MAKING HEALTHY PLACES

NSW built environment practitioners' perspectives on place-making opportunities that deliver health and wellbeing outcomes

Final Report (April 2021)

Maridulu Budyari Gumal
Working together for good health and wellbeing

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About us

Maridulu Budyari Gumal combines 14 thought-leading organisations in the Sydney region. We've come together to create the Sydney Partnership for Health, Education, Research and Enterprise. The Healthy Urban Environments Collaboratory supports local health districts to translate health and environment research into policy and action. And we are working with public health academics, clinicians, social scientists, public health leaders and executives, and built and natural environment specialists to bring Sydney to the forefront of healthy urban environments.
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LIST OF ACRONYMS

DA Development Application

DPIE Department of Planning, Industry and Environment

HBEP (UNSW) Healthy Built Environment Program

HP Health Prevention

LHD Local Health District

LEP Local Environmental Plan

LSPS Local Strategic Planning Statement

NSW New South Wales

SWLHD South West Local Healthy District

UNSW University of New South Wales

WHO World Health Organisation

WSU Western Sydney University

Part 1:Project background

1. INTRODUCTION

The built environment can positively impact the health and wellbeing of individuals and communities. Where you live shapes how easy it is to buy healthy food, use active transport, and make social connections. The evidence is clear. But how do we go about creating places that help deliver positive health and wellbeing outcomes for all? There is a longstanding recognition that strategic policy and health promotions fall short in the implementation of healthy placemaking. As such there is an ongoing question about how to bridge the gap between the rhetoric of current healthy planning principles and the reality of what is being delivered and managed by practitioners on the ground.

Work to achieve environments that are supportive of human health is as old as the human endeavour itself.[1] It is also apparent that this work has been characterised by an on-going dynamic of convergence and divergence between those individuals, professional groups, organisations and governance structures responsible for health and those responsible for urban planning and construction.[2]

It is possible to identify a range of contemporary and positive convergent processes within NSW (Part 3: below). However, it is also possible to identify concurrent divergent processes arising from competing interests at state and local government,[3] a potential to deal with health-supportive environments indirectly through other more politic initiatives,[4] and lingering difficulties with professional communication and different standards of accepted 'evidence' needed to justify action.[5]

In addition, although in Australia the health profession has high standing, built environment professions do not have the same level of acceptance. It presents a lingering difficulty in integrating health (or often any other matter) into new urban policies.[6]

This project looks at such convergences and divergences within a particularly instrumental environment – the barriers and opportunities that present to built environment practitioners when making healthy places.

[1] See for example Chatzicocoli, S. & Syrakoy, A. (2009), 'Historical Conceptions of a Healthy City. The Greek Paradigm.' *International Journal of Architectural Research* Vol. 3 Issue 1: 14-29.

[2] Freestone R. and Wheeler A. (2015) 'Integrating Health into Town Planning' in Barton H, Thompson S, Burgess S and Grant M (Eds.) *The Routledge Handbook Of Planning For Health And Well-being. Shaping a sustainable and healthy future.* Routledge, Oxfordshire; Hensley, M., Mateo-Babiano, D., Minnery, J. and Pojani, D. (2020) "How Diverging Interests in Public Health and Urban Planning Can Lead to Less Healthy Cities", *Journal of Planning History*, Vol. 19(2): 71-89.

[3] Harris, P., Kent, J., Sainsbury, P. Marie-Thow, A., Baum, F. Friel, S. & McCue, P. (2017) 'Creating 'healthy built environment' legislation in Australia; a policy analysis'. *Health Promotion International*, 2018; 33:1090-1100.

[4] Mead, E., Dodson, J., & Ellway, C. (2006) *Urban Environments & Health: Identifying Key Relationships & Policy Imperatives*. Urban Research Program Research Monograph 10, Griffith University, Brisbane.

[5] J. Kent, J. & S. Thompson (2014) 'The Three Domains of Urban Planning for Health and Well-being.' *Journal of Planning Literature*, Vol. 29 Issue 3: 239-256

[6] McCosker, A. (2018) *Barriers and Enablers to Healthy Planning and Active Living Initiatives,* PhD thesis, Sustainability Policy Institute, School of Design and the Built Environment, Curtin University, Perth; Tomlinson, R. (2012) *Australia's unintended cities: The impact of housing on urban development.* CSIRO Publishing, Canberra; Ashton, P. (1995) *The Accidental City. Planning Sydney Since 1788.* Hale & Iremonger, Sydney.

2. POSITIONING THE SURVEY

An initial 'quick appraisal' of applicable literature was undertaken, with two broad aims:

(i) Identify any existing surveys overlapping with that proposed in this project, and
(ii) Identify other relevant studies with similar overall objectives to this project.

Thirty one documents were reviewed, comprising studies, appraisal reports, conference presentations and peer-reviewed papers. The full review of the literature is presented in Part 3, and a list of the reviewed documents is in Appendix 1. The following subsections summarise the findings in relation to the two objectives above.

SIMILAR NSW SURVEYS

The review did not locate any New South Wales-specific survey identical to that proposed in this study.

The review did locate five Australian surveys which had *similar* aims, some of which canvassed practitioners in New South Wales. Generally, however, these studies tended to focus on particular aspects of built environment practice, such as skills or settings; particular levels of government; or particular sub-sets of healthy behaviours. One case, although broader in scope, was restricted to one NSW local government area, Wollondilly Council. These studies were, in chronological order:

- a 2011 stakeholder consultation by the UNSW Healthy Built Environments Program (HBEP) (Table entry #3) – canvassed NSW practitioners and comprised 16 interviews and a workshop.
- a 2014 Victoria study (with a comparison with Portland, USA) comprising an analysis of planning and policy documents and 20 semi-structured interviews with 'key informants' (Table entry #16, also Table entries # 17 and #18).
- a 2014-15 on-line survey, by invitation, of 96 staff in 14 randomly selected councils in South Australia and New South Wales (Table entry #13), based on similar earlier studies in Canada (Table entry #12) and New Zealand (Table entry #4)
- 2017 interviews with key land use planning staff and observation of meeting discussions at Wollondilly Council (south-west fringe of Sydney) (Table entry #31).
- A 2016 on-line survey of 20 local government practitioners and semi-structured interviews with 28 practitioners in government and academia in Western Australia, South Australia, New South Wales and Victoria, undertaken for PhD research (Table entry #21).

RELEVANT STUDIES

The review canvassed documents over roughly a period of two decades, from what might be considered the 'embryonic' period of recent healthy built environment practice (the early 2000s, and related to concerns about chronic disease) to the present day. An overall impression is of a still unresolved discipline, or, more accurately, broad field of endeavour.

The range of issues around health-supportive environments does not substantially change over the study period. Further, most of these issues often appear to be unresolved, with later documents expressing similar concerns, conclusions and recommendations as earlier ones. It suggests a field that is still essentially in an 'adolescent' stage: still developing, very aware, showing some progression to 'adult' resolution but not yet mature and fully accepted, and still with internal questioning. Examples of an emerging more 'adult' understanding, where identified, included:

- Discussion on how to establish health as a *primary* consideration in the thinking of non-health professionals, rather than via the current tendency towards promoting health in a more politically acceptable way as a positive 'co-benefit' from other actions. Concerns are expressed about the potential ultimate effect of expressing something as important as human health as a 'secondary' rather than primary concern.
- Where the consideration of factors identified as important in influencing effective practice is discussed as not simply an either/or duality of barrier or enabler, but rather as potentially both a barrier *and* an enabler depending on how each are constructed, developed, changed and 'matured' in themselves, and in each setting.
- The intrinsic need in this field for collaborations, and then how to best achieve such collaborations across often different discipline perspectives, languages and definitions of accepted 'evidence' (and, as part of this, the merit or otherwise of developing a new separate 'healthy built environments' discipline).

The review also found six broad and generally overlapping themes within the various study outcomes, as relevant to the survey here. These are detailed in the main report. In summary they relate to:

- Practitioners' attitudes and personal knowledge regarding health, the determinants of health generally, and the relevance to their work.
- Issues around the *translation* of research findings, as well as connections between disciplines (and other 'players').
- Practitioner and researcher *skills* – both existing and additional needed skills.
- The use of particular tools to assist practice – mostly around tools nominated by the researchers themselves but also, in some studies only, tools as identified by respondents.
- A broader overall study perspective via a focus on *settings* – including organisations, systems, and wider public communities.
- Barriers and enablers to the inclusion of health into built environments. This was the focus of a large proportion of studies reviewed (as intended in the search process). However, a number of studies did not specifically use these terms, with the identification of specific 'barriers' and 'enablers' being an outcome of their conclusions and recommendations. Also, as mentioned above, some studies went beyond considering such barriers and enablers as a simple either/or equation.

3. SURVEY DESIGN

This project carried out by researchers from WSU, UNSW and SWLHD, helps to fill the critical research gap identified above, prompted also by similar review work by the UK Design Council in 2018. Its aim was to roll out NSW state-wide survey to gain a better understanding of the barriers and opportunities that different built environment practitioners face in making healthy places a reality. In this sense also it extends state-wide the recent similar survey work of the extent to which, and barriers and opportunities, staff within Wollondilly Council are aware of and implementing healthy environment initiatives (Hirono K,, et al., 2017 – entry #13 Table 1 to Appendix 3).

This survey built on the UK Design Council's *Healthy Placemaking Report* (2018) that explored the attitudes and behaviours of built environment practitioners towards healthy placemaking in the UK. Whilst there has been some previous work in NSW into the capacities and shortcomings among built environment professionals in making healthy places (see Fallding 2016, Plumb 2011), there was considerable value in updating this work and undertaking a survey across the state that was similar to the one conducted by the UK Design Council.

One strength of the UK survey was the breadth of its definition of built environment professionals. As such, we similarly developed a NSW database (through relevant peak bodies) and surveyed built environment practitioners across a wide range of professional domains, including strategic planning, social planning and community services, transport engineering and planning, development applications and appeals, landscape architecture, architecture, urban design and precinct planning, development and finance, building and construction, building operations and management, open space operations and management, policy advice and development, and research.

Our survey was designed as a brief, five-minute survey of these built environment practitioners involved in making healthy places in NSW. It centred on five key themes:

- Respondent background (profession, sector, location, extent of work coverage, work experience role in organisation);
- Current work practices in making healthy places (including collaboration with other practitioners, community consultation, ways health and wellbeing is incorporated into documents and everyday language at work)
- Opportunities to make healthy places (through improving access to positive influences on health, supporting better mental health, enabling active lifestyles, and reducing environmental health risks)
- Barriers to making healthy places (including capacity barriers, workplace barriers, regulatory barriers, implementation barriers, and others)
- Resources available to help make healthy places (through assessing awareness, whether used, and would recommend to others).

Around 350 responses were received from across Central and Greater Metropolitan Sydney and Regional NSW in late 2019 and the beginning of 2020. This survey provides important evidence into the current state of play in healthy placemaking in NSW. It also provides many personal insights and perspectives, generously shared by survey respondents. Overall a total of 71 respondents shared additional comments on healthy placemaking, providing further understanding into the barriers and opportunities in making healthy places, and their recommendations towards achieving health and wellbeing outcomes in places.

This survey was completed just prior to emergence of the coronavirus pandemic. During 2020, the role of shared spaces in promoting positive health outcomes for communities has only become

clearer, serving as an important reminder that built environments are intimately connected with conditions of public health.

In this sense, practitioner insights and suggestions for improving the way things are working, in order to achieve better place-based health outcomes for communities, remain more relevant than ever.

4. RESPONDENT SAMPLE

Of the approximately 350 responses, a final sample of 221 were used in the analysis, with attrition due to incomplete or otherwise unusable responses. This is a fairly reliable dataset, with a 7% margin of error at a 95% confidence interval. This margin of error means findings are best read as indicative, rather than definitive. It also makes potential for cross tabulation, or comparison of subsamples, somewhat limited. However, comparisons are made between strategic planners and other professions.

The responses are skewed in some notable ways, although in the absence of benchmarks the data presented has not been weighted to adjust for this:

- Nearly half (46%) work in the profession of 'strategic planning' (**Figure 1**)
- Nearly half (49%) work in the sector of 'local government' (**Figure 2**)
- Nearly half (48%) have 'more than 10 years' experience (**Figure 3**)
- Nearly half (44%) have 'no management responsibilities' (excluding 'trainees', etc.) (**Figure 4**)

Equally notable is these skews were not evidently correlated. For example, 55% of strategic planners worked in local government, while a similarly high 43% of other professions worked in local government (**Figure 2**). **Figure 3** and **Figure 4** also show distributions of experience and management responsibilities for strategic planners and other professions, and **Figure 5** shows the distribution of management responsibilities by level of experience.

Figure 1 What is your profession?

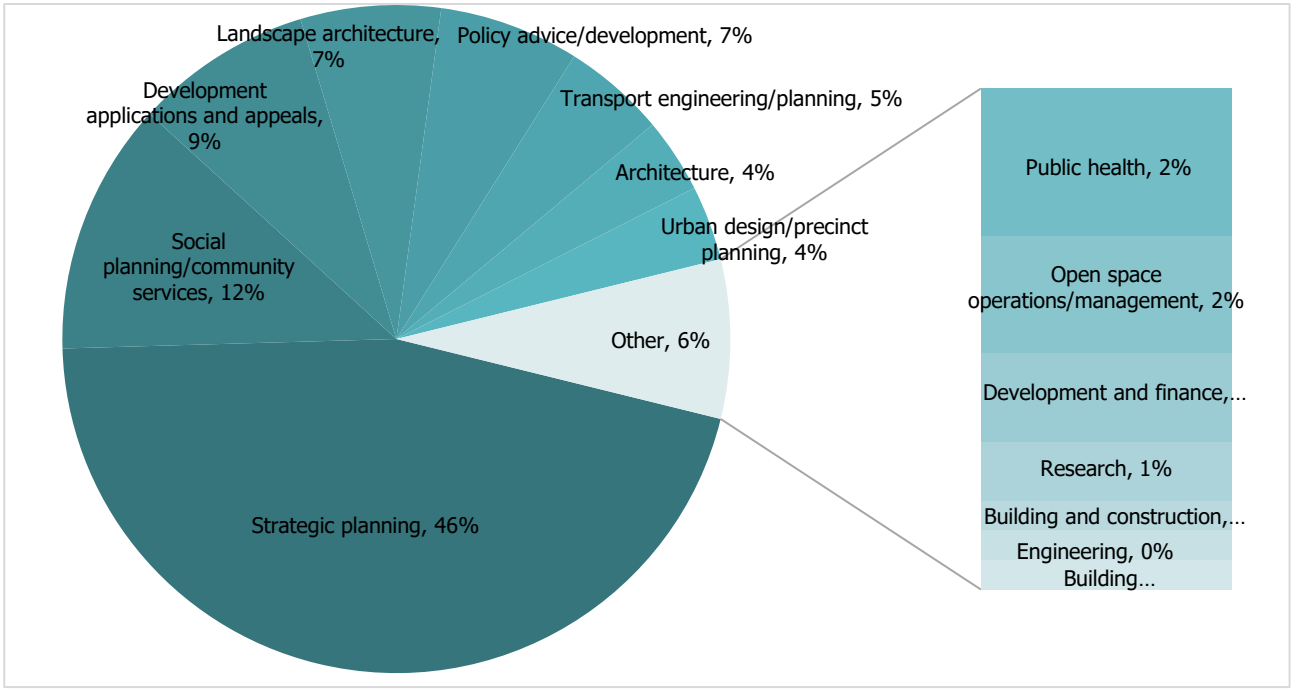


Figure 2 What sector do you work in?

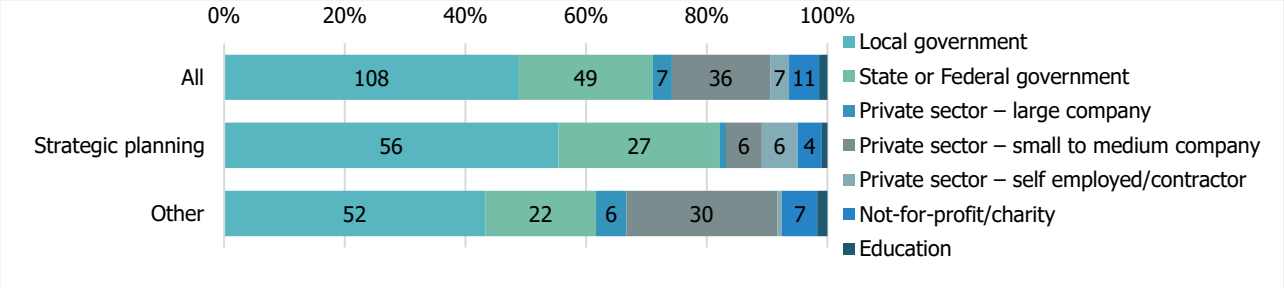


Figure 3 How long have you worked in this field?

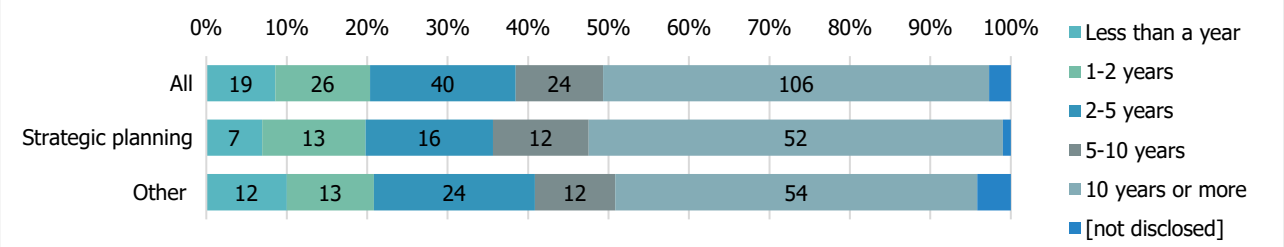


Figure 4 What level best describes your current position in your organisation?

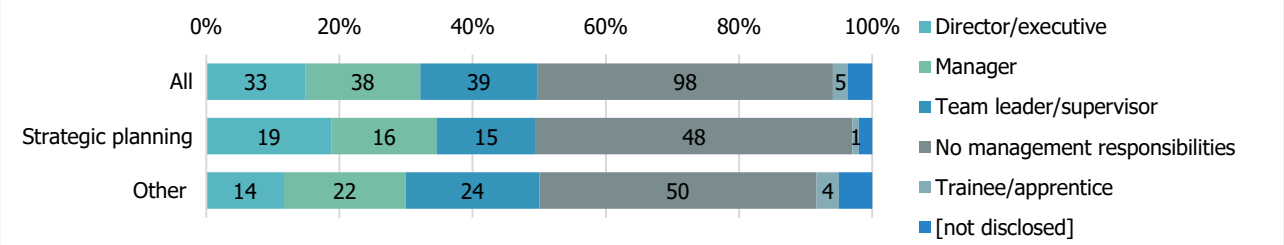
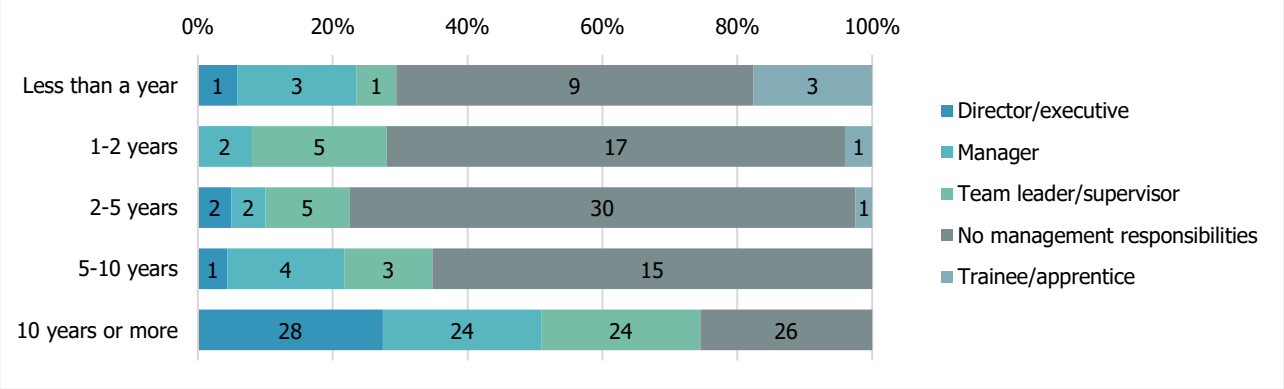


Figure 5 How long have you worked in this field? (where disclosed, n=207)



The sample is fairly geographically diverse, with representation from across the state (**Figure 6**), but with expected concentrations in areas with government office (in line with the skew towards local and state government respondents (Sydney CBD, Newcastle, Parramatta and Liverpool/Campbelltown)). The scope of work among respondents did reflect the high representation of local government workers, with 'across the local government area' the most common response (**Figure 7**).

Figure 6 Where do you work? (where disclosed, n=219)

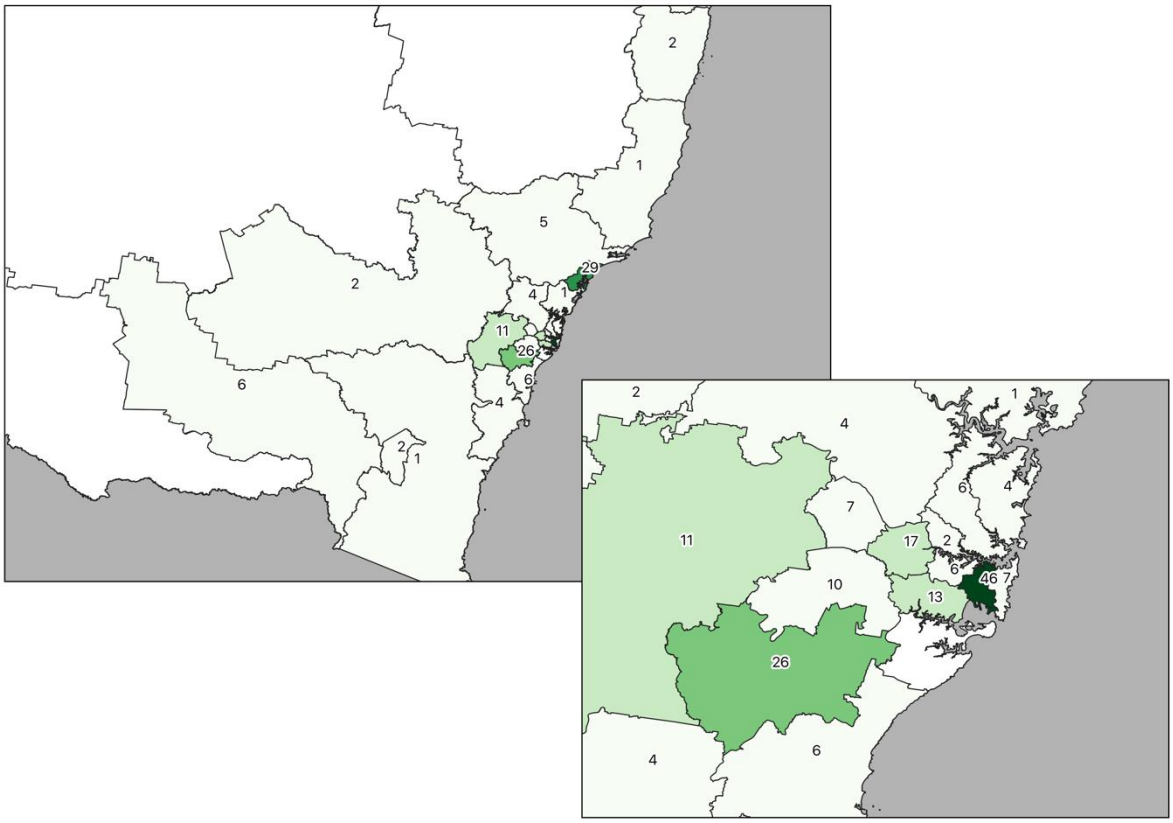
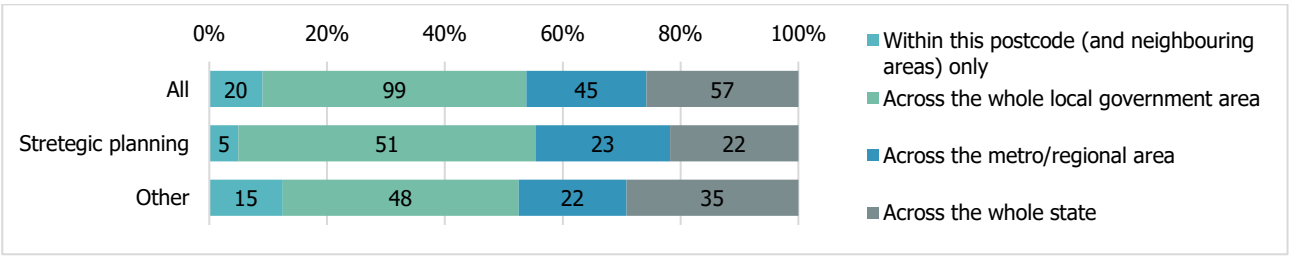


Figure 7 Which part of NSW does your work cover?



Part 2: Survey findings

5. CURRENT WORK PRACTICES IN MAKING HEALTHY PLACES

Participants were asked about their current work practices, seeking to identify two things: the extent to which they work with other professions involved in making healthy places and the extent to which known best practice for making healthier places are being employed.

In terms of collaborations, 'urban design/precinct planning' was the most common profession that respondents worked with frequently or regularly (

Figure 8), with more than half of respondents also working frequently/regularly with 'architects', 'policy advice/development' and 'development application and appeals'.

Strategic planners were more likely than other professions to work frequently/regularly with 'urban design/precinct planning', 'policy advice/development', 'transport engineering/planning' and 'social planning/community services'. But they were less likely than other professions to work with 'landscape architects' or 'civil/structural engineers' (**Figure 9**).

Despite these existing levels of collaborations, there were concerningly very low level of interaction generally (other than with 'strategic planning'). Even 'regular' interaction is less than 'occasional', and 'regular' is only about once per month. There were especially low interactions with 'development and finance', building and construction', 'engineering', and the various 'operations and management' groups – i.e. with the *implementation* side of professional work. Similarly, and instructively, there was low interactions with 'research' and low levels of 'collaborations' specifically with health professionals (Q.8) and also with 'social and economic development' professionals where health related.

Figure 8 How often do you work with people in these fields?

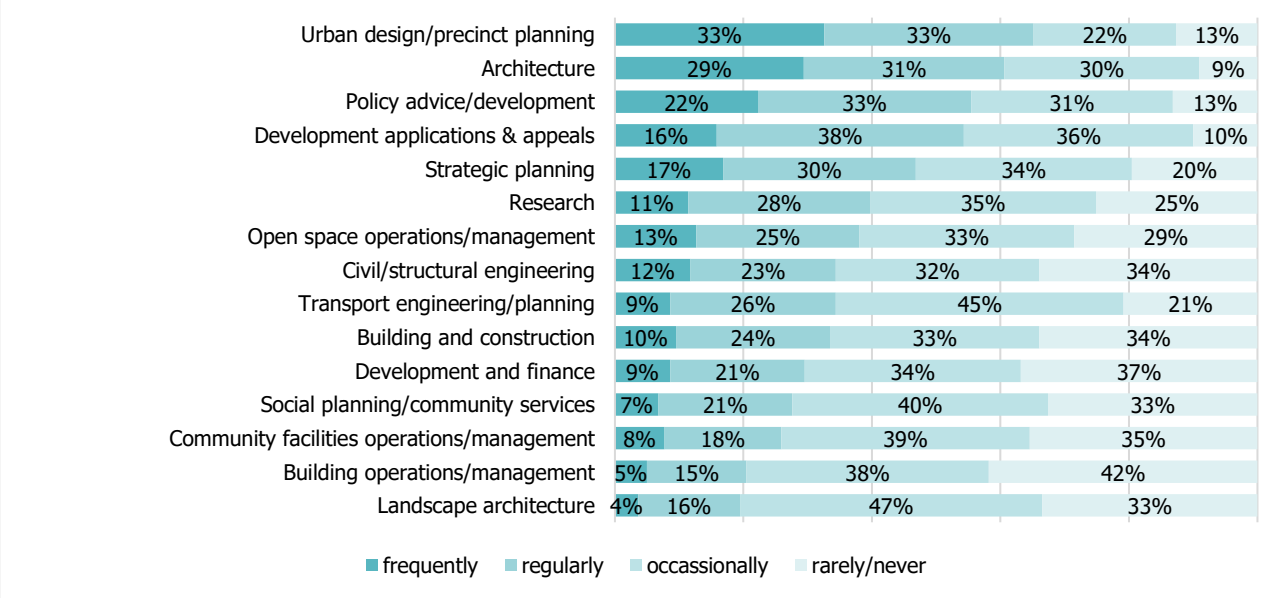
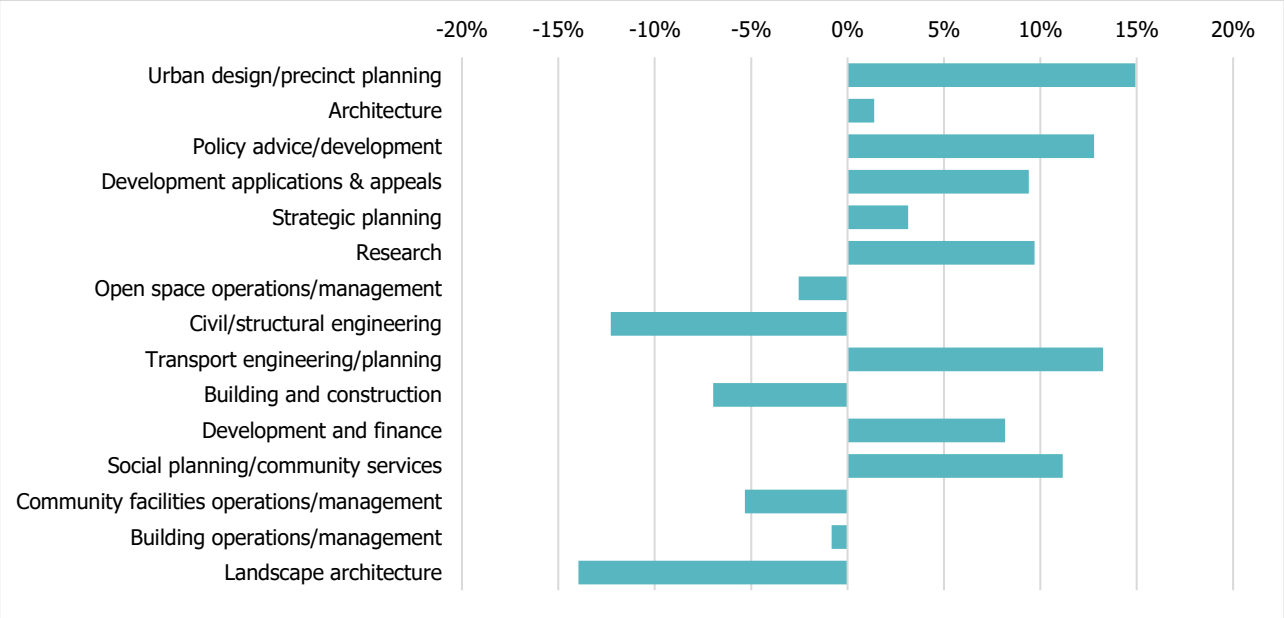


Figure 9 How often do strategic planners frequently/regularly work with each profession, relative to other responses?



In terms of work practices known to contribute to making healthier places, there was a surprising trend that, while health and wellbeing was considered, and incorporated into respondents' work, they were less likely to draw on data and evidence towards this end, and even less likely than that to collaborate with professionals or even the community to achieve these ends (**Figure 10**). Strategic planners were more likely than other professions to work with other social/economic development and health experts (**Figure 11**) but were – again surprisingly – less likely to engage with the community about their health and wellbeing.

These findings present a conundrum in that high numbers of respondents also cite that they give reference and prominence to health and wellbeing in the documents *they* produce. So, if they are not asking/discussing/collaborating with others, it remains unclear where the information they are putting in their documents comes from.

Similarly, there are very high levels of using health and wellbeing in respondents' 'everyday language' at work. Again, it remains unclear where the background knowledge embedded in this language, and the individuals' initial interest in health, come from. Equally concerning, is a low level of consultation with the community about barriers and opportunities to improve health. Respondents are 'referencing and giving importance' to health and wellbeing and also 'talking in health language', however, can we be confident that it fits local community expectations, and is therefore also effective?

Figure 10 How often do you do these activities as part of your day-to-day work?

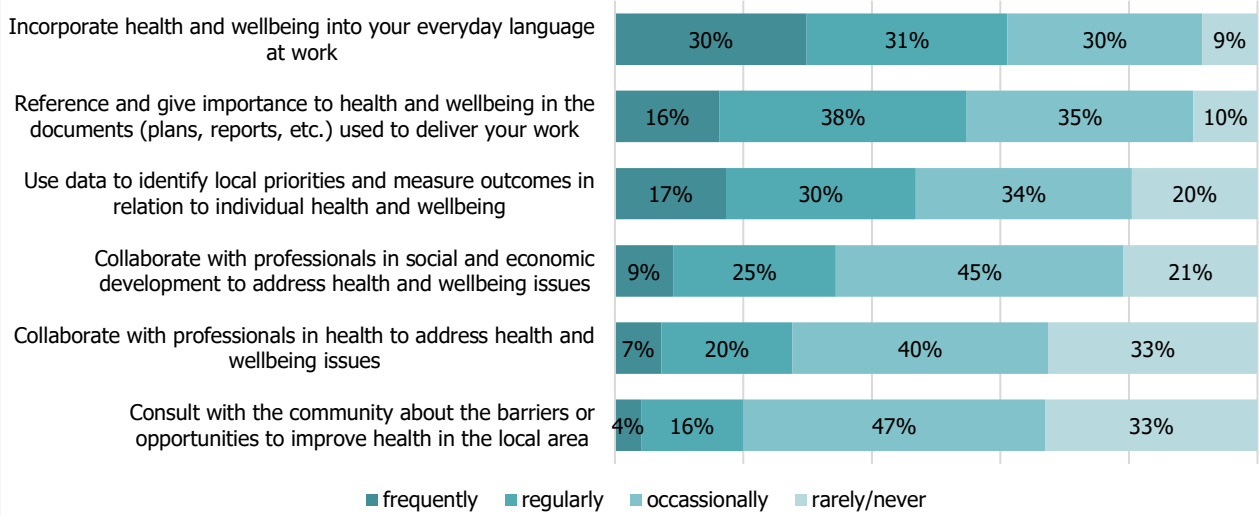
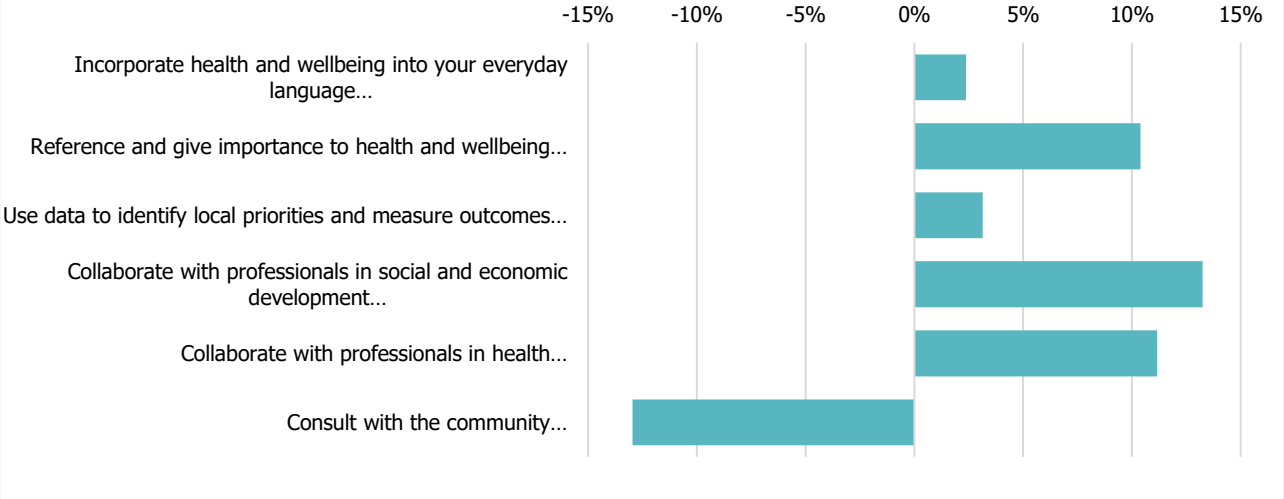


Figure 11 How often do strategic planners frequently/regularly doing these activities, relative to other responses?



6. OPPORTUNITIES TO MAKE HEALTHY PLACES

Participants were asked what aspects of making healthy places they felt they had opportunities to contribute to in their day to day work. By far the area of greatest influence expressed by respondents was in enabling active lifestyles. The most common opportunity identified (**Figure 12**) was to 'increase opportunities for active recreation', with 72% stating they could influence this outcome, and 69% suggesting they could increase 'incidental exercise', such as walking to the shops. Respondents also identified improving access to positive influences on health, for example 'increasing access to natural environments' (67%) and supporting better mental health through 'enabling social interaction' (63%). These answers reveal that there are high levels of recognition of the interaction of health with employment, housing, and climate change matters (namely some of the 'determinants' of health).

There were, however, low recognition that their work could address loneliness and social isolation, even though these two matters are key in the established 'three domains of a healthy built environment (the other being physical activity). Although 'loneliness/social isolation' is given low attention, a good level of attention is given to 'enabling social interaction'. These two matters are similar and therefore one might expect a similar score.

The least common opportunity identified was to 'increase access to affordable, healthy food'. Fewer than one third of respondents felt they had opportunity to contribute to this outcome, a threshold that 'increasing access to health services' and 'increasing Aboriginal connection to culture and Country' also fell below.

A number of opportunities were much more likely to be identified by strategic planners (**Figure 13**). This included the abovementioned access to natural environments and health services, as well as mitigating climate change and a trio of reduce car use, increase access to jobs and reduce commute times. These last three were correlated, in that respondents who identified one were likely to identify the others.

Conversely, strategic planners were less likely to identify opportunities in their work to reduce isolation, develop communities and reduce social disorder. Again, this trio were correlated. And, along with 'enable social interaction', were identified as contributing to supporting better mental health.

In terms of how many of the twenty areas that respondents felt they had an opportunity to contribute to, the responses were fairly normally distributed, with planners and other professions both most likely to identify ten areas of opportunity.

Figure 12 In your day-to-day work, which activities do you have an opportunity to contribute towards?

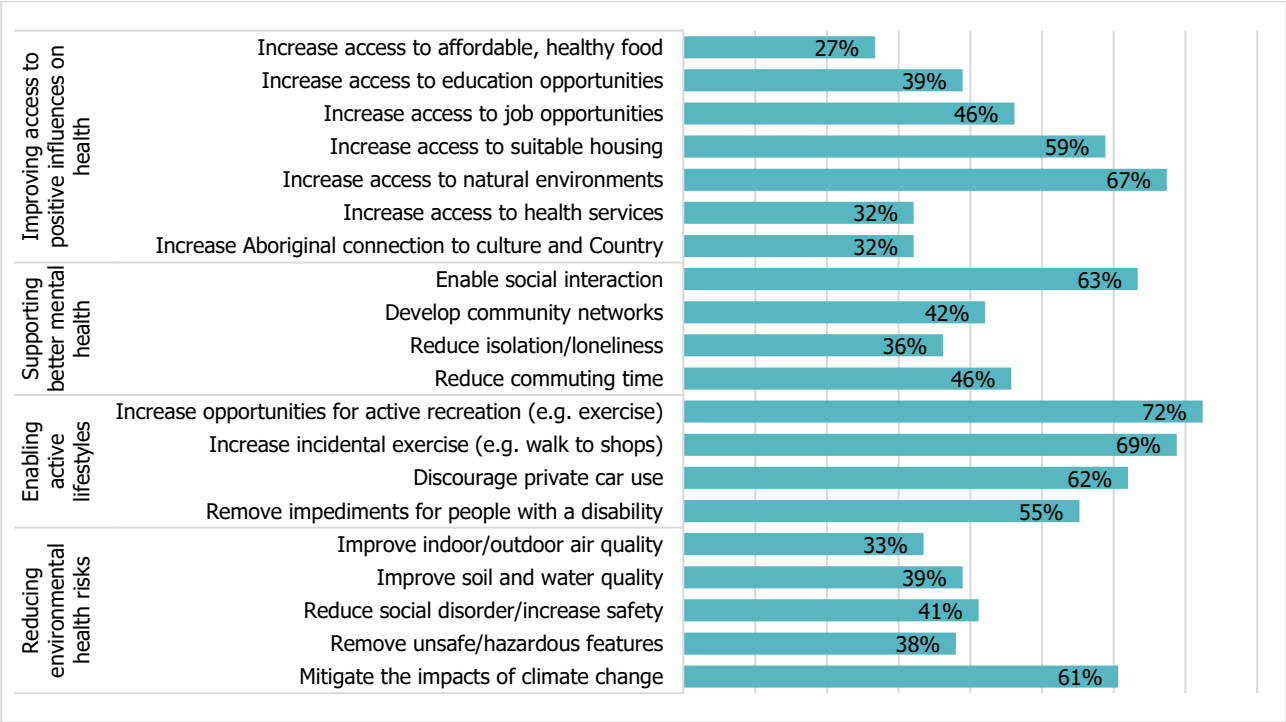
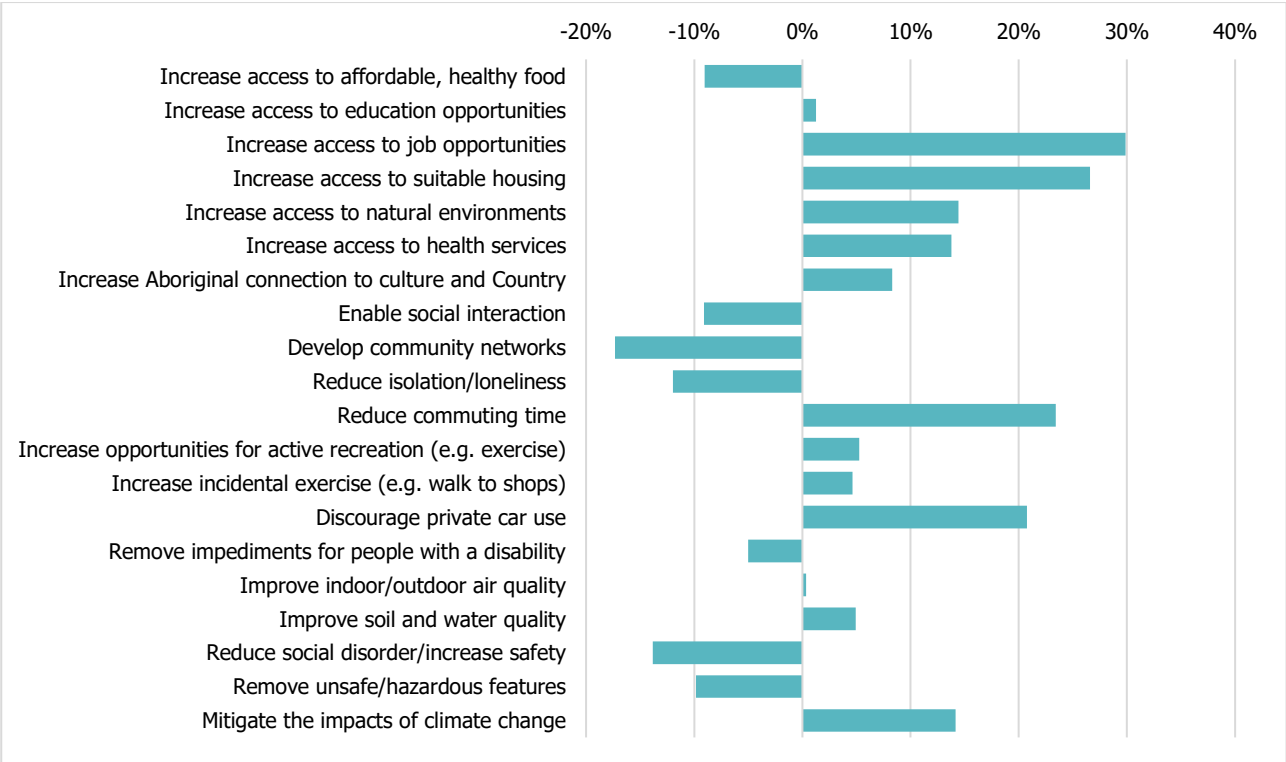


Figure 13 How often do strategic planners feel they contribute to each outcome, relative to other responses?

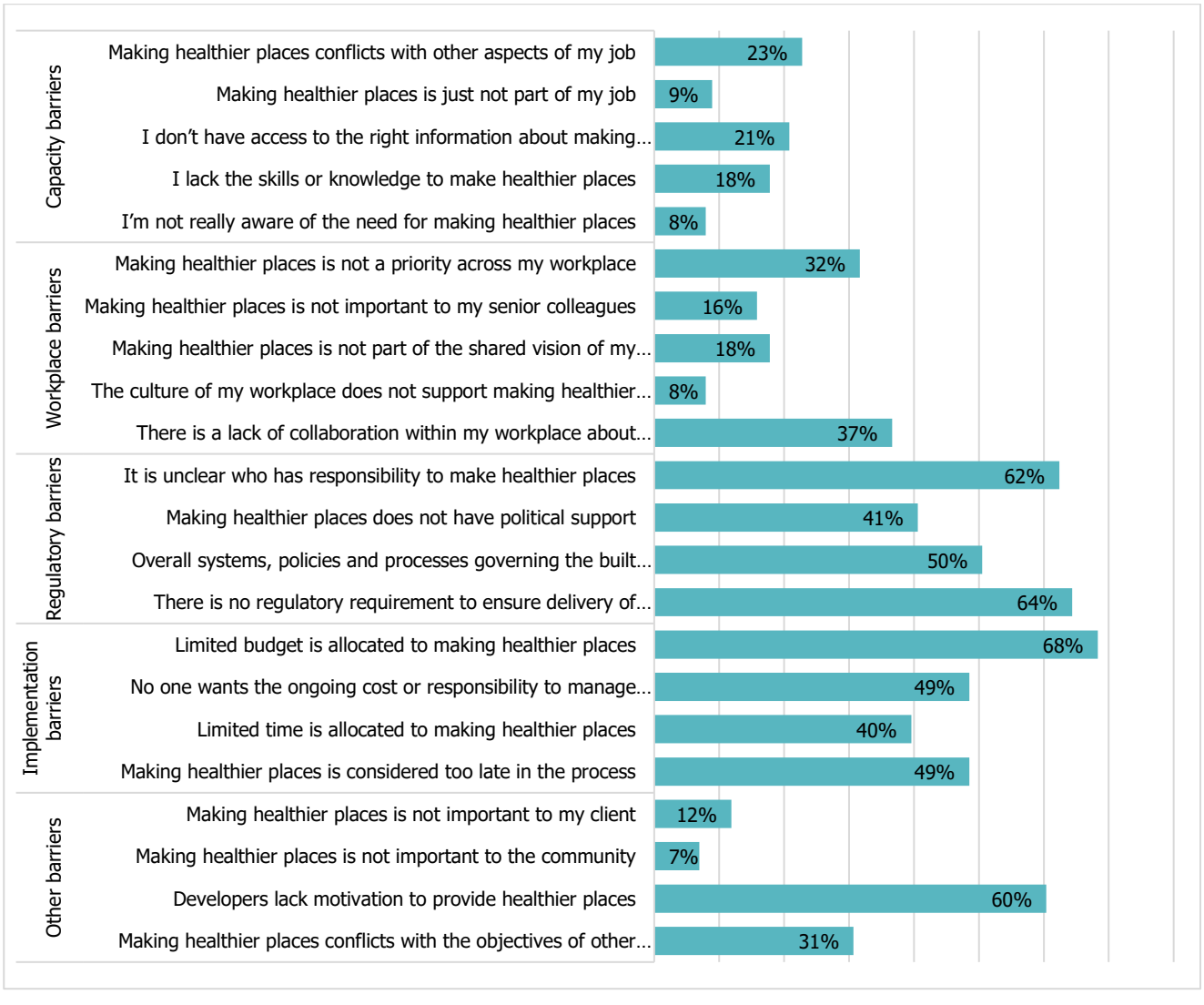


7. BARRIERS TO MAKING HEALTHY PLACES

Participants were asked what barriers they faced in making healthy places through their work. By far the most common response (**Figure 14**) was a 'limited budget' allocated to making healthier places (with 68% identifying this barrier). Other common responses were 'no regulatory requirements to ensure delivery of healthy places' (64%), 'unclear who has responsibility to make healthier places' (62%), and 'developers lack motivation' (60%) with regards to making healthier places. Workplace barriers, such as there was 'a lack of workplace culture to support making health places' and personal capacity barriers such as 'a lack of awareness of the need for making healthier places' were, conversely, the least common barriers identified by respondents (each at 8% respectively). Moreover, very few reported that making healthier places was not important to the community (7%) or their client (12%).

Despite some preconceived expectation that strategic planners are the likely to pin the barriers on a lack of regulation and developer motivations, these were not more likely to be identified by this profession. Further, other professions were much more likely to pin the barrier on client priorities. Strategic planners were, however, more likely to identify a lack of clarity around where responsibility lies, as well as a lack of skills, a lack of time and a lack of collaboration towards the creation of healthier places. Compared with the other professions, planners were also marginally more likely to identify fewer barriers to making healthy places (mean of 6.0 and 6.5 barriers identified).

Figure 14 In your day-to-day work, which barriers do you face in making healthier place?



There was a high degree of correlation within the 'workplace', 'regulatory' and 'implementation' barrier groups. That is, respondents identifying one barrier within one of these groups was likely to identify others in the same group. There was also a fair degree of correlation with those identifying the 'overall systems/policies' as a barrier and subsequent barriers in implementation, other professions and developers.

Many respondents took the opportunity to expand further on where the major barriers were in their fields. These barriers were identified as lack of leadership, resourcing, co-ordination and regulatory capability. Despite the need for health and wellbeing outcomes being spelt out across major strategic planning statements, precinct planning guidelines were singled out as barrier rather than an enabler.

> *The Department of Planning is the main barrier to creating healthier places. SEPP 65[7] being a guideline and not a control is a major setback as it is largely ignored and not enforced. The Design Review and Design Excellence Panels try to bring up the level of design of site planning, apartment arrangements, adequate recreational and play areas in the communal facilities provision, and suggest that SEPP 65 guidelines be followed if not considered. (Urban designer and precinct planner)*

Lack of statutory mechanisms to incentivise health outcomes was also identified:

> *Working within the private sector collating development approvals for clients is a difficult realm to implement healthy city initiatives. Without a statutory requirement for developers to implement these initiatives coupled with for example reduction of developable space and Council's cost of maintaining an extra greenspace means these attributes are often regarded as cost-prohibitive to the developer and Council and left out of the design. (Development, Private sector, Regional NSW)*

> *The most significant barriers to making healthier places are a lack of money and an absence of empowering legislation that would give planners the tools to prioritise the social determinants of health. Healthy planning is just good planning practice, but decision-makers do not currently have the legislative/policy arsenal to support that practice. (Strategic planning, Local Government, Greater Metro Sydney)*

A number of respondents called for greater NSW State Government leadership:

> *State Government must translate guidelines and research into mandatory planning controls via SEPP. (Strategic planning, Greater Metropolitan Sydney)*

> *Stronger lead by State Government is required to overcome the local barriers in local government with particular reference to politicians. There is also a lack of cross boundary collaboration between Councils. (Strategic planning, Greater Metropolitan Sydney)*

> *The NSW Planning system seems to only genuinely consider health at the philosophical level, and then only implemented at the back end of the strategic planning process when it is too late and token. (Social planning, Local Government, Greater Metro Sydney)*

> *One problem is government silos, and NSW Treasury. The fact that the benefits/savings to Health come from costs/investments in other portfolios. Unless mandated, and enforced, it is hard to coerce departments into action. For example - Sydney Gateway project is a $2.6b*

[7] *State Environmental Planning Policy 65-Design Quality of Residential Apartment Design* (SEPP 65) is a State Government planning control aimed at improving the quality of design of residential apartments in NSW. New development must comply with a set of 'Design Quality Principles' established in the SEPP, and be consistent with a concurrent *Apartment Design Guide*. Local councils must include an assessment against SEPP 65 when considering development applications for applicable residential flat development proposals.

> *road project to the airport, with NO footpath or cycleway access to the domestic terminal, despite the [Department] requiring a health assessment in the [environmental impact statement]. (Transport Engineer, Local Government, Central Sydney)*

Lack of co-ordination and leadership was also highlighted, with local government also constrained:

> *The big issue is lack of required co-ordination in the planning and design of places and neighbourhoods. There is no requirement for co-ordinated action and local government has no clue as to how this may be done. (Private sector developer, Sydney, Eastern Suburbs)*

> *It seems that most are aware of the broader need for, if not the detail of how to achieve, a healthy built environment. The community asks for it, the media covers it, the politicians announce it. But how is local government to fund delivery of it, when developer contributions include works required to make the land saleable (like road and drainage infrastructure required for a specific site), and contributions are capped (or have significant exclusions)? (Social planner, Western Sydney)*

The lack of financial mechanisms to recoup additional investments needed to achieve health outcomes is also a major barrier:

> *The health benefits to good design of public places must compete with numerous other aspects and values. As local governments have suffered significantly from rate pegging and cost shifting over many years, it has few funds to factor health into design of public places. Policy, strategy and funding needs to be in place before priorities will favour health. (Urban Designer/Precinct planner, Local Government, Greater Metro Sydney)*

Identifying differences in capacities and barriers in different parts of the state is also a key consideration. It appears to be more difficult to implement health supportive placemaking in lower-density environments, reliant on private vehicles. Those working in regional areas reported particular issues with gaining support for healthy place outcomes:

> *There is no desire in regional Australia to take public transport, cycle or walk to work, and with the cost of land so cheap, densification is not yet commercially viable despite our strategic planning attempts to gaslight it. (Strategic planner, Regional NSW)*

> *I know that legislating healthier outcomes would seem like the answer and would be successful in most areas, but for Councils which lack oversight from the [Office of Local Government] and are remote, it won't be that effective. The best way to create change in these areas will be through cultural change (targeting the public) and potentially creating some grants or concessions to encourage developers to consider healthier outcomes. (Strategic planner, Regional NSW)*

Other uniquely Australian issues were also singled out:

> *In the Australian imaginary, healthier places mean more ovals, bigger gardens, far away from roads and industries, cleaner air outside the city etc. there is a gap where cities do not spark the imagination as what is healthy and not and how much they contribute to a healthy life. (Strategic planner, State/Federal Government)*

8. WAYS TO OVERCOMING BARRIERS TO MAKING HEALTHIER PLACES

Participants were also asked to prioritise (select top three) possible solutions to their identified barriers. The most common solutions chosen were stricter regulations, clearer policy settings and more government funding (**Figure 15**). The least chosen solution was more research to demonstrate impacts of a better built environment on people's health. Notably, strategic planners were much less likely to choose stricter regulations (**Figure 16**), but more likely to choose more government funding and better collaboration with the health sector.

These findings suggest a belief that their individual efforts where not the reason for low attention to health matters, but it is the overall system that is the key barrier. There were also, for example, low scores for any need for more information/training and research into the health-built environment link. Whilst this is positive finding just by itself, that the existing last 15 or so years of attention on demonstrating this links has proved fruitful. Instead, participants suggest a greater need for attention to 'structural' help – guidelines, public awareness, stricter regulation, more funding. Some of these responses, however, also raise more queries. For example, respondents expressed a need for more guidelines, but a low score given to referencing existing guidelines (Figure 15). Similarly, how can respondents be sure about a need for greater public awareness when they themselves have a low rate of talking with the public (community) (Figure 11).

Figure 15 What do you think will help you overcome the barriers you face in making healthier places?

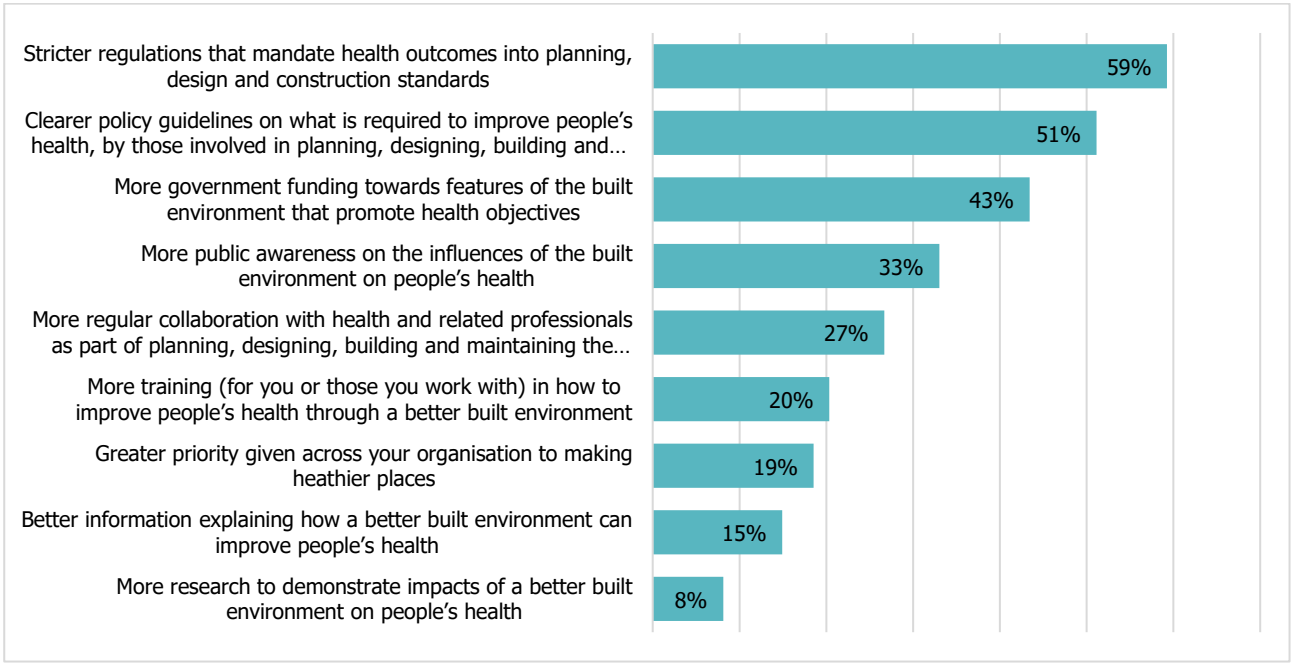
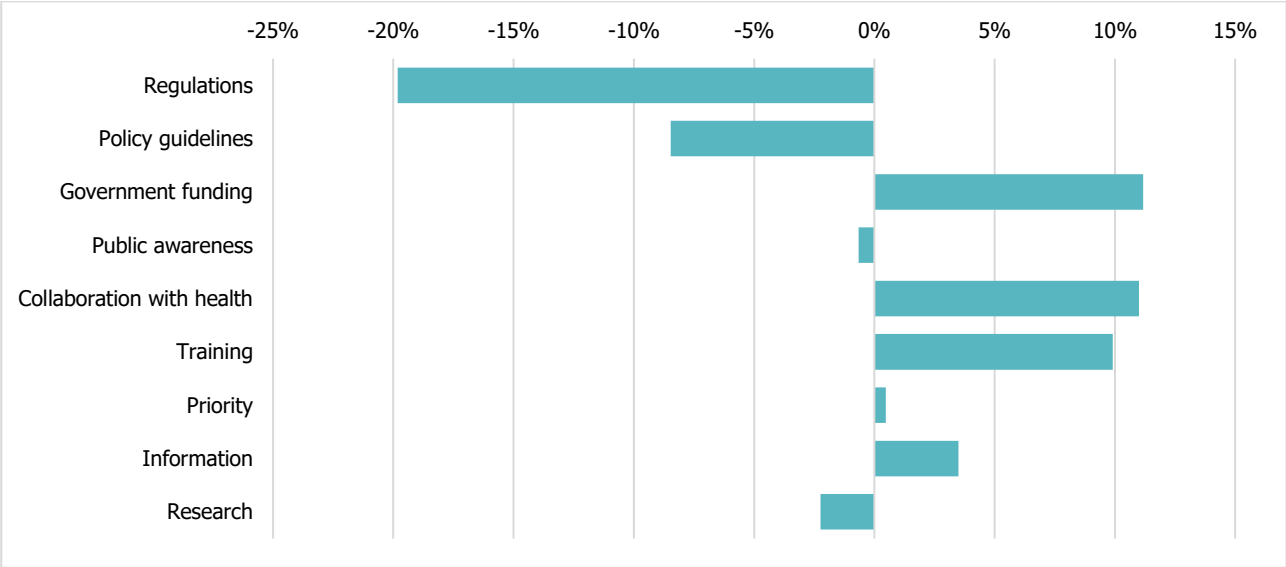


Figure 16 How often do strategic planners identify each possible solution, relative to other responses?

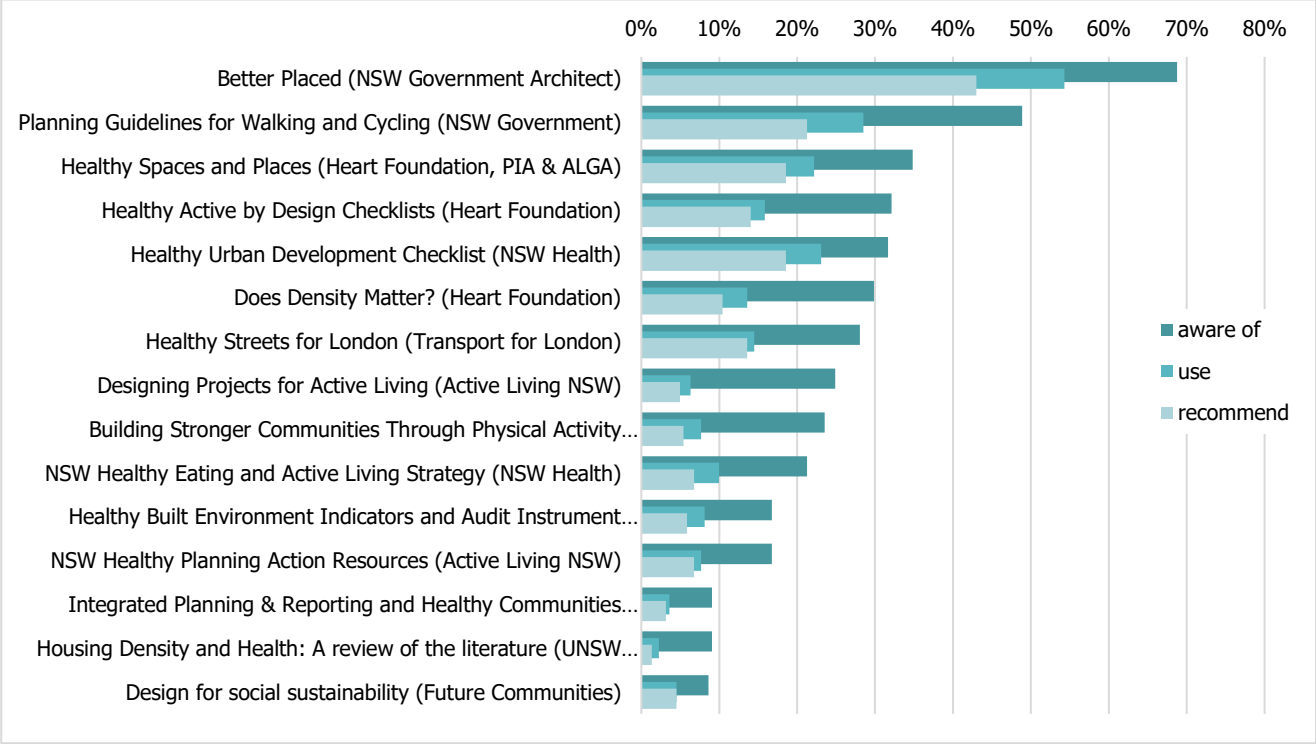


9. RESOURCES AVAILABLE TO HELP MAKE HEALTHY PLACES

Finally, participants were asked in a series of cascading questions about existing resources they were (a) aware of, (b) had used and (c) would recommend. Participants were shown images of the resources (cover images, typically) as well as the titles.

The most known, used and recommended was the 'Better Placed' document released by NSW Government Architect (**Figure 17**). However, in terms of 'attrition' from use to recommendation, the less well-known international resources (from Transport for London and Future Communities) are more successful, as is the Heart Foundation resource (checklists) and Active Living NSW resources.

Figure 17 Which of the following resources are you aware of/do you use/would you recommend to colleagues?



This survey did not follow up on what made these resources successful, but this would be an important component of future research into increasing capacities among the built environment professions. Although many of the respondents shared additional comments in this regard:

> *In a developer led planning system planning for healthier places is aspirational. There is no desire by government, despite the number of publications they churn out, to create places or healthier places (Urban designer and precinct planner)*

Others expressed an optimism that health and wellbeing was becoming more integral to the work of the built environment sector.

> *With the LHDs [local health districts] beginning to shift their focus toward preventative health, there is growing political will to change that situation. (Strategic planning, Local Government, Greater Metro Sydney)*

> *Public health/Population health teams are increasingly looking at ways to influence the design of built environments, so they specifically enhance health outcomes and prevent lifestyle diseases. We are exploring different models which bring the two worlds of public health and urban planning/design together. What if planners and designers thought about*

the health outcomes/risks when they are shaping neighbourhood plans? What if public health specialist acquired some urban planning skills and worked alongside teams who shape cities, neighbourhood and streets? (Public health specialist for healthy built environments, based in Pittwater)

10. OTHER THEMES RESPONSES

WHAT IS WORKING OR WORTH BUILDING ON?

A number of respondents offered helpful insights into what initiatives they felt were working, and/or were worth building on further.

> *The social plans prepared by local government within the Integrated Community Strategy is the best attempt so far, but it depends on having the co-ordination managed by experienced people whom are comfortable working with multi-disciplinary and expert input. (Strategic planner, Not-for-profit organisation, Sydney)*

> *Within my role and collaborations with state and federal health we are able to encourage and advocate for a healthier built environment in our relevant workplaces. We have been able to audit our environments to rate their level of impact on health, positively or negatively. We work with other departments e.g. sustainability, environmental health to improve the health of the community. We run events and workshops to educate the community about health. (Community projects officer, Local Government, Greater Metro Sydney)*

Building a better evidence base is also recognised as critical:

> *More research and evidence need to be provided to show the economic benefits of healthy spaces. This may encourage developers to implement these design elements as they'll see a financial benefit to them. (Strategic planning, Local Government, Mid North Coast, Regional NSW)*

> *We need clearer measures and local area (not just LGA-wide data) for health, particular when measuring social connections and mental health. (Strategic Planning, Local Government, Greater Metro Sydney)*

> *I think attitudes are shifting. There appears to be an increasing recognition of the impact of multiple (but interrelated) parties [Govt agencies, professionals, developers, investors and place 'managers'] on how to influence outcomes that make people healthier. (Strategic planning, Private Sector, Central Sydney)*

WHAT COULD BE DONE DIFFERENTLY?

> *I think at the moment, similar to sustainability, population health should be embedded across the board in planning. (Strategic planner, Local Government, Greater Metropolitan Sydney)*

> *Cost implication of healthy design need to be put into feasibility reports. (Planning Academic, Western Sydney)*

> *It would also be good to better understand / define the benefits and how to assign metrics for healthy places to contribute to business cases." (Transport Engineer, State/Federal Government, Sydney)*

A health worker contributed their observations on what could be improved:

> *This way of working has been a low priority to our LHD senior managers. There is not a commitment that this is an important role in health besides mainstream HP [health prevention] programs. I have been advocating for over 15 years. They are happy that someone is doing HBE [healthy built environment] but do not recognise the need/value. We need more cross service work within health itself e.g. public health, planners etc Best way to influence is to have good relationships with council staff both at the practical*

responsiveness level and formal level." (Health worker, State/Federal Government, Wollongong)

Some planners called for a rethink of the property development cycle, away from an investment led model.

It's time for a fundamental change to focus on well-being and long-term health which will result in changes to the system which are currently land and investment-based lead. It's time to rethink how we attract dollar investments into new ways of living and get out of the land and construction development cycle. (Social planning, Local Government, Greater Western Sydney)

Make it tangible so people understand. Tell people this park will lead to a reduction in diabetes; if you walk around this park five times you will be less likely to get diabetes. In order for people to choose transport over cars you can't just make transport attractive but instead you need to make cars an unattractive option e.g. parking spots a further walk than the train station etc. (Community Projects Officer, Local Government, Greater Metro Sydney)

Promote inclusion of HBE matters in councils' LSPS, LEP Planning Proposals, the DPIE's model DCP and in DA assessment (Strategic planning, Private sector, South Coast)

Social and Economic Impact Assessment is my key area. Health Impact Assessment is increasingly forming part of EIA and thus of Social and Economic Impact Assessment. But the tools and agreed methodologies to measure and assess impacts on health are lacking. (Social planner, private sector, Regional NSW)

11. CONCLUSIONS

Research, to date, has primarily centred on establishing the link between health and built environment practices, focusing in particular on evaluating the outcomes (see e.g. City Futures 2016, and others). Whilst the evidence base is growing, there remains little work, to date, that provides comprehensive data on built environment practitioners' views and experiences in delivering healthy placemaking across NSW.

Our research surveyed a broad range of built environment practitioners working in NSW, offering invaluable insights into the barriers and opportunities in making healthy places across the state. Overall, the practitioners completing the survey demonstrated a strong commitment to making healthy places, with more than half dedicating over a decade of their career to this endeavour. Moreover, the majority expressed willingness to remain engaged in this research exercise, so that the lessons they had learnt could be widely shared. The survey responses revealed a number of important considerations which need to be addressed going forward. In addition, many provided personal insights and suggestions on changes to be made to ensure making healthy places is prioritised by all. These considerations are outlined below.

Creating opportunities to collaborate.

Whilst there was a recognised need for collaboration, current work practices suggest a generally low level of interaction particularly with 'development and finance' 'building and construction', 'engineering' and various 'operations and managements' professions. Yet engagement with these professions is crucial so that health plans, policies and practices are put at the forefront of placemaking projects, and not considered too late in the process. Creating more opportunities to work collaboratively is therefore crucial, particularly if some of the 'implementation' barriers identified are to be addressed.

Developing effective community consultation.

There appeared to be a surprisingly lack of engagement with the community about the barriers and opportunities to improve health outcomes in their local area. Community consultation is an important part of making healthy places, as local insights are an invaluable asset to any project going forward. Engagement with local residents occurs right at the start of the project inception through to its delivery. Genuine engagement, however, is acknowledged to be inherently time consuming, but it needs to be seen as part of the continuous project delivery process. It is also a crucial component in evaluating project impact over the longer term. Whilst key barriers to healthy placemaking relate to limited budgets and time allocation, there now exists a number of new participatory planning practices that can assist in community consultation. Best practice can now be readily shared among the different built environment professions. Cross-cultural knowledge transfer is also readily available, for example, through the UK Design Council, and other relevant peak bodies.

Understanding the value of data.

Many participants were not readily engaging with data to identify local priorities and measure outcomes in relation to health and wellbeing. Whilst participants may not put value on the use of data, if incorporated into current work practices, it can help shape decision-making around healthy placemaking, identify local priorities, and help measure the impact that specific interventions have had on individual behaviour. Socio-economic and health data audits, used alongside case studies, are also invaluable in supporting practitioners' case to put healthy placemaking on workplace agendas. Given that nearly a third of participants confirmed that making healthier places was not a priority across their workplace, this barrier warrants attention. An appetite was, however, expressed

for establishing evaluation frameworks that could examine whether specific health interventions impact the health and wellbeing of individuals and communities. This desire mirrors the sentiment found in the UK Design Council's (2018) study of UK's built environment professionals. Opportunities to strengthen international collaborations in this regard clearly exist.

Demonstrating impact.

Despite the difficulties in measuring the impact of their day-to-day work, participants considered that they were able to support the health and well-being of their communities in numerous ways, particularly in enabling active lifestyles and improving access to our natural environments. However, few felt they had opportunities to increase access to healthy food options. Given that interventions in this regard largely sit outside planning processes (for example, through farmer markets or similar events, educational campaigns and taxing sugary food), this finding is not surprising. Access to healthy food, however, remains one of the key domains of a healthy built environment. There may therefore be potential to investigate, for example, ringfenced floorspace concessions to make healthy food options commercially feasible, and by doing so help improve individuals' daily food choices. Yet overall, there was a strong consensus that built environment professionals' work can contribute to many different aspects of making healthy places, and thus positively impacting people's behaviour and transforming lifestyles for the better.

Responding to lack of funding.

Frustrations, however, were also felt by many, and particularly among social and strategic planners, in making healthy places through their work. Limited budget allocation was by far the biggest barrier around healthy placemaking, which mirrors the key finding in the UK Design Council's (2018) study. A lack of funding comes at a time when there is growing public and political recognition of the need to create healthy places to live and work in, across the globe. Our research findings, along with others, can be used to support built environment practitioners, as they collectively push to make healthy places a priority across NSW, and internationally. This is not an easy task, given the many competing priorities and future funding cuts are likely to occur across all sectors and professions, following the COVID19 pandemic.

Strengthening government guidance.

Whilst there are a number of resources available to help built environment professionals make healthy places, only a few appeared to be regularly consulted and would be recommended to others. By far the most referenced document was the NSW Government Architect's *'Better Placed'* report, which creates a clear approach to ensure good design is delivered. Positively, this document identifies 'health' at the top of the criteria of what characterises a good place, although there is limited reference thereafter of what actually constitutes a health-supportive place. Nonetheless, given that this resource scored so highly, it presents an opportunity to include additional detailed information and advice on healthy placemaking. The wealth of experiences and best practice examples, provided by our participants, can readily be drawn upon and expanded in future research, thus helping build capacity across the professions.

Improving systems, policies and processes.

Clearer policy guidelines are not enough. There was overriding consensus that the value of healthy places to long term prosperity and wellbeing needs to be recognised as a key political priority. Improving systems, policies and processes of planning would help to clarify the roles and responsibilities to make healthier places, strengthen the case for greater cooperation within workplaces, and across professions and geographical boundaries.

A call for stronger statutory mechanisms.

The majority called for greater NSW state government leadership and stronger statutory mechanisms to incentivise the development and implementation of healthy place making interventions. As respondents argued, only through stricter planning regulations and policy frameworks would health outcomes be mandated into planning, design and construction standards. Whilst there was success in NSW when a health object was included in the proposed new planning bill in 2013, the failure of passage through the Parliament meant this did not come to fruition. More recently, amendments in the ACT planning legislation have met with success, setting a precedent. Time is ripe to make a call for improved NSW state regulation and policy frameworks.

Raising expectations.

Not only would greater political and legislative support help to empower built environment professionals, specifying types of regulatory requirements would ensure different aspects of healthier places are delivered. Whilst the development industry faces competing demands and market pressures, there was a strong consensus that expectations need to be raised, with healthy placemaking principles put at the forefront of every project.

Putting health at the top of the agenda.

Health of individuals and communities, warrants being embedded into planning policy and legislation. There was a strong consensus that health can no longer be seen as a secondary consideration, or as tokenism in urban design and planning decisions and outcomes. The COVID19 pandemic has reinforced the importance of putting health central in all that we do. The case is stronger than ever.

Part 3: Literature review

12. POLICY STATE OF PLAY IN NSW

In New South Wales, as elsewhere in Australia and internationally, there has been a renewed interest in the connection between human health and the physical, social and ecological environments in which we live. This interest has been around, broadly, since the late 1990s and is prompted by an increase in the incidence of chronic disease, combined with subsequent epidemiological studies, as well as lived experience, that suggest contemporary, generally 'suburban', living environments are a causal factor.

In response, there have been a number of policy, research and practice actions within the fields of both health and urban planning. Examples specific to NSW are included in List A.

Arguably, the instigation of such actions has also been supported by the development in the preceding decades (generally the 1970s to 1990s) of a then somewhat new – and fortuitous – professional and broader community *zeitgeist* characterised by an interest in forging interconnections across otherwise different and separate sectors and disciplines. Examples of the various contributing strands of this 'spirit of the time' are listed in List B.

However, and notwithstanding this otherwise positive state of play, the literature, together with on-the-ground experience, also suggests some lingering difficulties.

One relates to a low level of acceptance of the discipline of planning overall in Australia, and therefore also a potential similar low level of acceptance of particular components of planning activity (here, health-supportive environments). McCosker (2018) for example found a 'negative inertia … affect[ing] urban planning practice generally'[8]; it is a finding that continues earlier references to a 'planning deficit', resulting in 'unintended cities'[9], and to 'planning' as being subservient to 'laissez-faire individualism' and the whims of 'political agendas', comprising more an exercise of catching-up with issues only once they arise.[10]

A second potential difficulty is revealed in a study of planners at Wollondilly Council.[11] It found (amongst other matters) that although health was present in the Council's planning policies, this was more implicit than explicit, with particular variations in individual staff understandings of this presence.

[8] McCosker, A. (2018) *Barriers and Enablers to Healthy Planning and Active Living Initiatives,* PhD thesis, Sustainability Policy Institute, School of Design and the Built Environment, Curtin University, Perth: 69. (see also Item #21, Table A).

[9] Tomlinson, R. (2012) *Australia's unintended cities: The impact of housing on urban development.* CSIRO Publishing, Canberra.

[10] Ashton, P. (1995) *The Accidental City. Planning Sydney Since 1788.* Hale & Iremonger, Sydney: 10, 12.

[11] Hirono K, Haigh F, Jaques K, Crimeen A. (2017) *Integrating Health Considerations into Wollondilly Shire Council Planning Processes*. Centre for Health Equity Training, Research, and Evaluation, University of New South Wales, Sydney. (Item #31, Table A).

Table A: Examples of existing healthy places strategies and actions in NSW

- Regional Plans and (in the Sydney metropolitan area) associated District Plans as prepared under the *Environmental Planning and Assessment Act 1979* include goals relating to the fostering of 'healthy communities'.
- Many NSW universities now have research, teaching and outreach programs related to 'healthy built environments' (eg. City Wellbeing Program, City Futures Research Centre, UNSW; Western Sydney University; Charles Perkins Centre, University of Sydney; Centre for Health Equity Training, Research and Evaluation, Faculty of Medicine, UNSW).
- The Ministry of Health maintains a webpage of resources, including a comprehensive *Healthy Urban Development Checklist* published in 2009 and updated in 2020.[12] The Ministry also runs the annual Healthy Towns Challenge through the Office of Preventive Health.
- A number of Local Health Districts are also involved in local actions to achieve health-supportive built environments. Many make responses to major development and land use proposals. The South Western Sydney LHD has established a joint position with one local council (Fairfield) to support both organisations in such work.
- The Premier's Council for Active Living (PCAL) (2004-2016) arose from the earlier NSW Physical Activity Taskforce (1996-2002). PCAL established working groups, capacity building programs, commissioned research and maintained a web-based information resource. This resource is now maintained by the (NSW) Heart Foundation.[13]
- PCAL also published a guide to assist the inclusion of healthy living actions in local Councils' Integrated Planning and Reporting (IP&R) process, required under the *Local Government Act 1993*. A review of the uptake of this guide was undertaken in 2006.[14]
- Landcom, the NSW government land development agency, has adopted a policy to include health in its activities (*Healthy Development. How Landcom plans for healthy places and healthy people* (2010)). The Policy is structured on a model developed by Trevor Hancock, one of the founders of the Healthy Cities movement. This Model merges community, environment and economic matters to achieve a stated 'sustainability=health' objective.
- The (NSW) Heart Foundation undertakes collaborative research and lobbying activity on health-supportive environments and maintains a public resource base. It has recently (2020) updated the PCAL guide to IP&R to encourage inclusion of health matters in the 'Local Strategic Planning Statements' now required under amendments to the planning Act.[15]
- The NSW Cancer Institute has also published suggested text for inclusion in Councils' Local Strategic Planning Statements of references for the need to for public shade.[16]
- Combined, these examples continue earlier work at national level under the title of 'healthy spaces and places' by the national Heart Foundation, Planning Institute Australia and the Australian Local Government Association, and comprising a manual and website of resources.[17]

[12] https://www.health.nsw.gov.au/urbanhealth/Pages/default.aspx
[13] https://www.healthyactivebydesign.com.au/resources/active-living-nsw
[14] Fallding, J. (2016) A baseline of healthy eating and active living within NSW local government Community Strategic Plans & selected Delivery Programs. New South Wales Premier's Council for Active Living, Sydney.
[15] https://www.healthyactivebydesign.com.au/resources/active-living-nsw
[16] See also: https://www.cancercouncil.com.au/wp-content/uploads/2020/01/Shade-a-planning-and-design-priority.pdf
[17] See: https://www.planning.org.au/policy/healthy-spaces-and-places-2

List B: Example components of a broad underlying professional and community *zeitgeist* evident c.1970s-1990s

- The concept of 'ecologically sustainable development', following the 1992 United Nations Earth Summit and resultant 'agenda for the 21st century'. In Australia, local councils were each encouraged to adopt a 'Local Agenda 21'.
- The notion of 'triple bottom line' – social, economic and environmental – accounting, first conceived in the 1990s to assist sustainable development objectives.
- 'Integrated Local Area Planning', promoted by the Australian Local Government Association in the 1990s to improve integration across all of a council's – and broader government – activities; and continued in NSW by new 'Integrated Planning & Reporting' provisions in the *Local Government Act 1993*.[18]
- 'Place management', also promoted in the 1990s to address then deficiencies in urban management as a result of fragmentation and 'silo-ing' of management responsibilities.[19]
- The WHO Healthy Cities Program, established in 1986, with the aim to embed health into all urban management activities, was promoted in Australia by the national associations for community health and local government.[20] An associated series of national conferences is still held under the title *Making Cities Liveable*.
- The associated WHO Charter on Public Health (also adopted in 1986) also prompted public health disciplines to re-focus on the nexus between human and ecological health (often also with a professional change of name to 'environmental health'). Australia adopted a National Environmental Health Strategy in 1999.[21]
- The 1980s also saw a resurgent interest on urban design (including, amongst others, the approach of 'New Urbanism' developed in the United States); including, in Australia, establishment of a national Urban Design Forum.[22]
- Development and wide-spread adoption of 'Crime Prevention Through Environmental Design' (CPTED) principles, which involve a close collaboration between urban design, policing and crime prevention actions.[23]

[18] Margerum, R. (1999), 'Implementing Integrated Planning and Management. A typology of approaches,' Australian Planner Vol. 36 No. 3: 155- 161.

[19] Collins, D. and Burgess, K. (2007) 'Place Management: Practice and Principles in NSW.' 21st Australian and New Zealand Academy of Management Conference Proceedings, Sydney.

[20] Australian Commission for the Future, Australian Community Health Association & Australian Local Government Association (1989) *Healthy Cities Australia: discussion paper. Transition from pilot project to national network.* Healthy Cities Queensland, Brisbane.

[21] Brown, V., Nicholson, R., Stephenson, P., Bennett, K. and Smith, J.(2001) *Grass Roots and Common Ground. Guidelines for Community-based Environmental Health Action.* University of Western Sydney, Richmond.

[22] O'Toole, S. 'Landcom and New Urbanism', paper presented to Royal Australian Institute of Architects *New Urbanism Conference.* Parramatta, 4 November, 1996.

[23] NSW Police (n.d.) 'Crime Prevention Through Environmental Design', http://www.police.nsw.gov.au/ community_issues/crime_prevention/ safer_by_design

13. LITERATURE REVIEW

Our study included a 'quick appraisal' of relevant literature.

The initial prompt was to undertake a confirmation check on whether there had already been any similar survey of practitioner experiences in NSW to that proposed in this study.

The opportunity was also taken to extend this focus, to also gain an understanding of the general state of play in respect to studies of practitioners in Australia and elsewhere with similar objectives, including conclusions about healthy place-making practice as well as possible survey techniques and questions.

A broad scan of broadly relevant studies, appraisal reports, conference presentations and papers in peer-reviewed journals was undertaken, initially via (i) a key-word search on the internet using the broad terms of health, built environment, healthy built environments, practitioners, practitioner experiences, practitioner surveys, and barriers and enablers, and then (ii) by canvassing relevant references in these initially-sourced documents. Given the broad scope of the search terms, an eclectic array of topics and fields of activities was sourced. This eclecticism was viewed positively, and retained in the final choice of documents reviewed as consistent with the intended scope and range of this study and the inherently trans-disciplinary nature of the field.

Thirty-one documents were chosen for detailed review. Table 1 provides an extended summary of each, plus key findings and advice relevant to this study. It draws on the introductory abstracts, where available, within the document itself.

SIMILAR SURVEYS INTO PRACTITIONER EXPERIENCES IN NSW

The review did not locate any NSW-specific survey identical to that proposed.

Five surveys undertaken in Australia with *similar* aims were located. Generally, however, these surveys tended to focus on a particular aspect of built environment practice (eg. skills or settings), particular levels of government, or sub-sets of healthy behaviours. One survey, broader in scope, was however restricted to one local government area only.

These five Australian studies were:

1. *Healthy Built Environments: Stakeholder Engagement in Evidence Based Policy Making* (Freeman et al, 2011; Entry #3, Appendix 1): 16 interviews and a workshop with NSW practitioners. Now somewhat dated, though potentially useful as an historical comparison.
2. *Exploring barriers and enablers of health-promoting policy integration* (Lowe at al, 2015) analysis of planning and policy documents and 20 semi-structured interviews with 'key informants' in Victoria in 2014 (and including a comparison with Portland, USA). Relates to State government-level decision-making only.
3. *Social determinants of health and local government: understanding and uptake of ideas in two Australian states* (Lawless et al, 2017) on-line survey, by individual invitation, of 96 staff in 14 randomly selected councils in South Australia (n=8) and New South Wales (n=16) undertaken in 2014-15 and based on similar earlier studies in Canada (Table entry #12) and New Zealand (Table entry #4) – although these earlier international studies were of government staff at a national rather than local level.

4. *Integrating Health Considerations into Wollondilly Shire Council Planning Processes* (Hirono K, et al, 2017; Appendix 1): interviews with key staff and observation of meeting discussions, with a focus on land use planning.
5. *Barriers and Enablers to Healthy Planning and Active Living Initiatives* (McCosker & Matan, 2018; Appendix 1): on-line questionnaire survey of 20 local government practitioners and semi-structured interviews with 28 practitioners in government and academia. Respondents were spread over Western Australia, South Australia, New South Wales and Victoria. Four councils in NSW were surveyed.

OUTCOMES FROM THE BROADER REVIEW OF SIMILAR RELEVANT STUDIES

The studies identified in this broader part of the review tended to focus on particular aspects of a healthy built environment and/or singular potential 'determinants' of barriers and enablers to healthy built environment practice – of interest to and determined beforehand by the study investigators (rather than by the respondents). In addition, most were specific to a particular geographic area, mainly an individual country. Where an international stance was taken this was mainly in studies that reviewed the existing literature.

A summary review of the findings is provided below. The first point provides an overall impression; the others identify particular thematic concerns as evident in the studies themselves.

(I) AN OVERALL IMPRESSION OF AN 'ADOLESCENT' FIELD, WITH SOME DEVELOPING QUESTIONS OF DIRECTION

The review canvassed documents over roughly a period of two decades, from what might be considered the 'embryonic' period of recent healthy built environment practice (ie. late 1990s - early 2000s) up to the current day. The overall impression gained was of a still unresolved discipline (or, perhaps more accurately, trans-disciplinary field of endeavour).

The range of issues canvassed around health-supportive environments does not substantially change over the two decades of the studies reviewed. Further, most issues appear to remain essentially unresolved. That said, some evidence of growth and development was also discerned, suggesting the field is now in an 'adolescent' stage: still developing, very aware, showing some progression to 'adult' resolution but overall not yet mature and fully accepted, and inherently questioning.

Examples of the latter included:

- a growing desire to establish health as a *primary* consideration in the thinking of non-health professionals and decision-makers, as different to earlier approaches that emphasise the 'co-benefits' of including health considerations - as a way to overcome potential disinterest in bringing such considerations into play.
- the way in which some studies now consider the various factors that influence effective practice as not simply a duality of 'barrier' or 'enabler', but more constructively as potentially both a barrier *and* an enabler depending on how each are constructed and 'matured' in themselves.
- an expansion of the understanding of the need for collaborations, beyond the two professional levels of health and of the built environment to now include all 'actors' involved in the delivery of health and urban living environments generally, members of the 'recipient'

communities, development of a common language, and resolution of differences in what comprises accepted 'evidence' sufficient to support action.

(II) PRACTITIONER'S ATTITUDES AND PERSONAL KNOWLEDGE REGARDING HEALTH

The studies of Canadian, New Zealand and Australian (South Australia and NSW) public servants about their understandings of the determinants of health, plus attitudes about relevance to their work, all found reasonable degrees of understanding as well as support for health as a consideration in wider decision-making. However each study also concluded there was a need for more *sector-specific* assistance to make this base-level of understanding and support more effective.

(III) ISSUES AROUND RESEARCH TRANSLATION, AND CONNECTIONS BETWEEN DISCIPLINES (AND OTHER 'PLAYERS')

Various studies identified a 'theoretical tension' between how each of the health and urban planning professions deal with 'evidence' that might then support policy change and/or action. Other studies similarly identified critical 'gaps' between research findings and practice, and by implication between researchers and practitioners. Suggested 'remedies' include a need for greater 'listening' between 'players' (including 'end' consumers), a need to overcome competing, generally economic, interests, and a need to look more deeply at cultural and 'personal' aspects of knowledge transfer (research translation).

(IV) PRACTITIONER AND RESEARCHER SKILLS

Some studies found that practitioner respondents rated the development of technical or knowledge skills as of less importance when seeking to get specific actions on-the-ground than the 'soft' skills of collaboration, communication and community engagement. Included here was also what different studies respectively subsequently described as "team science", and a need to undertake more "natural experiments": case studies of the actual 'lived experience' of different urban environments, from a health perspective.

(V) USE OF PARTICULAR TOOLS TO ASSIST PRACTICE

Study respondents also cited a need to better utilise decision-making tools more focussed on the particular needs of the health and built environment inter-disciplinary relationship. Suggestions included (above-mentioned) "natural experiments", the development of new sets of Indicators, and the use of specific Health Impact Statements.

(VI) A BROADER PERSPECTIVE THROUGH A FOCUS ON SETTINGS

Experiences from the field of health *promotion* have led to an appreciation of the importance of settings, or contexts, in effective action. This includes understanding the various and multiple natures of such settings, the need to foster close collaborations with the populations of each setting, and a need to adopt non-linear models of causality or, expressed another way, to adopt strategies that are comfortable with complexity, including large numbers of potentially influencing factors. Further, settings in this regard include systems and organisations, as well as the physical make-up of *the setting itself*.

Part 4: Appendices

APPENDIX 1: ANNOTATED BIBLIOGRAPHY

Documents reviewed relating to health and built environment practice, and relevant health promotion practice generally (alphabetical by author)

	Key aspect researched	Reference	Summary
1	Reconnecting disciplines via eco-social theory	Corburn J.(2004) 'Confronting the Challenges in Reconnecting Urban Planning and Public Health'. American Journal of Public Health. Vol. 94 Issue 4.	USA Opinion, from the author's experience in the USA in health and environmental and social justice
	Abstract: A need to re-couple the fields of urban planning and public health, the separation of which has only been exacerbated by the recent adoption of EIS and risk assessment processes which over-emphasise quantitative factors. Reconnecting urban planning and public health will require each field to embrace their own and the other's physical and social dimensions, address health disparities, and democratize research and decision-making practices. Suitable conceptual frameworks are available via, in health, eco-social epidemiology and, in planning, environmental justice – each provide multilevel, life-course and population-wide perspectives.		
2	Factors in adopting a health focus in local government	Department of Human Services (Victoria) (2006) Evaluation of 'Environments for Health' Municipal Public Health Planning Framework. http://www.health.vic.gov.au/localgov/mphpfr/eval.htm	Victoria. Evaluation of the process of Municipal Public Health Plans. Document reviews + interviews + on-line survey + focus groups
	Abstract: Evaluation (by external consultants) of Environments for Health, a State government guide adopted 5 years earlier to assist the legislative requirement that all local councils adopt a Municipal Public Health Plan (MPHP). Comprised 73 interviews, an on-line survey (108 responses), 5 community forums, and review of 62 MPHP's. Found: ▪ the guide had a major positive impact – councils were starting to consider actions to improve health and wellbeing across the range of their activities/responsibilities. ▪ similar programs in the USA, UK and The Netherlands report much less progress. ▪ the 'four domain' framework (built/physical, social, economic and natural environments) in the guide assisted different fields to see the part they could play. ▪ the majority of MPHP's showed evidence of a developing more sophisticated approach to health planning – that went beyond simply preventing ill health and providing services, and used quality data (compared to older MPHP's that tended to focus on regulatory functions only). ▪ the degree of implementation depended on various factors, including council priorities, culture, resources and skill-base. ▪ actual implementation of MPHP provisions relating to integrated practice across the council organisation was however more limited, with greater leadership and consistent effort required. Effective internal and external partnerships were also considered key to better move from theory into action. ▪ a range of other needs: more specific assistance to support a move from planning to implementation, monitoring and review; ongoing training, induction and networking for councillors and staff; resources and activities that speak the language of different sectors; more practical examples of actions; and promotional skills to help raise the status of MPHP's		
3	Effective partnerships/ collaborations	Freeman E., Jalaludin B. & Thompson, S. (2011) 'Healthy Built Environments: Stakeholder Engagement in Evidence Based Policy Making'. State of Australian Cities Conference 2011.	NSW. In-depth semi-structured interviews with 16 health and built environment professionals.
	Abstract: Details a survey of practitioners to inform the then embryonic HBEP (now City Wellbeing) at UNSW, and detailed in: Healthy Built Environments Program (UNSW) (2011) Stakeholder Consultation Report Informing a Research Strategy in NSW. The evidence base from which healthy built environment policy-makers and practitioners can draw is growing. However, effecting change is still difficult due to the cross-disciplinary nature of the field, the number and breadth of stakeholders involved, and the traditional bureaucratic structures of government. The objective was to seek insights from key stakeholders engaged in healthy built environment policy about effective		

	partnerships, strategies, tools and policy making. Participants were government and non-government urban planners, social planners, researchers and managers. Five themes/needs emerged: ▪ stakeholder identification ▪ partnership enhancement ▪ policy evolution ▪ research content ▪ research facilitation. Key 'strategic' needs to build the evidence for creating healthier built environments were: ▪ improved stakeholder engagement, via relationship building within and between organisations, the evaluation of policy and programs, and effective communication of results ▪ improved collaboration and capacity building that fosters understanding of the health impacts of the built environment within all organisations and the wider community ▪ practical examples of how organisations can value-add to policies and practice ▪ appropriate technical, valid and reliable measurements, able to be consistently applied. Also noted that no one individual 'stakeholder' has all the requisite skills and knowledge – thus necessitating cross-disciplinary collaboration.		
4	Awareness, attitudes and personal knowledge on health	Gauld R., Bloomfield A., Kiro C., Lavis J. & Ross (2006) 'Conceptions and uses of public health ideas by New Zealand government policymakers: Report on a five-agency survey.' Public Health (2006) 120,283-289.	New Zealand. Questionnaire survey in 2003. The intent and structure draws on the survey process in Lavis et al, 2003 (#12 below).
	Abstract: Explores N.Z. government policymakers' awareness of, attitudes toward and self-reported use of ideas about the determinants of health. Incudes some comparison with an earlier similar Canadian study (Lavis et al, 2003). Employees with policymaking and advisory responsibilities in government departments of health, social development, housing, education and finance were surveyed, with 166 responses from 298 invitations received. As per Lavis et al (2003), the survey rated statements around awareness of determinants of health ideas, attitudes toward and use of ideas, and knowledge sources; plus the ability for open-ended comment. 58% of respondents were familiar with ideas about health determinants. 80% felt that health determinants should be considered in all government policy, but that more practical information on effective policy interventions is needed. Knowledge was gained from a variety of sources (with 'the media' given a low ranking), with health sectors relying most on academic papers and reports. Commitment to the idea that the economy should take precedence over reducing health inequalities was low. Concluded (in conjunction also with a concern about the low survey response rate) that there is a demand for a literature on health determinants that is sector specific and which provides practical and proven information about effective interventions that influence health.		
5	Research translation: gap between researchers, policy makers and practitioners (as related to active living and chronic disease)	Giles-Corti B., Sallis, J., Sugiyama, T., Frank, L. Lowe M. & Owen, N. (2015) 'Translating active living research into policy and practice: One important pathway to chronic disease prevention.' Journal of Public Health Policy. Vol. 36 Issue 2: 231-243.	Victoria, South Australia, California, British Columbia. Reflections on research-translation gaps from the authors' own work and experiences (though all are from academia). Includes ten 'strategic' responses.
	Abstract: Using evidence to inform policy and practice is challenging and often hampered by poor fit between academic research and the needs of policymakers and practitioners. This is notably so for active living researchers seeking to increase population physical activity by changing the ways cities are designed and built. Identifies four 'phases' of effective (translatable) research: (1) must be policy relevant, (2) use of research methods that are compelling to decision-makers, (3) active dissemination of findings via appropriate communication methods, and (4) engagement in advocacy. Concludes with 10 strategies to facilitate translation of research into health-enhancing urban planning policy: ▪ understand the 'policy world'/contexts/needs - know what influences decision-making, which is shaped by many inputs, including public opinion ▪ establish stronger links between researchers, policy-makers & practitioners (the authors also cite journalists here) – with two-way communications ▪ work with knowledge brokers, advocates, lobbyists – communicate with the right people, in the right way at the right times ▪ establish research agendas jointly with policy-makers and practitioners; co-create research questions		

	▪ undertake interdisciplinary collaborative research (to address the 'wicked problem' of the city); interdisciplinarity generates more innovative solutions ▪ study and address health-economic costs and benefits ▪ evaluate policy reforms via 'natural experiments' ▪ conduct research focussing on community needs/consumer preferences ▪ highlight specific solutions/policy reform recommendations arising from the research (eg. in the abstract/summary) ▪ create interdisciplinary built environment and health training programs/build understandings across disciplines.		
6	Influences on policy-makers	Harris, P., Kent, J., Sainsbury, P. Marie-Thow, A., Baum, F. Friel, S. & McCue, P. (2017) 'Creating 'healthy built environment' legislation in Australia; a policy analysis'. Health Promotion International, 2018; 33:1090-1100. (See also Kent, et al (2018) - #9, below).	New South Wales. Document analysis + 9 interviews + focus group. Relates to the inclusion of health in the (then) drafting of new environmental planning & assessment legislation.
	Abstract: Covers the same study as presented by Kent, et al (2018) (#9, below) and which reviewed the factors which enabled a high-profile inclusion of health (as an objective) in proposed new planning legislation. This paper gives more emphasis to the specific influences relating to this inclusion. The aim was to draw lessons as to how and why certain (health) policy matters are given such prominence. Comprised interviews with nine individuals who were involved plus discussion within a focus group of healthy planning 'experts'. Data was analysed through three established frameworks that explain policy process: Multiple Streams, Punctuated Equilibrium Theory, and Advocacy Coalition Framework (see #9 below). Found that the policy gained traction as a result of a fortuitous convergence of a complex interaction of many factors. The study makes sense of this complexity via the three conceptual frameworks. Amongst numerous learnings, detailed findings were that: ▪ health will gain more traction as a complementary rather than competing issue, and when 'non-threatening' to the prevailing market-driven (neo-liberal) system ▪ an opening for some kind of change is a pre-requisite for the introduction of new ideas into otherwise 'stuck' planning systems ▪ lobbying can assist, in this case was provided by an existing long-established professional advocacy group ▪ while the policy system must be open to the specific change sought, elements of that system can display different degrees of openness ▪ actor-network agendas and structures can shift throughout a policy review process. [* Although not covered in this paper, the fortuitous – perhaps unpredictable – nature of the initial coalition of events studied here is reinforced by subsequent events whereby the health objective in the draft legislation was deleted in the final version.]		
7	The multiple factors required to influence policy	Harris, P., Haigh, F., Sainsbury, P. & Wise M (2012) 'Influencing land use planning: making the most of opportunities to work upstream.' Australian and New Zealand Journal of Public Health. Vol. 36 No. 1.	Australia Opinion, from the authors' experiences in seeking to better establish public health considerations in urban planning activity, including legislation.
	Abstract: An analysis, from personal experience, structured around Kingdon's (2011) theory that policy change is more likely when a policy window opens and that opening is at the convergence of all of problem, policy and political streams. Policy advocates must be able to recognise such windows, and be ready to act quickly. Suggest five enabling factors: ▪ a good understanding of the system, and primary responsibility for the matter (problem) at hand ▪ having an evidence base to draw on ▪ having mechanisms (tools and processes) available to intervene/influence public policy ▪ then having the capacity to use or recommend these – people, money, time and working inter-sectorially ▪ (most important) having pre-existing strong, trusting and lasting interpersonal and inter-organisational relationships - influencing another system's agenda requires collaboration.		
8	Practitioner perspectives on Health Impact Assessment and Healthy Public Policy	Harris P., Kemp, L. & Sainsbury P. (2019) 'The essential elements of health impact assessment and healthy public policy: a qualitative study of practitioner	Australia/International Interviews + workshop conducted in 2010.

		perspectives.' British Medical Journal. Vol.2 Issue 6.	
	Abstract: Seeks to define and distinguish the roles and overlaps between healthy public policy (HPP) actions generally and health impact assessment (HIA) – to assist practitioners involved in each. Comprised nine unstructured interviews with participants (in UK, Ireland, USA, Australia, New Zealand, the Netherlands) as working in or with government to influence policy. Seventeen participants (from New Zealand, Australia, Thailand, Tonga, UK) in a subsequent workshop were self-selected during an international conference on HIA. The essential characteristics of HPP were identified as: ▪ concern for a broad definition of health ▪ policy design to improve people's health and reduce health inequalities ▪ inter-sectoral collaboration ▪ influencing the policy cycle form inception to completion. The essential characteristics of HIA were identified as: ▪ assessing a policy proposal to predict population health and equity impacts ▪ a structured process for stakeholder dialogue ▪ making recommendations ▪ flexibly adapting to policy processes 'Contingency' factors for success in each were identified as: ▪ public health's organisational capacity and institutional mandate ▪ the siloed structure of government ▪ people's characteristics and competencies ▪ the health evidence base ▪ community engagement in public policy ▪ societal values ▪ long term nature of policy change.		
9	Influences on policy-makers	Kent, J., Harris, P., Sainsbury, P., Baum, F., McCue, P. & Thompson, S. (2018) 'Influencing Urban Planning Policy: An Exploration from the Perspective of Public Health'. Urban Policy and Research. 36:1, 20-34. (See also Harris, et al (2017) (#6 above).	New South Wales. Document analysis + 9 interviews + focus group. Relates to the inclusion of health in the (then) drafting of new environmental planning & assessment legislation.
	Covers the same study as presented by Harris, et al (2017) (#6, above), but with emphasis on how the theoretical frameworks adopted in the analysis (Multiple Streams, Punctuated Equilibrium Theory, and Advocacy Coalition Framework) are useful in shedding light on such decision-making, to the benefit of future healthy built environment practice. Refer to entry #6 above for the study outcomes.		
10	Enablers and constraints to inclusion of health	Kent, J., Harris, P., Sainsbury, P. Riley, E. & Harris E. (2017) Health in Strategic Planning. (A report for the Henry Halloran Trust, University of Sydney).	NSW. Content analysis of Sydney's metropolitan plan of 2014, associated district plans and associated commentary (2014 - 2017) + six informant interviews.
	Abstract: The purpose was a retrospective analysis of a strategic planning episode that included a 'seemingly unprecedented focus on health', around the questions of: how is health included?, what were the enablers for health's inclusion?, and what were the constraints to health's inclusion? Findings around each of these questions are detailed, including an analysis of what is described as 'issues circling' (ie. the various other issues inherent within the broad remit of urban planning, in this case comprising economic growth, housing affordability, density, planning reform, and local council amalgamations) and the role of key 'actors'. Specifically, it was found that while 'healthy built environments' did have a 'moment' of recognition, it failed to have a well-defined mechanism for timely implementation. A key conclusion is that advocates must now engage with public and governance interests in liveability, productivity and sustainability at all governance scales. Recommendations for future health-built environment practice were: ▪ a need to recognise the political drivers of the planning system ▪ engagement with the wider issues driving planning		

	▪ a need to frame health issues broadly in relation to a government emphasis on infrastructure ▪ a need to support the regional scales of governance in NSW (urban planning). Recommendations for future health-built environment <u>research</u> were: ▪ discourse analysis as a way to understand the contexts within which planning is done ▪ taking an institutional approach as a way to understand the complexity of policy making ▪ a multi-method approach across multiple planning 'episodes' to assist understanding of the breadth and depth of influences.		
11	Barriers and enablers to health & built environment inter-disciplinarity	Kent, J. & Thompson, S. (2012) 'Health and the Built Environment: Exploring Foundations for a New Interdisciplinary Profession.' Journal of Environmental and Public Health. Vol. 2012.	Review of international literature. Comprises a version of a paper presented to the 2011 State of Australian Cities Conference.
	Based on a review of 1,615 pieces of literature undertaken for the then UNSW Healthy Built Environments Program (see also #3, above) and which yielded three 'domains' of healthy built environments: physical activity, social interaction and healthy eating. This paper discusses a further theme which emerged – 'Professional Development', as relating to relationships between health and built environment professionals. Contends that a reinvigorated relationship between the two is fundamental to a new 'healthy built environment profession'. Found, alongside a number of then existing good practice models: ▪ that despite closely linked origins, the contemporary professions of public health and urban planning largely operate within academic, political, and policy silos, and ▪ a theoretical tension between health and built environment practitioners and researchers as they seek to establish mutual understanding and respect – in particular an asynchrony between protocols relating to the nature of evidence required to justify policy change. "Key ingredients" for enhanced collaborations were found to be: ▪ support for professionals through education ▪ budgetary support/funding that connects health and urban planning practice ▪ establishing roles for health professionals in the planning agenda ▪ inserting health into urban planning regulation ▪ draw in other stakeholders/agents – to reduce competition between differing demands ▪ working together to influence policy change ▪ speaking the same, rather than differing disciplinary, languages ▪ development of a "critical mass of institutional and financial motivation" through "selling" the healthy built environment concept.		
12	Awareness, attitudes and personal knowledge on health	Lavis J., Ross S., Stoddart G., Hohenadel J., McCleod C. & Evans R. (2003) 'Do Canadian civil servants care about the health of populations?' American Journal of Public Health. 93,4:658-663.	Canada. Questionnaire survey conducted in 2000.
	<u>Abstract</u>: Survey of federal and provincial civil servants with policy responsibilities - in finance, labour, social services and health departments. 113 responses from 153 invitations. Participants were asked to rate on a five-point scale statements around: (1) awareness of determinants of health, rated by familiarity (2) attitudes toward and use of ideas around the determinants of health, rated by agreement (3) knowledge sources. Driving the research were notions that: ▪ public health is affected by a broad range of policies and actions of agencies outside the influence of the health sector (eg. finance, labour, social services) ▪ health departments recognize and actively support the use of ideas about health determinants in public policy, and also promote cross-sectoral activity aimed at health improvements ▪ not much was known about responses to health determinants in policy sectors outside of health. Found that except for finance departments, most civil servants see population health as relevant to their sector; 65% say ideas about determination of health have already influenced policy; but 83% say they need more information. Concluded: ▪ Need to develop accountability structures in government agencies around health ▪ Researchers should consider producing and transferring more policy-relevant research.		

13	Awareness and perceptions of social/equity determinants of health	Lawless, A., Lane, A., Lewis, F. Baum, F. & Harris, P. (2017) 'Social determinants of health and local government: understanding and uptake of ideas in two Australian states'. Australian and New Zealand Journal of Public Health. Vol.41. No.2.	South Australia and New South Wales. On-line survey of 20 councils in 2014-15. The structure and intent drew on Lavis et al (2003) (#12 above) and Gauld, et al (2006) (#4 above).
	Abstract: Sought advice on the awareness and perceptions of local government staff about the social determinants of health and health inequity, and use of these ideas to shape policy and practice. 96 responses out of 135 invitations across the 14 councils that responded. 88.4% of respondents reported some familiarity with ideas about the broad determinants of health. 90% agreed that the impact of policy action on health determinants should be considered in all major government policy and planning initiatives. Research articles, government/professional reports and professional contacts were rated as important sources of knowledge about the social determinants of health. Concluded: ▪ there is support for action within local government to address the social determinants of health ▪ resources need to be dedicated to systematic research on practical implementation of interventions on social determinants of health inequities ▪ resources need to be dedicated towards providing staff with more practical information about interventions and tools to evaluate those interventions.		
14	Cultures, specifically in relation to practitioners' approaches to 'evidence'	Lorenc T., Tyner E., Petticrew M., Duffy S., Martineau F., Phillips G. & Lock K. (2014) 'Cultures of evidence across policy sectors: systemic review of qualitative evidence.' European Journal of Public Health. Vol. 24 No. 6: 1041-1047.	UK Review of existing international literature, with detailed analysis of 16 studies of urban decision-making processes.
	Abstract: It is important to understand the decision-making process and the role of research evidence within it across sectors other than health - given interventions delivered within these sectors may have substantial impacts on public health and health inequalities. Twenty-eight databases covering a range of sectors were searched. Eligible studies were those related to local decision-making in policy relevant to the social determinants of health (incl. housing, transport, urban planning, urban regeneration, crime, licensing, trading standards), were conducted in a high-income country, and reported primary qualitative data on perceptions of research evidence. Most were based on interviews, and focussed on planning or transport policy. Factors identified as influencing decision-makers' views of evidence, included: ▪ practical matters (eg. resources, organizational support) ▪ the credibility of the evidence ▪ its relevance or applicability to practice ▪ considerations of political support or feasibility ▪ legislative constraints. Analysis in the paper draws on the following diagram (by others) of categories of influence on practice (see full size version in Annexure 2):  Found there was limited data on how evidence is used. Overall conclusions were that: ▪ cultures of evidence in non-health sectors can be similar to those in health, but with some key differences, particularly in regards to the political context of decision-making ▪ non-health sector decision-makers value evidence that is credible and relevant to practice, but feel much existing research does not meet this need ▪ laws and regulations may limit the extent to which evidence can be used ▪ evidence is often used to 'tactically' justify/lend legitimacy to decisions already made – therefore increasing uptake of evidence may make limited difference to quality of decisions ▪ practitioners should be aware of the different sectoral cultures regarding evidence ▪ inter-sectoral public health research will benefit from taking into account non-health practitioners' needs and preferences, particularly on relevance and political feasibility.		

15	Use of indicators – of urban health/liveability – differences in perception between planning and health practitioners.	Lowe M., Whitzman C., Badland H., Davern M., Aye L., Hes D., Butterworth I. & Giles-Corti B. (2015) 'Planning Healthy, Liveable and Sustainable Cities: How Can Indicators Inform Policy?'. Urban Policy and Research, 33:2, 131-144.	Victoria. Literature review + discussion sessions with (variously) 6 to 50 academics and decision-makers on how to increase the utility of indicators.
	Abstract: Indicators are being used at national, state and local levels to compare the liveability of cities and regions. Yet challenges remain in the adoption of such indicators: (i) planning scholars see a challenge in creating indicators that measure something publicly valued, while (ii) public health researchers are concerned about scant systemic research on relationships between policies, the built environment, and health and well-being. This article overviews liveability indicators used to date in Australia and internationally, then outlines the results of consultations with Melbourne-based academics and decision-makers on how to increase the utility of such indicators. Found that current indicators are often not tied to achieving policy outcomes, and there was no consensus on which indicators are most useful in urban policy. There is a need to ensure indicators provide clear and useful measures, are directly included in policies and recommendations for actions, and be 'owned' by those responsible for these tasks.		
16	Policy-making barriers and enablers in health-promoting integrated policy and planning	Lowe, M., Whitzman, C. & Giles-Corti, B. (2015) 'Improving integrated planning in Melbourne: Exploring barriers and enablers of health-promoting policy integration'. State of Australian Cities Conference 2015.	Victoria + comparison with Portland, USA (as a 'leading example' of collaborative planning). Content analysis of planning policy documents + 22 'key informant' interviews
	Abstract: Integrated planning across multiple sectors is essential for creating healthy communities. Explores barriers and enablers of health-promoting integrated planning in Melbourne, focussing on horizontal integration across state government departments and agencies. In-depth semi-structured interviews were conducted with 20 senior policymakers in Victorian state government, and two from the City of Portland. Walt and Gilson's (1994) policy analysis framework used to assess and categorise barriers and enablers of integrated planning into the following factors: ▪ actor ▪ process ▪ content, and ▪ context. Given the complexity of the decision-making environment, a broad range of factors shape how planning manifests in Victoria. Key facilitators were found to be: ▪ inter-departmental governance structures and processes ▪ the collaborative skills of policy-makers ▪ place-based planning approaches, and ▪ specific legislative and policy content that aspires to integrated planning. But despite clear aspirations and efforts at health-promoting integrated planning, key challenges remain: ▪ re 'actors' - need to break down silos and a lack of bipartisanship ▪ re 'process' – need to (i) dissolve competition for budgets and funds (and emphasis co-benefits), (ii) reward public servants for collaboration, (iii) formalise health considerations in decision-making, including using HIA, and (iv) increase engagement with community and non-government stakeholders, and strengthen local partnerships. ▪ re 'content' – include more specific requirements and examples in policy documents. Combined, these approaches will then help overcome 'context' barriers.		
17	Policy-making barriers and enablers in health-promoting integrated policy and planning	Lowe, M., Whitzman, C. & Giles-Corti, B. (2018) 'Health-Promoting Spatial Planning: Approaches for Strengthening Urban Policy Integration'. Planning Theory and Practice. 19:2, 180-197.	A further paper relating to #16) above – comprises expanded discussion on the identified actor, process, content and context barriers.
	Abstract: Improving urban population health requires integrated spatial planning to create liveable communities - with affordable housing and daily living destinations accessible via walking, cycling and/or public transport. Integration must occur horizontally across transport, housing, employment, education and social infrastructure		

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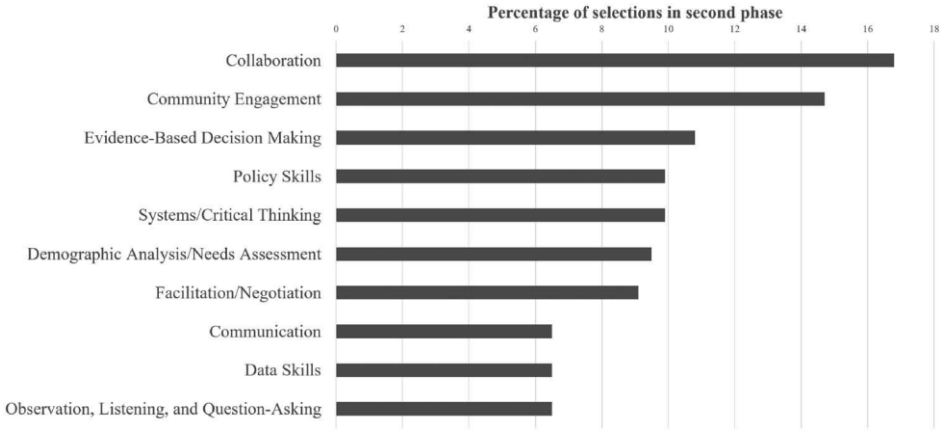
<tr><td></td><td colspan="3">sectors, and vertically between levels of government. Although horizontal integrated planning is a common urban policy aspiration, there is a lack of clarity on how it can be attained. Using Melbourne as a case study, this paper draws on interviews with state government policymakers and policy content analysis to explore barriers and enablers of horizontal integrated planning for health. Key requirements for integrated planning are outlined to assist policymakers in creating healthy, liveable communities (see #16 above for a summary of these).</td></tr>
<tr><td>18</td><td>Policy-making barriers and enablers in health-promoting integrated policy and planning</td><td>Lowe, M., Whitzman, C. & Giles-Corti, B. (2013) 'Integrated planning for healthy communities: Does Victorian state legislation promote it? State of Australian Cities Conference 2013.</td><td>A further paper relating to #16 & #17 above – comprises the results of the content analysis of three statutory policy documents (ie. Acts).</td></tr>
<tr><td></td><td colspan="3"><u>Abstract</u>:
Examines the extent to which key Victorian legislation (Planning and Environment Act 1987, Transport Integration Act 2010, Public Health and Wellbeing Act 2008) supports integrated planning that promotes health. Assessment was against criteria that reflect best-practice principles for integrated planning for health, comprising 13 questions in four groupings:
(i) In relation to overall goals related to the social determinants of health:
▪ Is there explicit mention of human health and/or wellbeing as a policy goal?
▪ Is there explicit mention of 'liveability' as a policy goal?
▪ Is there explicit mention that the policy aims to support the social determinants of health?
▪ Is the content of the policy supportive of the social determinants of health?
(ii) In relation to integrated planning:
▪ Is there explicit mention of how the policy complements or works with other relevant policies?
▪ Is there explicit mention that multiple departments/levels of government worked together on developing the policy?
▪ Is there explicit mention that multiple departments/levels of government will work together on implementing the policy?
▪ Does the policy explicitly aim for or promote integrated planning across sectors?
▪ Does the content of the policy implicitly complement the content of other relevant policies?
(iii) In relation to commitment to implementation:
▪ Are roles and responsibilities clearly articulated?
▪ Are there clear targets and is there a clear monitoring plan?
(iv) In relation to community and stakeholder participation:
▪ Was there an appropriate level of community participation in the policymaking process?
▪ Were other important stakeholders outside of government (such as NGOs and the private sector) adequately involved in the policymaking process?
Found that although the Acts contain some supportive features they also present barriers to integrated planning to promote health – see #16 above for recommendations.</td></tr>
<tr><td>19</td><td>Lingering challenges to achieving healthy built environments</td><td>Lowe, M., Boulange, C. & Giles-Corti, B. (2014) 'Urban design and health: progress to date and future challenges'. Health Promotion Journal of Australia, 2014, 25: 14–18</td><td>Australia
Opinion, with supportive references, from the authors' experiences of healthy built environment research, practice and knowledge translation.</td></tr>
<tr><td></td><td colspan="3"><u>Abstract</u>:
The growing knowledge base about the role of built environments in supporting or hindering health outcomes is not being consistently translated into urban planning policy and practice in Australia – this paper provides a 'state of play' as of 2014. Contends a need for:
▪ greater alignment – involving collaboration, engagements, partnerships – between health promotion and urban planning practitioners and researchers to achieve more integrated health, transport, land use and infrastructure planning.
▪ innovative and policy-relevant research to evaluate the effectiveness of policy options so evidence can be more effectively translated into policy and practice, and to include more 'natural experiments'
▪ adoption of complex-system modelling
▪ a greater number of interdisciplinary academic programs within universities.</td></tr>
<tr><td>20</td><td>Practice gaps between research findings in healthcare design and</td><td>McCormick, M. & McCuskey Shepley M. (2003) 'How can Consumers Benefit from Therapeutic Environments?' Journal of</td><td>Review of international literature.</td></tr>
</table>

	actual built therapeutic environments.	Architectural and Planning Research Vol. 20 No. 1:4-15	
	Abstract: Comprises an introduction to a themed issue on practice gaps – focussing on particular facilities (eg. hospitals) rather than the overall built environment. Delineates four sets of 'players': ▪ researchers ▪ practitioners (designers, programmers, evaluators, teachers) - as 'intermediate' consumers of research ▪ consultancy clients, policy-makers, advocates, legislators, administrators (also 'intermediate' consumers of research) ▪ 'end' consumers – patients, residents, their families, visitors, facility staff. Identifies three 'remedies' to link consumers with design research: ▪ identifying 'user-needs' gaps needing to be bridged – as relating to each of the players above, not just the client paying the designer ▪ listening to demand/hearing consumer voices – identifying what the designer doesn't know they don't know ▪ sharing benefits of research with consumers, eg. through accreditation standards, codes, regulations. Two further key points: (1) designers may intuit what is therapeutic, but lack the scientific or economic defences, and so can be overruled by the economic imperatives of the commissioning client (2) design collaborations, including hearing consumer voices, can lead to a new social responsibility in design.		
21	Barriers and enablers to preparing planning initiatives (focussed on active living)	McCosker, A. & Matan A. (2018) 'Barriers and Enablers to Planning Initiatives for Active Living and Health'. Journal of Sustainable Development. Vol. 11, No. 1.	Western Australia, South Australia, New South Wales, Victoria. Questionnaire survey of 20 local government practitioners.
	Abstract: Reports the local government practitioner survey component of PhD research: McCosker, A. (2018) Barriers and Enablers to Healthy Planning and Active Living Initiatives. Curtin University, WA. (This research also included semi-structured interviews with 28 practitioners in government and academia). The response of local government to rising rates of non-communicable diseases is important given their roles as place managers. The research explored the experiences of local government built environment and community health practitioners to identify barriers and enablers to the implementation of healthy planning and the associated promotion of active living. Found that the field of healthy planning was not yet adequately integrated into the day-to-day functioning of local government, with the success of projects being dependent on the engagement of individual practitioners in 'politics and problem framing' in addition to more accepted roles in policy development and implementation. Found six key areas presented as potential enablers and/or barriers: ▪ internal organisational functioning (as barrier or enabler) (eg. practitioner knowledge, siloed operations, partnership formation, framing of health as a shared responsibility and supportive policy frameworks) ▪ the promotion of co-benefits (as enabler) (eg. economic, built environment and social co-benefits, and health itself a co-benefit) ▪ partnerships (as enablers) (eg. the importance of and being open to collaborations) ▪ the value of recognition and good news (as enabler) (eg. engenders positivity and political viability) ▪ placing a mandate for action on local government (as barrier or enabler) (eg. establishes responsibility transfer as well as a potential questioning of roles) ▪ funding and resourcing (as barrier or enabler) (eg. source and quantity).		
22	Organisational barriers and enablers to health promotion	McFarlane K., Judd J., Devine S. & Watt K. (2016) 'Reorientation of health services: enablers and barriers faced by organisations when increasing health promotion capacity.' Health Promotion Journal of Australia 2016, 27: 118-133.	Australian-based review of international literature from 1990-2014.
	Abstract: Primary healthcare settings are important in providing a range of approaches to health promotion. However, challenges within organisations can affect their capacity to deliver these. The review explored the experiences of health organisations when seeking to increase their health promotion capacity – to identify common enablers and barriers. 18 qualitative and seven quantitative studies were reviewed.		

	Enablers included: management support, skilled staff, provision of external support to the organisation, committed staffing and financial resources, leadership, and the availability of external partners to work with. Barriers included: lack of management support, lack of dedicated health promotion staff, staff lacking skills or confidence, competing priorities, and a lack of time and resources allocated to health promotion activities. Concluded that while the literature highlights the importance of health promotion work, barriers can limit delivery. Organisations wanting to increase their health promotion capacity need to, and can, pre-empt the barriers by strengthening the enablers identified in the review. (Also noted that a gap in the literature exists in relation to how Aboriginal-specific health organisations face these challenges).		
23	Challenges in achieving healthy built environments	Mead, E., Dodson, J., & Ellway, C. (2006) Urban Environments & Health: Identifying Key Relationships & Policy Imperatives. Urban Research Program Research Monograph 10, Griffith University.	Australia Literature review + review of metropolitan planning strategies
	Abstract: Provides a 'state of play' of the then (2006) embryonic realisation that there needs to be a greater adoption of health considerations in urban planning, particular as relating to chronic diseases. Included a review of then metropolitan planning strategies in Australia. Found: ▪ the evidentiary base [at that time] for many expected relationships was under-developed, particularly around social health outcomes, and lack of longitudinal data ▪ an issue of a weak conceptual and methodological framework for such studies, particularly the prevalence of a 'mono-directional' rather than 'full spectrum' perception of health and wellbeing ▪ the impact of transport systems on urban health outcomes had received comparatively little attention, most studies tended to focus on pedestrian travel ▪ similarly, little research on the relationship between health outcomes and geographical access to specific health services ▪ typically, Australian metropolitan strategies do not advance the improvement of urban health outcomes through urban planning. Positive work in this regard tends to be ad hoc ▪ one unsatisfactory outcome of the disciplinary divides in this work is a lack of common definitions and therefore understandings about the implications of various urban forms/typologies (eg. 'sprawl') ▪ health is too often expressed as a 'secondary' outcome (eg. 'healthy neighbourhood', 'neighbourhood wellbeing'), and there is a 'dearth' of detail about what such outcomes actually mean in physical built environment terms – instead there are only 'vague formulations of worthy objectives' ▪ positive initiatives are too often fragmented ▪ funding agencies need to reflect on/address the interdisciplinary imperative in their disbursement strategies.		
24	Enablers to health promotion practice	Patrick R., Capetola T. & Noy S. (2011) Health promotion and sustainability: Transitioning towards healthy and sustainable futures. Report prepared for Sustainability Victoria by School of Health and Social Development, Deakin University.	Victoria & NSW Review of six on-the-ground examples linking sustainability and health practice. Included interviews + focus group discussions.
	Abstract: Explored ability for health promotion activity and sustainability principles to come together (and generate co-benefits) by investigating six actual examples of current practice. Five in Victoria were from within the health sector (North Yarra Community Health, Caufield Community Health, Southern Grampians and Glenelg Primary Care Partnership, Womens' Health in the North (Melbourne), and Kooweerup Regional Health Services), plus the community-based Hawkesbury Harvest NGO in north-west Sydney. Identified the following as enablers: ▪ Existing health promotion competencies were highly transferrable to sustainability matters. Shortages in confidence, knowledge and skills were generally overcome through participation in professional development, multidisciplinary teamwork and engaging 'sustainability experts'. ▪ Funding issues were partly resolved by seeking less traditional sources, and by obtaining initial 'seed' funding for demonstration projects to then develop an evidence base and a case for embedding work into core funding. However lack of long-term secure funding is a significant barrier to practice. ▪ Executive and senior management support ('environmental champions in managerial positions') was significant in securing broader organisational change, and enabling a more organisation-wide commitment and systematic approach. Organisational and individual behaviour change also enabled by establishment of 'green staff' committees. ▪ Understanding (emerging) community interests and needs – via regular consultation and community profiling.		

	▪ Adaption of existing health promotion tools, frameworks and processes - to guide planning and strategy development and processes to suit local context and issues.		
25	Use of indicators – of urban health – by practitioners	Pineo H., Glonti K., Rutter H., Zimmermann P. & Davies M. (2017) 'Characteristics and use of urban health indicator tools by municipal built environment policy and decision-makers: a systemic review protocol'. Systemic Reviews 2017.	UK. Advice about a future review of documents relating to local government practice, as of 2017 (a search did not yield the results as of yet).
	Abstract: There is wide agreement that there is a lack of attention to health in municipal environmental policymaking, such as urban planning and regeneration. Explanations include: (i) differing professional norms between health and urban environment professionals, (ii) system complexity, and (iii) limited evidence for causality between attributes of the built environment and health outcomes. Data from urban health indicator (UHI) tools are potentially a valuable form of evidence for local government policy and decision-makers. Although many UHI tools have been specifically developed to inform policy, there is poor understanding of how they are used. This study aims to identify the nature and characteristics of UHI tools and their use in local government. The research to comprise searching health and social sciences databases and key journals for studies using UHI tools, plus practitioner websites and Google to find grey literature. The focus is on UHI tools that assess the physical environment's impact on health (and will include transport, housing, air quality and green space). The study will help those developing indicators understand whether this form of evidence is of value to built environment practitioners and how such tools should be tailored for this audience. Complexity is emphasised as a key challenge for policy-making for health and the built environment – indicators have been promoted as a solution. The study will also assess whether and how UHI tools address and are perceived as assisting with this complexity.		
26	Settings for health promotion	Poland B., Krupa G & McCall D. (2009) 'Settings for Health Promotion: An Analytic Framework to Guide Intervention Design and Implementation'. Health Promotion Practice. Vol. 10 No. 4: 505-516.	Canada. Development of an analytical and implementation framework for health promotion activities, using a 'settings' approach. Derived from the authors' own experiences + reviews of others' experiences.
	Abstract: A settings approach to health promotion means addressing the contexts within which people live, work, and play - and making these the object of inquiry and intervention. This is in addition to the needs and capacities of people to be found in different settings. Interventions 'whither or thrive' based on complex interactions between key personalities, circumstances and coincidences. An analysis of the setting at an early stage can be helpful in organising for action and optimising success – a settings approach offers opportunities to situate practice in its context. 'Members' of the setting can then optimize interventions in relation to specific contextual contingencies, target crucial factors in the organizational context influencing behaviour, as well as render settings themselves more health promoting. Various attempts have been made to systematize evidence regarding effectiveness of interventions in different types of settings (e.g. school-based health promotion, community development). However few, if any, attempts have been made to systematically develop a template or framework for analyzing those features of settings that should influence intervention design and delivery. This article lays out the core elements of such a framework: ▪ in the form of a nested series of questions to guide analysis [see Annexure 1], and ▪ by recommending eight additional considerations ('corollaries that should underpin health promotion practice') that should be taken into account when operationalizing a settings approach in the field. The corollaries are [with the final one able to be extrapolated to include creating 'healthy urban environments']: ▪ account for temporal patterning of behaviours ▪ look for unanticipated effects and unintended consequences (positive and negative) ▪ be reflexive regarding ethics associated with actions, assumptions and use of power ▪ recognise the impact of race, gender, class and age differences between 'actors' ▪ use a non-linear ecological model to describe and assess how interventions will work/are working		

	▪ start where the people are, with their own self-understandings; then deepen this individual/personal understanding into organisational, community and society contexts ▪ link across and beyond individual settings to wider stakeholders and influences ▪ address how the setting itself can be more health-promoting, not just how the intervention influences those in the setting.		
27	Enhancing translation of research/science	Sallis, J., Bull, F., Burdett, R., Frank, L., Griffiths, P. Giles-Corti, B. & Stevenson, M. (2016). 'Use of science to guide city planning and practice: how to achieve healthy and sustainable future cities.' The Lancet. Vol. 388 Issue 10062, 10-16: 2936-2947.	USA Examination of various international case-studies to draw conclusions about effective research translation.
	Abstract: Based on an investigation of 7 'diverse' case-studies, with a common feature of promoting active living: Active Living Research project (USA) about the role of environments and policies in physical activities; RESIDE (WA), a longitudinal study of the effectiveness of the state government Liveable Neighbourhoods Design Code; SMARTQR project (Atlanta) looking at transport systems and air quality outcomes; the Australian Heart Foundation Healthy Active By Design and the New York City Council Active Design Guidelines documents (referred to in the paper as 'knowledge platforms'); the London 'Lord Mayor's Vision on Cycling'; the Stockholm Urban Mobility Strategy; and the Bogotá cycle network project. The analysis uses the 4-stage model on research translation described in paper (3), above and the conceptual policy framework developed by Kingdon (see paper (11) above). Barriers to effective translation were identified as insufficient access to relevant evidence among decision makers, limited skilled application of evidence into local contexts, and lack of timeliness in communication of research. Overall conclusions were that: ▪ health research can and does play an influential role in urban planning. The challenge is to ensure research is used in a more routine and effective way. ▪ policy makers need local data to guide local decisions. Particular care needs to be taken if extrapolating research from other countries. ▪ funding is usually specific to disciples and sectors, thus limiting the ability to source funds for multi-sectoral research. ▪ health benefits can overlap with benefits in other areas of interest and need – therefore a systems approach is needed. ▪ structural changes in academia, government and NGOs are needed to address the above.		
28	Organisational resilience	Sapeciay, Z., Wilkinson, S. & Costello, S. (2017) 'Building organisational resilience for the construction industry: New Zealand practitioners' perspective.' International Journal of Disaster Resilience in the Built Environment.	NZ. Investigated resilience of organisations in the construction sector to recover from incidents. Literature review + questionnaire survey + interviews.
	Abstract: The survey was completed by 50 organisations, with questions based on a series of indicators/ benchmarks around resilience sourced via the literature review. Ratings were requested on a five-point scale. Found that the sector lacks resilience practice, there was no standard in the resilience practice that does take place, there was a lack of investment in resilience and a lack of knowledge, and that it would benefit from a resilience assessment tool. Also noted a disjuncture here - that while the sector was quite familiar [as would be expected] with the notion and practice of resilience when applied to buildings and infrastructure ('technical resilience') this was not being applied within its own organisations ('organisational resilience'). When asked about resilience indicators and assessment tools, 'leadership' was ranked highest, followed by 'staff engagement', 'decision-making' and 'situation awareness'. The next ranked were 'planning strategies', 'internal resources', 'proactive posture', 'effective partnership', 'innovation and creativity', 'unity of purpose' and 'stress testing plan'. Substantially lower scores were given to 'breaking silos' and 'leverage knowledge'. Recommends that the integration of organisational resilience with the technical resilience the sector is already familiar with presents a 'clear way forward' in the development of a new and necessary (organisational) resilience too.		
29	Knowledge transfer/ communication gaps	Ugolini, F., Massetti, L. Sanesi, G. & Pearlmutter, D. (2015) 'Knowledge transfer between stakeholders in the field of urban	Europe. Questionnaire survey about practical use of research

		forestry and green infrastructure: Results of a European survey'. Land Use Policy. 49 (2015): 365-381	knowledge within urban forestry and green infrastructure.
	Abstract: An investigation of how knowledge is transferred from one stakeholder group to another, including identification of the relative strengths and weaknesses of the different modes by which practitioners collaborate and interact. Based on 477 completed web-based questionnaires, with slight variations in content depending on the three work sectors surveyed: public administration, practitioners, and academia. Asked about: ▪ Scientific knowledge transfer (aspects in need of improvement, actual usage of different means of scientific knowledge transfer, effectiveness of these, and which strategic work sectors are worthy of funding) ▪ Collaboration between stakeholders (experiences of collaboration, strong and weak points of collaboration, what is needed to start a new collaboration, expectations for further collaborations) ▪ Training (participation in training courses, type of training provider, type of learning delivery, characteristics of the course). Found there were positive attitudes toward forms of collaboration, mainly because of common aims, such as innovation, finding practical problem solutions, and accessing funding. The analysis suggests stakeholders need to better understand the importance of forming cohesive teams, of optimizing financial resources, and of finding a common language to bridge diverse disciplinary backgrounds. Effective, future models of knowledge transfer will need to consider current needs of end users without neglecting the long-term potential of emerging communication technologies such as e-learning; and vocational training requires not only high-quality content but also practical activities and development of personal contacts that can then lead to enhanced collaboration.		
30	Practitioner and researcher skills needed to develop 'liveable' cities.	Yang, S., Eyler, A. Brownson R. Samuelas L. Kyung G. & Teis R. 'Developing livable cities: do we have what it takes?' (2019) Cities & Health.	USA Utilised survey responses from 235 participants (Stage 1) + a rating of the 'top five' skills by 46 participants (Stage 2).
	Abstract: A popular and intuitive way to capture the quality of life in cities is by evaluating 'liveability.' This study sought insight on the types, importance and availability of skills needed to develop liveable cities, as perceived by researchers and practitioners in public health and a range of built environment professions. Participants in a separate project that mapped the concept of a liveable city [and where the initial recruitment process was similar to that envisaged in our study] were asked to list the skills they found most important in developing liveable cities. Responses (235 responders, 904 items cited) were collated into broad categories. The most cited categories were Collaboration, Communication, and Community Engagement. In Stage 2 (46 responders, 232 responses), participants were given the top 10 skills identified and asked to nominate the five most important. Collaboration and Community Engagement skills were the most frequently cited:  This was consistent for both practitioner and researcher respondents; priorities differed in relation to other skills. A disjuncture was also identified between skills seen as important and skills actually taught in courses – with a recommendation that more emphasis be placed on what the paper describes as 'soft skills', non-traditional approaches to education and workforce development, and 'team science'.		

31	Useful focussed investigation of local government organisational opportunities and barriers to health promotion in land use planning, and tools to assist.	Hirono K, Haigh F, Jaques K, Crimeen A. Integrating Health Considerations into Wollondilly Shire Council Planning Processes. Centre for Health Equity Training, Research, and Evaluation (CHETRE), University of New South Wales. 2017.	Wollondilly Council (south-west fringe of Sydney metro area). Interviews, meeting observations, literature review, expert consultations. Collaboration between local agency of State health department, university and local government.
	Prepared for South Western Sydney Local Health District and Wollondilly Council to identify ways of integrating health into land use planning processes (part of a larger collaboration to integrate health into broader corporate and business planning, following participation in CHETRE Health Impact Assessment Learning by Doing Training in 2013/14, a joint Planning and Health Forum in 2015 and a 2016 MoU to establish a reference group). Comprised: semi-structured interviews with Council staff (see questions used, Annexure 1b) meeting observation, document review of legislation, guidelines, etc., literature review and audit of health planning tools, consultations with local and international experts in the field, and validation workshops. Tools investigated were 'Health in All Policy' policy, health impact assessments, design guidelines, place-making, liveability measures, and intra and inter organisational collaborations. Also looked at evidence on generating institutional change, innovation diffusion, capacity development through learning, and creating 'buy-in'. Here considered individual (micro), settings (meso) and broader context (macro) levels of influence; and four types of knowledge bases - declarative (knowing about things), procedural (knowing about processes and ways of doing things), functional (knowing how to apply knowledge) and conditional (knowing when it is appropriate to do things). Specific organisational findings were that health was implicit in planning policies but there were (i) variations in staff understandings of this, (ii) a lack of more explicit connections, such as already evident in relation to environmental sustainability and crime prevention matters, (iii) a limiting culture of seeking compliance with minimum standards only and 'ticking boxes' rather than testing against wider objectives, and (iv) concerns that additional standards will risk achieving development. The study suggested a need to generate a greater 'buy-in' amongst staff, developers and community to address these matters. Procedural recommendations were to: (1) create a high-level policy on health, (2) create a policy on health assessment, and (3) establish a joint staff position (Council & the Local Health District) to assist expansion of capacities in both organisations (and based on a similar existing position in nearby Fairfield Council).		

APPENDIX 2: QUESTIONS FROM THE REVIEWED STUDIES

The questions annexed here provide a useful 'primer' or 'scanner' of the range of matters that impinge on making health-supportive changes to settings. Such settings can include systems, organisations and built environments.

UNDERSTANDING AND WORKING WITH THE SETTINGS IMPORTANT IN HEALTH-PROMOTION ACTIVITY

Source: Poland B., Krupa G & McCall D. (2009) 'Settings for Health Promotion: An Analytic Framework to Guide Intervention Design and Implementation'. *Health Promotion Practice*. Vol. 10 No. 4: 505-516 (Table entry #26).

(i) Understanding Settings

Diversity across and within categories of settings

1. What makes this category of setting (e.g., hospitals) different from (or similar to) other categories of settings (e.g., schools, workplaces)?
2. What diversity can be expected within this category of setting? (e.g., inner city vs. suburban or rural schools; large, corporate vs. small, family-run workplaces, etc.)

Received knowledge

3. What assumptions are usually made about this setting? Are these assumptions warranted in this case?
4. How has the conceptualization (as well as role and nature) of this setting evolved over time?

Localized determinants of health

5. How does the setting interact with other related settings and systems as well as the local environment to accomplish its goals?
6. What elements of the physical and built environment are causing ill health in this setting? (ergonomics, noxious hazards, physical and social isolation or lack of opportunities for interaction, access to green space, etc.)
7. To what extent do the following aspects of the psycho-social environment have a bearing on health and the possibilities for intervention in this setting?
   - social composition with respect to age, gender, race, and class
   - stress, decision latitude, control over pace, and demands of work
   - status hierarchies
   - work–life balance
   - behavioural norms and expectations (social sanctions)
   - quality of human relations (trust, reciprocity, local social capital and social cohesion, bullying)
   - lines of accountability and reporting structures
   - organizational culture and readiness for change
   - internal politics, recent history of accommodation, or prior conflict

Stakeholders and interests

8. Who are the primary stakeholders in this setting or affecting this setting?
9. What are their agendas, their stake in change or the status quo, access to resources?
10. What are the functions of this setting for different stakeholders (e.g., hospital functions as site of healing for patients, home for long-term or palliative care patients, workplace for staff, site of professional and class conflict)
11. Who is absent from this setting? Why?
12. What is the meaning of health from different stakeholder perspectives and its salience to them?
13. How widely are the determinants of health as they are experienced in this setting understood and acted on?

Power, influence, and social change

14. How do power relations come into play in this setting?
15. What is the relative power of stakeholders? How is power exerted?
16. Who controls access to this setting?
17. Who sets the agenda in this setting?
18. Who participates in decision making? On what basis? On whose conditions?

19. Who has voice? What is the relative role and power of experts and of the lay public in agenda setting, problem definition, intervention planning, implementation, and evaluation?
20. What—or who—drives (or blocks) change in this setting?

(ii) Changing Settings

Context

1. What is the history of health promotion in this setting?
2. What explains the changing approaches to this setting?
3. What does the health promoter bring to this work? (background, training, skills and abilities, sensitivities, assumptions; also similarities or differences in terms of race, class, and gender with respect to key stakeholder groups and the impacts this may have on practice)
4. What is the role of the broader socio-political context in supporting or limiting change efforts? Is there a need for higher level policy change and advocacy work across settings and locales?

Capacity

5. What capacities are required among professionals for this setting to promote health effectively?
6. What capacities are required within local communities to make this setting effective?
7. What capacities are required among local agencies for this setting to be effective?
8. What capacities are required among governments for this setting to be effective in promoting health?

Focus

9. How should one select which setting to work in?
10. What emphasis should be given to physical health, as distinct from (but clearly related to) emotional, mental, and spiritual dimensions of health?
11. Should one direct interventions to those with power and privilege or to those who are relatively less advantaged?

Engagement

12. What are the issues involved in engaging in this setting? (negotiating and gaining entry, developing trust, managing relationships and competing agendas, etc.)
13. How will you successfully manage (sometimes competing or unrealistic) expectations regarding intervention in this setting?

Strategy

14. What emphasis is put on changing individual behaviour as opposed to structural and organizational change? (changing persons in the setting and/or changing the setting itself to become more health promoting)
15. How should one work with broader and indirect stakeholders outside the setting of focus? (e.g., role of families in shaping the behaviour of school-yard bullies)
16. How participatory an approach are you willing to undertake? Whose participation will be sought, and how will differences in agendas and power of different stakeholders be handled?
17. What (types and nature of) evidence is drawn on in intervention design? How is local experience and local input blended with evidence-based practice to produce optimal interventions?

Evaluation

18. How do we (and other stakeholders) define and measure the success of a health promotion intervention in this setting?
19. What unintended consequences (positive and negative) can be identified?
20. What is known about the distribution of costs and benefits associated with this intervention in this setting? (equity and social justice considerations)

(iii) Knowledge Development and Knowledge Translation

1. What do we still need to know about the settings approach? About this setting in particular?
2. What forms of knowledge and information allow one to understand this setting? What counts as legitimate knowledge and who participates in its creation and dissemination?
3. What gaps can be discerned between theory and practice? Are we successfully ‘walking the talk’?

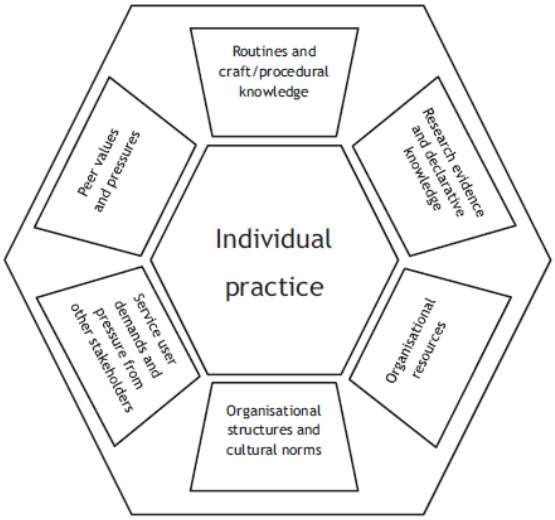
INTERVIEW QUESTIONS RELATING TO UNDERSTANDING ORGANISATIONAL KNOWLEDGE AND CAPACITY

Source: Centre for Health Equity Training, Research, and Evaluation (CHETRE), *Integrating Health Considerations into Wollondilly Shire Council Planning Processes*. University of New South Wales. 2017 (Table entry #31).

1. Can you tell me a bit about what health means to you?
   Prompts: What does it mean to you, not for planning? Does it mean health services/not being sick/or something else? (Discuss how we're thinking of health for this project).
2. Tell me about your role in planning.
   Prompts: Are you involved in development consent processes, or plan-making or strategic planning within Council? How?
3. Do you think health is an important consideration in planning?
   Prompts: Why or why not? Do you think health should be a consideration in planning, if it's not?
4. How do you think health is relevant to your work or local government planning?
   Prompts: *What are some health considerations you think should be included (that aren't currently) in council planning processes? How is health relevant to what you do in Wollondilly Shire Council?*
5. How could health be considered in Council planning activities?
   Prompts: Are there specific tools/policies/processes/strategies that you think would be useful to achieve this?
6. What do you think are potential barriers to health being considered in Council planning activities?
   Prompts: Are there specific barriers (a policy), or are they more general (like attitudes or the culture of planning)? Can you give me an example? Do you think this is an insurmountable barrier or are there ways to work around that?
7. What is needed to support opportunities to consider health in planning within Council, or to mitigate the barriers?
   Prompts: Does it require specific tools, information, leadership, knowledge, culture, processes, policies? Are there any organisational capabilities that are required? What would help you to better consider health in your work?
8. Can you think of a new issue or practice that has been introduced within local government planning that has worked well? What was it? Why did it work well?
   Prompts: For example, why has CPTED (crime prevention through environmental design) been so successful in local government and what can we learn from that? Would a tool like this work well in Wollondilly Shire Council? What were the barriers? What would support you to use a tool like that?

CATEGORIES OF INFLUENCE ON PRACTICE.

Source: Lorenc T., Tyner E., Petticrew M., Duffy S., Martineau F., Phillips G. & Lock K. (2014) 'Cultures of evidence across policy sectors: systemic review of qualitative evidence.' *European Journal of Public Health*. Vol. 24 No. 6: 1041-1047 (Table entry # 14).



Sourced by Lorenc T. et al from: Davis, H., Nutley, S. & Smith, P. (Eds) *What Works? Evidence-based Policy and Practice in Public Services.* Bristol: The Policy press, 2000: 317-50.

APPENDIX 3: SURVEY QUESTIONS

Start of Block: Landing page

NSW practitioner experiences survey

Thank you for helping with this important research.

The survey is designed to take just over 5 minutes.

Participants must be over 18 years old and work in a position that is responsible for creating places which make it easier for people to be healthy ("making healthier places"). These terms are defined broadly:

- "making" covers designing, planning, financing, building and maintaining places as well as associated policy-making and service provision, and
- "places" includes homes, workplaces, public buildings, parks, streets, neighbourhoods and regions

Participation is voluntary.

By completing and submitting a survey you are consenting for your responses to be stored, analysed and reported as part of this and future related research projects. No information identifying you will ever be disclosed.

To learn more about the research, including instructions on how to make a complaint, please read the participant information sheet.

Press next to begin.

End of Block: Landing page

Start of Block: Part 1: about you

What is your profession?

(Please select the option that most closely matches your job.)

Planning
- ☐ Strategic planning
- ☐ Social planning/community services
- ☐ Transport engineering/planning
- ☐ Development applications and appeals

Design
- ☐ Architecture
- ☐ Landscape architecture
- ☐ Urban design/precinct planning

Construction
- ☐ Development and finance
- ☐ Building and construction
- ☐ Civil/structural engineering

Operations
- ☐ Building operations/management
- ☐ Community facilities operations/management
- ☐ Open space operations/management

Other
- ☐ Research
- ☐ Policy advice/development
- ☐ _____

What sector do you work in?

(Please select the option that most closely matches your job.)

- ☐ Local government
- ☐ State or Federal government
- ☐ Private sector – large company
- ☐ Private sector – small to medium company
- ☐ Private sector – self employed/contractor
- ☐ Not-for-profit/charity
- ☐ Education

Where do you work?

(Please state the postcode of your place of work.)

_____

Which parts of NSW does your work cover?

(Please select the option that most closely matches your job.)

- ☐ Within this postcode (and neighbouring areas) only
- ☐ Across the whole local government area
- ☐ Across the metro/regional area
- ☐ Across the whole state

How long have you worked in this field?

(Please select your level of experience.)

- ☐ Less than a year
- ☐ 1-2 years
- ☐ 2-5 years
- ☐ 5-10 years
- ☐ 10 years or more

What level best describes your current position in your organisation?

(Please select the option that most closely describes you.)

- ☐ Director/executive
- ☐ Manager
- ☐ Team leader/supervisor
- ☐ No management responsibilities
- ☐ Trainee/apprentice

End of Block: Part 1: about you

Start of Block: Part 2: about your work

How often do you work with people in these fields?

(Please select one option for each professional field.)

	Never/ rarely	Occasionally (a few times a year)	Regularly (at least once a month)	Frequently (at least once a week)
Planning				
Strategic planning	☐	☐	☐	☐
Social planning/community services	☐	☐	☐	☐
Transport engineering/planning	☐	☐	☐	☐
Development applications & appeals	☐	☐	☐	☐
Design				
Architecture	☐	☐	☐	☐
Landscape architecture	☐	☐	☐	☐
Urban design/precinct planning	☐	☐	☐	☐
Construction				
Development and finance	☐	☐	☐	☐
Building and construction	☐	☐	☐	☐
Civil/structural engineering	☐	☐	☐	☐
Operations				
Building operations/management	☐	☐	☐	☐
Community facilities operations/management	☐	☐	☐	☐
Open space operations/management	☐	☐	☐	☐
Other				
Research	☐	☐	☐	☐
Policy advice/development	☐	☐	☐	☐

How often do you do these activities as part of your day-to-day work?

(Please select one option for each statement.)

	Never/ rarely	**Occasionally** (a few times a year)	**Regularly** (at least once a month)	**Frequently** (at least once a week)
Use data to identify local priorities and measure outcomes in relation to individual health and wellbeing	☐	☐	☐	☐
Collaborate with professionals in health to address health and wellbeing issues	☐	☐	☐	☐
Collaborate with professionals in social and economic development to address health and wellbeing issues	☐	☐	☐	☐
Reference and give importance to health and wellbeing in the documents (plans, reports, etc.) used to deliver your work	☐	☐	☐	☐
Incorporate health and wellbeing into your everyday language at work	☐	☐	☐	☐
Consult with the community about the barriers or opportunities to improve health in the local area	☐	☐	☐	☐

End of Block: Part 2: about your work

Start of Block: Part 3: about the opportunities you have

The following is a list of ways in which we can *make healthier places*. In your day-to-day work, which of these, if any, do you have an opportunity to contribute to?

(Please select as many ways as apply to your work.)

Improving access to positive health influences

- ☐ Increase access to affordable, healthy food
- ☐ Increase access to education opportunities
- ☐ Increase access to job opportunities
- ☐ Increase access to suitable housing
- ☐ Increase access to natural environments
- ☐ Increase access to health services
- ☐ Increase Aboriginal connection to culture and Country

Supporting better mental health

- ☐ Enable social interaction
- ☐ Develop community networks
- ☐ Reduce isolation/loneliness
- ☐ Reduce commuting time

Enabling active lifestyles

- ☐ Increase opportunities for active recreation (e.g. exercise)
- ☐ Increase incidental exercise (e.g. walk to shops)
- ☐ Discourage private car use
- ☐ Remove impediments for people with a disability

Reducing environmental health risks

- ☐ Improve indoor/outdoor air quality
- ☐ Improve soil and water quality
- ☐ Reduce social disorder/increase safety
- ☐ Remove unsafe/hazardous features
- ☐ Mitigate the impacts of climate change

End of Block: Part 3: about the opportunities you have

Start of Block: Part 4: about the barriers you face

In your day-to-day work, which of the following statements, if any, reflect the barriers you face in *making healthier places*?

(Please select as many statements as apply to your work.)

Capacity barriers

- ☐ Making healthier places conflicts with other aspects of my job
- ☐ Making healthier places is just not part of my job
- ☐ I don't have access to the right information about making healthier places
- ☐ I lack the skills or knowledge to make healthier places
- ☐ I'm not really aware of the need for making healthier places

Workplace barriers

- ☐ Making healthier places is not a priority across my workplace
- ☐ Making healthier places is not important to my senior colleagues
- ☐ Making healthier places is not part of the shared vision of my workplace
- ☐ The culture of my workplace does not support making healthier places
- ☐ There is a lack of collaboration within my workplace about making healthier places

Regulatory barriers

- ☐ It is unclear who has responsibility to make healthier places
- ☐ Making healthier places does not have political support
- ☐ Overall systems, policies and processes governing the built environment do not support making healthier places
- ☐ There is no regulatory requirement to ensure delivery of healthier places

Implementation barriers

- ☐ Limited budget is allocated to making healthier places
- ☐ No one wants the ongoing cost or responsibility to manage healthier places
- ☐ Limited time is allocated to making healthier places
- ☐ Making healthier places is considered too late in the process

Other barriers

- ☐ Making healthier places is not important to my client
- ☐ Making healthier places is not important to the community
- ☐ Developers lack motivation to provide healthier places
- ☐ Making healthier places conflicts with the objectives of other professions I work with

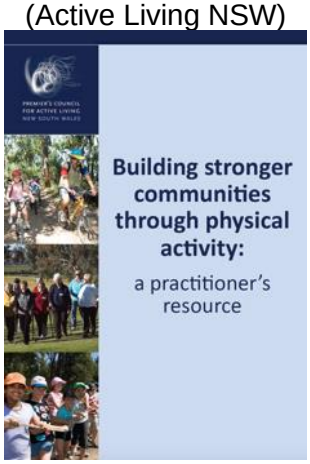
End of Block: Part 4: about the barriers you face

Start of Block: Part 5: about the resources you use

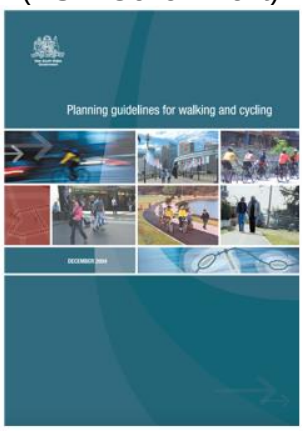
Which of the following resources are you *aware of*?

(Please select as many as apply.)

Building Stronger Communities Through Physical Activity
(Active Living NSW)

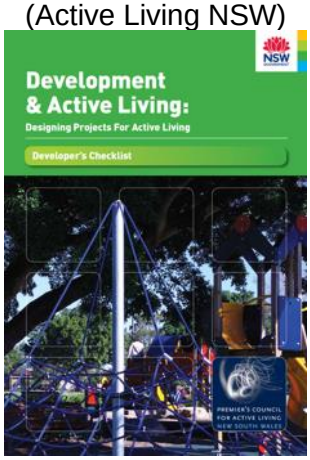


Planning Guidelines for Walking and Cycling
(NSW Government)



Housing Density and Health: A review of the literature
(UNSW CPHCE)

Designing Projects for Active Living
(Active Living NSW)

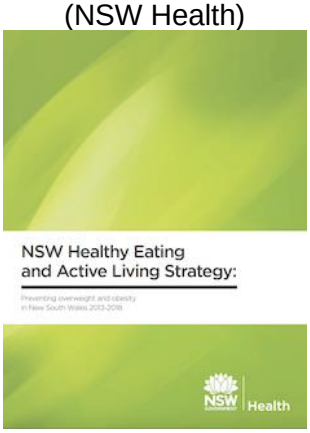


Healthy Active by Design Checklists
(Heart Foundation)

Healthy Streets for London
(Transport for London)

Healthy Built Environment Indicators and Audit Instrument
(UNSW City Wellbeing)

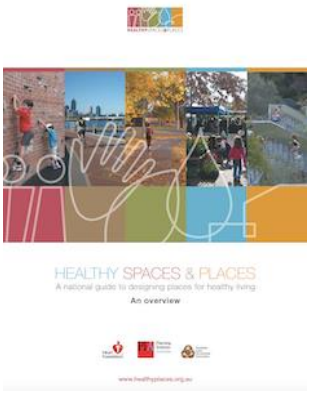
NSW Healthy Eating and Active Living Strategy
(NSW Health)



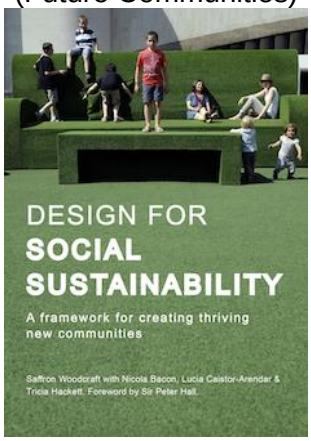
Better Placed
(NSW Government Architect)

Integrated Planning & Reporting and Healthy Communities
(Active Living NSW)

Healthy Spaces and Places
(Heart Foundation, PIA & ALGA)

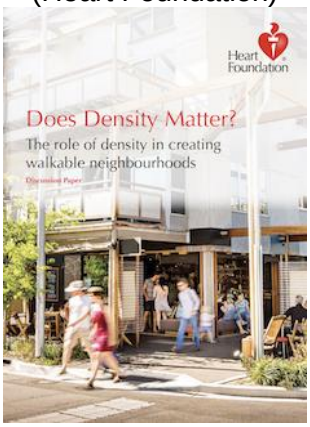


Design for Social Sustainability
(Future Communities)

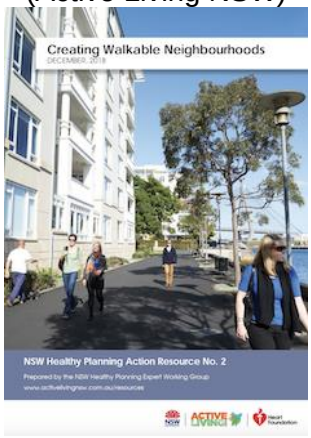


Healthy Urban Development Checklist
(NSW Health)

Does Density Matter?
(Heart Foundation)



NSW Healthy Planning Action Resources
(Active Living NSW)



Which of the following resources have you *used*?

(Please select as many as apply.)

{any options selected from previous question carry through}

Which of the following resources would you recommend to colleagues?

(Please select as many as apply.)

{any options selected from previous question carry through}

End of Block: Part 5: about the resources you use

Start of Block: Part 6: about what solutions you think will help

What do you think will help you overcome the barriers you face in *making healthier places*?

(Please select up to three options.)

- ☐ Better information explaining how a better built environment can improve people's health
- ☐ More training (for you or those you work with) in how to improve people's health through a better built environment
- ☐ Greater priority given across your organisation to making heathier places
- ☐ More regular collaboration with health and related professionals as part of planning, designing, building and maintaining the built environment
- ☐ Clearer policy guidelines on what is required to improve people's health, by those involved in planning, designing, building and maintaining the built environment
- ☐ More public awareness on the influences of the built environment on people's health
- ☐ Stricter regulations that mandate health outcomes into planning, design and construction standards
- ☐ More government funding towards features of the built environment that promote health objectives
- ☐ More research to demonstrate impacts of a better built environment on people's health

Finally, is there anything else you think we should know about your work?

(Please outline anything, including:

- any other *positive influences* your job has on people's health,
- any other *barriers* to you making healthier places,
- any other *ways to overcome* those barriers you do face.)

_____

_____

_____

_____

_____

End of Block: Part 6: about what solutions you think will help

Start of Block: Close

You've completed the survey! Thank you for your support.

Would you like to be contacted in the future?

(Please select all that apply.)

- ☐ for a follow-up interview (which would take about 30 minutes)
- ☐ for news about any published outcomes from this survey

What's the best way for us to contact you?

- ☐ Email _____
- ☐ Phone _____

End of Block: Close