature*, Sydney: Healthy Built Environments Program, City Futures Research Centre, UNSW
- ¹⁶ Kent, J. Thompson, S.M. and Jalaludin, B. (2011) *Healthy Built Environments: A review of the literature*, Sydney: Healthy Built Environments Program, City Futures Research Centre, UNSW p 13.
- ¹⁷ Ibid
- ¹⁸ HBEP (2013) *Healthy Built Environment Activities in NSW: A status review*, June
- ¹⁹ HBEP (2014) Draft *What is a healthy built environment in NSW?: Healthy Built Environment Indicators for the NSW Context*
- ²⁰ HBEP (2013) *Healthy Built Environment Activities in NSW: A status review*, June
- ²¹ ARC Linkage Project: 'The Development and Application of an Evaluation Framework to Assess transport, Health and Economic Impacts of New Urban Cycling Infrastructure'
- ²² Phibbs, P. and Thompson, S.M. (2011) 'The Health Impacts of Housing: Toward a policy relevant research agenda' *Australian Housing and Urban research Institute Final Report No 173*, AHURI, Melbourne.
- ²³ NSW Department of Health (2009) *Healthy Urban Development Checklist: A guide for health services when commenting on development policies, plans and proposals*
- ²⁴ Department of Infrastructure and Transport (2011) *Our Cities, Our Future—A National Urban Policy for a productive, sustainable and liveable future*, May