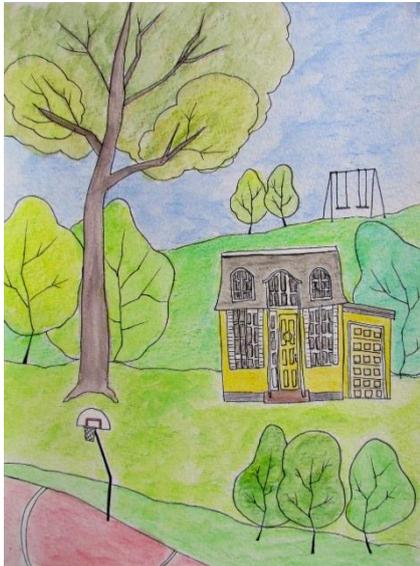
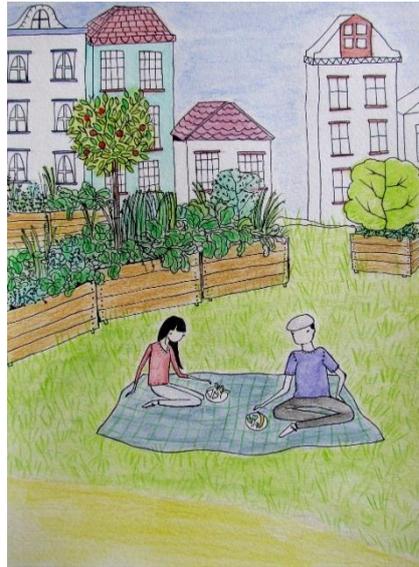
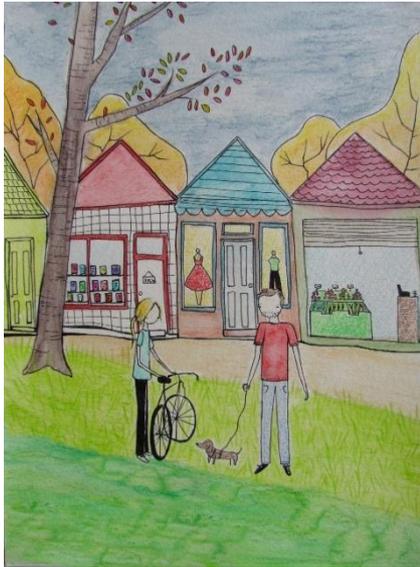


***Practice prompts
for
generating healthy built environments***



City Wellbeing Program

City Futures Research Centre, Faculty of Built Environment, University of New South Wales
Australia.

<https://cityfutures.be.unsw.edu.au/research/city-wellbeing/>

Background – the *Planning & Building Healthy Communities* study

Between 2011 and 2015 the (now) City Wellbeing Program in the City Futures Research Centre undertook a study (the *Planning and Building Healthy Communities* study) of how built environments either support or hinder personal health. The study audited the physical environments and spoke with the residents of four developing residential areas in the Sydney metropolitan area.

Detailed reports on the findings are available [here](#).

A major finding was that the effectiveness of many intended health-supportive features was substantially reduced because of poor initial implementation and poor on-going management. The result is a reduced potential for positive individual health outcomes, wasted infrastructure and other resources, and increased health care costs when otherwise avoidable illnesses become apparent.

Further, although the various limitations were obvious to the residents of each area (as well as to the research team), they were not it seems similarly apparent to the designers and managers of these areas. This is curious when we consider that these built environment practitioners will themselves also be residents (although probably of other areas), and will have similar personal health concerns, aspirations and needs. But somehow these personal understandings do not carry through into the work-practice environment.

This finding led to a series of ‘practice prompts’

Built environment professionals need to be better attuned to the effort needed to create health-supportive environments – so that well intentioned designs are not just proposed but put in place, with on-going management and maintenance similarly aligned.

The study responded to this need by preparing a set of ‘practice prompts’ aimed at encouraging continuous active attention and associated questioning, such as:

- How will this actually be used?
- *Will* it be used (is it a ‘close fit’ with need)?
- How will it be managed long-term?
- How *should* it be managed?
- What variations will make it more effective, and compelling to use?

Each prompt comprises:

- (i) a short statement of the need, referencing the desired health-supportive outcome as well as practical difficulties as evidenced from the study,
- (ii) examples of both deficient and better-resolved outcomes, and
- (iii) key questions practitioners and their teams can ask of themselves, as prompts for better practice.

The prompts do not cover all matters required to achieve healthy built environments. Nor are they specifically about design and management details. There are numerous guides that take on this function. In NSW there is the NSW *Health Healthy Urban Development Checklist* (2009). Others are listed on the City Wellbeing Program website *Resources* page. Rather, the prompts here address the particular findings of our study about practitioner practice.

Additional needs will be apparent from experiences in other localities and contexts. For example, the four prompts under the grouping *Accuracy in Supporting (Behaviour) Needs* are about enabling physical activity. This was a major issue in each of our four study areas. Other localities may reveal needs relating to other health behaviours. Healthy eating, for example, was not a significant issue here. And although concerns about limited social interaction with neighbours within multi-unit developments was raised, solutions were not readily obvious and require further research before it was felt a reasonable prompt could be determined.

Fourteen prompts have been written, detailed in the following section. They relate to all stages of development: initial planning, design and construction, and on-going management.

They are grouped under four headings (see below). These groupings are not about compartmentalising but are to assist readability and understanding. The networked nature of built environments and how we use them means that others could identify other groupings. Further, the prompts can be read in any particular order, and because there is substantial overlap in content many could be placed in more than one grouping.

These overlaps actually assist – one particular action can often have multiple outcomes and benefits (‘co-benefits’), thus leveraging each action in supporting the aim of a healthier population, and reducing costs.

As will be seen in the examples listed here, most of what we found in the study is not new. The prompts aim to generate more effective outcomes from what we usually already know and do.

The Strategic View

- (1) *Establish networks beyond the development.*
- (2) *Make development planning realistic to ensure facilities are achieved.*
- (3) *Early provision of walkable local centres (embedding healthy habits).*
- (4) *Responses need to be place-specific (one size does not fit all).*

Personal Professional Engagement

- (5) *A more empathic engagement by designers and managers.*
- (6) *Listen to the locals - people do understand the connections between health and behaviour.*
- (7) *A required attention to detail.*

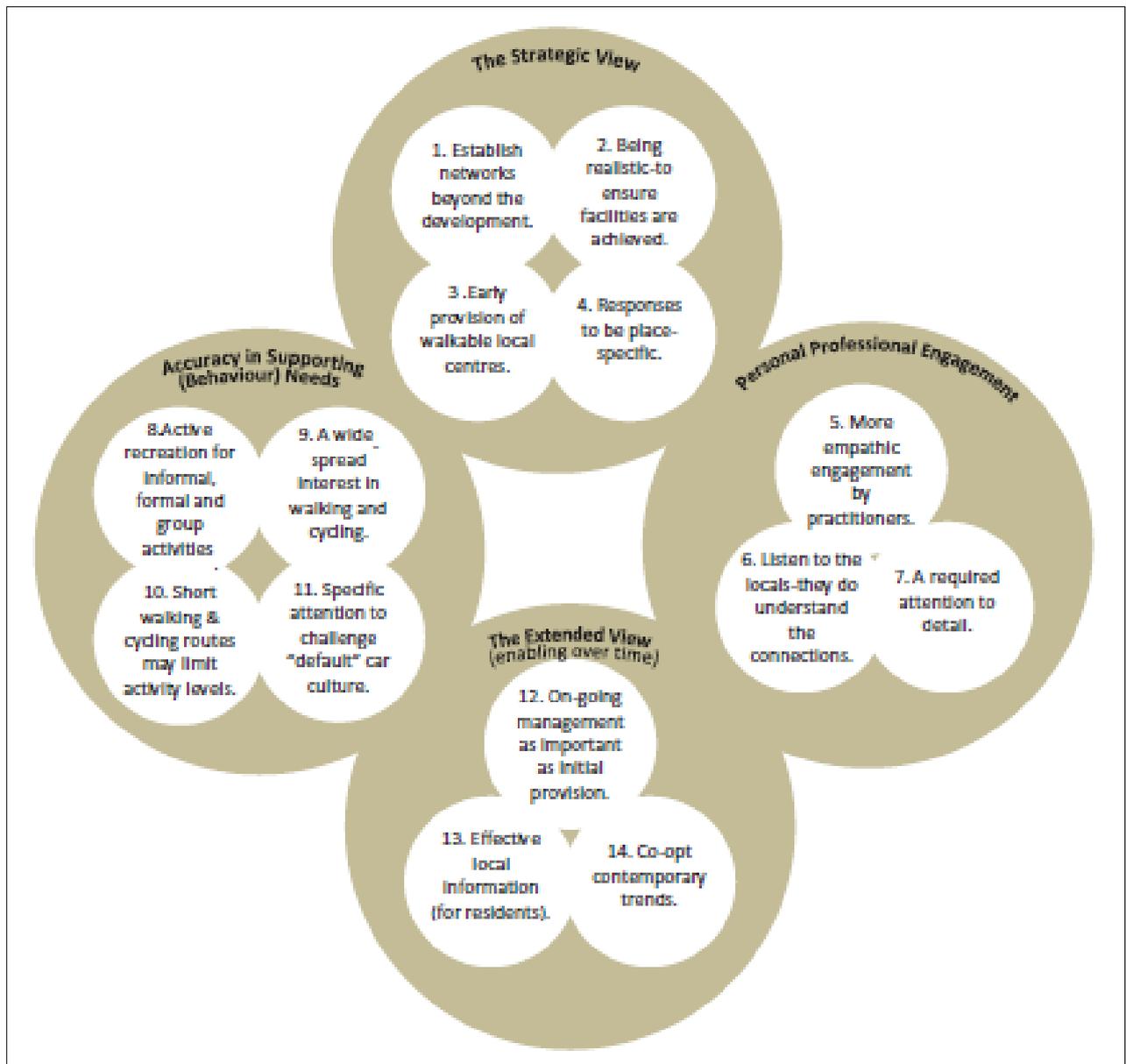
Accuracy in Supporting (Behaviour) Needs

- (8) *Active recreation facilities for both informal use and formal group activities.*
- (9) *There is a wide-spread interest in walking for recreation and transport, and potentially also in cycling for recreation.*
- (10) *Short walking and cycling routes may not achieve needed levels of activity.*
- (11) *Specific attention is required to challenge a ‘default’ car culture.*

The Extended View (“Enabling” Over Time)

- (12) *On-going management is as important as initial provision.*
- (13) *Effective local information for residents (knowing what is available).*
- (14) *Co-opt contemporary trends.*

A 'map' of the 14 practice prompts for generating healthy built environments



Source: Paine, G., Thompson, S., Randolph, B. & Judd, B. (2018): 'Learning from lived experience for the improvement of health-supportive built environment practice.' *Cities and Health Journal*: <https://doi.org/10.1080/23748834.2018.1464254>.

Acknowledgments

The *Planning and Building Healthy Communities* study that led to these practice prompts was supported by the Australian Research Council (Grant No. LP100100804). Appreciation is expressed to the residents of each study area who contributed to the research by way of interview and/or a workshop.

A version of these prompts was first published (as 'lessons') in the journal *Cities and Health*. Refer: Paine, G., Thompson, S., Randolph, B. & Judd, B. (2018): 'Learning from lived experience for the improvement of health-supportive built environment practice.' (<https://doi.org/10.1080/23748834.2018.1464254>).

Title page graphics by Emily Mitchell.

1. *Establish networks beyond the development.*

Resources for both initial capital outlays and on-going maintenance are invariably limited. Also, many health-supportive behaviours result from extending one's range of physical activities and social networks. Health benefits can therefore be leveraged by extending the planning horizon beyond the actual development to include good connections with existing and proposed infrastructure in the wider area. Similarly, the viability of new facilities within an existing (or proposed) neighbourhood can be increased by making them accessible to residents and workers from that wider area.

The study found examples where:

- (i) The development includes monetary and in-kind contributions to a range of community facilities both within the development and the locality for use by the wider community.
- (ii) Open space and pedestrian and cycling infrastructure in a new estate is available for use by the general public, promoting physical activity and social interactions between the established and new communities.
- (iii) Public transport access to a nearby swimming complex is difficult for residents with reduced mobility (due to poor routing) resulting in low levels of usage.
- (iv) Connections to pedestrian and cycle paths in the wider locality are not readily visible or well-resolved, and residents are now bored with the limited experiences within the estate itself.
- (v) The development includes retail and commercial facilities that service a wider locality, generating increased social interaction co-benefits as well as improving economic viability.

Key questions for practitioners to ask include:

- Are there viable existing connections to health-supportive facilities in surrounding areas, or are new connections needed to encourage use?
- Will new residents know about these facilities, and will they be able to find them?
- Do new open space, walking and cycling facilities link with other existing facilities elsewhere, expanding the experience and potential use?
- Can new shops and other facilities service a wider population, increasing their economic viability as well as social interactions?
- Should the development fund new facilities or expansion of existing facilities in the surrounding area?

2. ***Be realistic - to ensure facilities are achieved.***

Designs should explore new and effective ways of doing things. However, there is a risk of deficient service and adverse behavioural outcomes if an innovative proposal cannot actually be realised. Alternatives need to be available and implemented if required.

The study found examples where:

- (i) A proposed shorter more direct 'active travel' route to a nearby centre cannot be implemented because it is over land not in the control of the development. No viable replacement has been implemented, meaning pedestrian and cycle access to the centre is impractical.
- (ii) A new neighbourhood centre is proposed to address deficiencies in the existing centre which is in separate ownership. However, this risks the much-needed renewal of the existing centre because of over-supply and there are no proposals for a more fruitful collaborative partnership.

Key questions for practitioners to ask include:

- Is this proposed feature achievable in terms of ownership and financial viability?
- Are there mechanisms in place to encourage or require engagement with other owners, and potential partners?
- Will these proposed features be used as intended?
- How will this proposal impact on existing facilities and services?

3. Early provision of walkable local centres (embedding healthy habits).

Local centres accessible by walking and cycling, and incorporating fresh food retailing and various foci for social interaction will encourage early health-supportive behaviour. The resultant activity can then encourage a virtuous spiral of additional private and public services, opportunities for social interaction, reasons for local walking or cycling trips and improved economic viability.

In the early stages of development this may require imaginative solutions, such as 'pop-up' facilities, temporary subsidies and other interventions to encourage particular operators.

The study found examples where:

- (i) Residents desire a neighbourhood social focus, and suggest a local café with some fresh food retailing that, importantly, they can also *walk* to.
- (ii) There is good provision of services within the wider locality. Nevertheless, residents express frustration that there is no 'minimum provision' of services (such as food shops, a post office, a medical practitioner) in their own neighbourhood able to be accessed by walking.
- (iii) Residents want a total re-build of their existing long-standing walkable local centre. Its quality has seriously deteriorated, and together with poor design and management, generates concerns about safety, meaning residents go elsewhere (generally by car).

Key questions for practitioners to ask include:

- Does the development include a neighbourhood focus accessible by walking or cycling and which meets daily convenience shopping needs, either within the development itself or a close-by area?
- Is there a need for temporary facilities or an economic subsidy or other support to ensure early establishment of a walkable neighbourhood focus prior to full commercially-viable facilities coming on-stream?
- Is there an existing local centre nearby that can be utilised (rather than necessarily creating new additional centre), thus reinforcing its viability and providing an immediate focus for new residents? Will this require provision of new 'active travel' facilities?

4. Responses to be place-specific (one size does not fit all).

Communities are different – demographically and geographically. It may be effective to promote active travel use in one area; but in another it may never be viable, requiring other, compensatory measures to promote physical activity and social interactions. Some residents may have time for longer hours of moderate activity, others only for shorter periods of vigorous activity. Facilities responsive to varying needs are required to support health across all ages, abilities and circumstances, and located where most useful.

The study found examples where:

- (i) Take-up of active travel will always be marginal given the low density of the neighbourhood and the scattered nature of destinations. Therefore other opportunities for physical activity need to be maximised.
- (ii) Residents of multi-unit, multi-storey buildings express frustration about not knowing their neighbours because of limited opportunities for informal social interaction. Action is required to establish other opportunities for formal and incidental social interaction.
- (iii) Residents who were aged and with limited mobility have concerns about personal security that limits their use of public space, and thus also their opportunities for physical activity and social interaction. In response, they express a desire for group outdoor activities.

Key questions for practitioners to ask include:

- What are the particular physical, geographic and demographic characteristics of the neighbourhood? Have health-supportive built environment actions been tailor-made to suit?
- Has the provision of certain health-supportive features been given added attention to counter the likelihood that other features will have only limited use because of the particular characteristics of the neighbourhood?

5. *More empathic engagement by practitioners.*

The basic provision of facilities will not necessarily mean they are used if they are poorly located, unattractive, uncomfortable or do not otherwise meet community needs. Designers and managers have to imagine themselves as a potential user and judge whether the proposal delivers. Putting oneself 'in the shoes of' various roles - male or female, different ages and abilities, with or without children, from different cultural backgrounds, as a pedestrian or a cyclist – can assist.

The study found examples where:

- (i) Residents do not use a new cycle route because they consider it unsafe given it is partly located beside a busy highway where vehicles, including heavy trucks, travel at speed.
- (ii) Older residents are hindered in their desire to walk to destinations because they are not confident about negotiating uneven footpaths, and there are no seats for resting.
- (iii) Residents do not use an extensive footpath and cycle path network for active travel because the layouts are too circuitous (and not direct) as they are designed for recreational purposes.

Key questions for practitioners to ask include:

- Will this be used by the anticipated population of the development (or more specifically, *would I use this*)?
- Is the proposed facility convenient, safe, comfortable, attractive, accessible, affordable, and open at useful hours?
- Are there viable – comfortable, convenient, safe – connections to these facilities? Or will existing connections need to be improved or new connections established to assist take-up?

6. *Listen to the locals – they understand the connections.*

The resident-participants in the study understood the connections between their health and daily activity, and were often active in creating their own solutions in the places they know well. Health-supportive built environments should facilitate such local actions. Designers and managers need to be willing to invite advice and then respond to what residents say they need to be healthy.

The Study found examples where:

- (i) Residents engage in an evening walk around their neighbourhood, checking out new developments, with joint physical activity and incidental social interaction benefits.
- (ii) Individuals have informally established themselves as a 'social catalyst': organising meet-ups in their housing cluster, sitting and chatting to passers-by in the local park, and organising a community garden.
- (iii) A men's shed provides a popular activity and social meeting place, with the added benefit of checking on members who have health issues and/or live by themselves.

Key questions for practitioners to ask include:

- Has the provision and management of facilities drawn on what residents indicate they need to be healthy, and on observations and experiences of how such facilities are actually used?
- Is there provision for on-going engagement with residents to ensure the type and management of facilities provided actually meets their needs?
- Has provision been made to fund or otherwise resource new facilities if particular needs become apparent after initial design and construction?
- Are facilities managed to allow residents to use them as they might want to over time (for example, to garden in common areas or use community meeting spaces in particular ways)?

7. *A required attention to detail.*

Although the overall planning of an area may provide for health-supportive behaviour, deficiencies can arise where there is a lack of attention to detail - in the content of the plans, in implementation, and in on-going management.

The Study found examples where:

- (i) Pedestrian and cycle paths include unnecessary dog-legs, reducing ease and safety of use and therefore effectiveness.
- (ii) Internal security arrangements in multi-storey residential buildings complicate casual visitation between floors.
- (iii) There has been a delay in providing safe pedestrian crossings at busy roads to access nearby regional facilities.
- (iv) A lack of seating along pathways and at playground equipment hinders use by older people and the facilitation of group social interactions.
- (v) Management limits the use of certain common recreation facilities to a minimum age without an accompanying adult, but the chosen age is overly restrictive.
- (vi) A provided community room is kept locked by management, and requires specific permission for its use.

Key questions for practitioners to ask include:

- Have I put myself 'in the shoes' of anticipated residents and other users, and asked whether a particular facility is (or will be) effective?
- Is there provision for on-going engagement with residents to ensure facilities actually meet their needs?
- Is there a clear and well-documented 'line of sight' from the planning to implementation to management stages (do those planning the proposal know how it will need to be managed, will managers be aware of the initial design intention, and are those implementing it all similarly 'in the loop')?

8. Active recreation for informal, formal and group activities.

Often recreation space is allocated simplistically between passive uses and formal group-based active uses (particularly organised ball sports). Provision for informal individual and group active recreation also needs to be made: informal hard surfaces for ball games (possibly in conjunction with nets or hoops), level running and exercise surfaces, and exercise stations. Semi-formal organised activities can also encourage participation and, for some, ameliorate concerns about being alone in public spaces.

The study found examples where:

- (i) Although extensive open spaces are proposed, associated facilities are for passive activities only. Residents indicate a desire also for active facilities, including for informal family-based activities.
- (ii) Informal ball court facilities accessible by the public are well-used.
- (iii) There is a good provision of active recreation facilities generally, both within the residential development (gymnasium, ball courts, swimming pools) and by providing appropriate spaces in the associated commercial centre for privately-operated facilities.
- (iv) Residents desire more organised group activities (eg. tai chi, walking groups, boot camps) within open space areas – to encourage uptake and social interaction co-benefits.
- (v) Residents indicated they would use fixed exercise stations in the local park if they were available.

Key questions for practitioners to ask include:

- Is there a broad range of active recreation facilities available for formal groups, individuals and informal groups?
- Does the design of facilities maximise use either without the need for any associated management, or with accompanying easy-to-use management arrangements?
- Are associated facilities provided to encourage non-active residents and passers-by to linger and socialise?
- Are there opportunities for (public or commercial) informal classes or other group activities that encourage participation in physical activity?

9. *A wide-spread interest in walking, and cycling.*

Walking, particularly walking for recreation, is a commonly accepted and therefore presumably enjoyable way of achieving desired activity levels. It suggests that additional attention to providing quality walking infrastructure, including extended routes to wider regional destinations and for active travel, could readily generate an overall increase in physical activity.

By comparison, cycling has low acceptance mainly due to safety concerns and, for some, a lack of any cycling culture and skills. Nevertheless, many study participants indicated a potential to cycle more when improvements in safety, provision of dedicated pathways and changes in family situation allowed.

The study found examples where:

- (i) Residents express a desire for viable and attractive local neighbourhood centres they can *walk* to.
- (ii) Residents become bored with the otherwise well-designed but short and now-familiar walking paths within their neighbourhood, expressing a desire for longer and more varied walks.
- (iii) Residents do not feel safe cycling in their streets because they are narrow and reduced allotment widths mean a greater density of driveway crossings.

Key questions for practitioners to ask include:

- Are local streets designed to make walking and cycling convenient, comfortable and safe, either as an integral part of street design (as in the notion of 'complete streets'), or via specific separated facilities?
- Are there good connections with walking and cycling opportunities in the wider local and regional area?
- Are crossings of major roads pedestrian and cycling-friendly, and are they located where needed?
- Are key trips easy and pleasant to undertake as a pedestrian and as a cyclist?

10. Short walking and cycling routes may limit activity levels.

Although the design of a neighbourhood may provide effective local access for walkers and cyclists, the relatively short distances involved may not achieve recommended levels of physical activity for health benefits. Further, residents may become bored with the same routes, limiting use over time. A variety of destinations needs to be established, as well as connections to walking and cycling paths in the wider locality.

The study found examples where:

- (i) A central park is well used and generates a high number of walking trips, with some (mainly dog owners) visiting multiple times per day. However, the length of each trip is small, limiting the physical activity health benefits (although there are social interaction co-benefits).
- (ii) Substantial and well-constructed walking and cycling paths are proposed. Nevertheless, the small size of the estate means multiple circuits will be needed to achieve good levels of physical activity, and this may become boring over time.
- (iii) Although there are longer attractive walking and cycling opportunities in the wider locality, access is not always obvious, and sometimes requires crossing major roads with associated safety and amenity concerns.
- (iv) Although the local authority has a well-detailed plan to improve regional cycle networks, there is no similar plan for good regional walking routes to destinations of interest.

Key questions for practitioners to ask include:

- Are local trips made by walking and cycling likely to achieve minimum recommended levels of weekly physical activity for health benefits?
- Are local pedestrian and cycling routes provided for recreation interesting enough to ensure continued use?
- Have longer walking and cycling routes, and connections to more distant destinations, been provided to encourage an increase in the time spent being physically active?

11. *Specific attention to challenge 'default' car culture.*

The study participants still predominantly use their cars for short local trips. In part this relates to infrastructure – local streets designed for the car rather than the bicycle; indirect pedestrian or cycle routes making local trips longer than necessary; insufficient shade or seating along the way; a lack of interesting and desired local destinations; ineffective public transport. However, there are also long-established habits and perceptions that need to be addressed.

The study found examples where:

- (i) Although there are shops, schools and churches within easy walking or cycling distance and with well-designed and maintained pathways, nearly 100% of trips are still by car.
- (ii) A dedicated green travel officer employed by the local centre management has focussed on encouraging centre employees to use active travel, neglecting a need to also encourage local residents to walk or cycle to the centre.
- (iii) Residents have problems with the legibility of the local (semi-rural) bus service (the timetable; no formal bus stops; unsure if school bus services can be used by the general public), meaning use is minimal.
- (iv) Major changes are proposed to the street layout to improve effectiveness of the local bus service. However, this does not include provision of shelters and seats for all stops to assist comfort and thus uptake, and consideration of the usefulness of the bus route beyond the neighbourhood.
- (v) Instigation of a walking school bus, the promotion of walking as an integral part of well-patronised local church services, the promotion of personal shopping trolleys, and the provision of home deliveries may encourage greater local 'active travel'.
- (vi)

Key questions for practitioners to ask include:

- Are walking, cycling and public transport facilities designed and managed to a standard that will encourage residents to leave their car at home?
- Is there active engagement with schools, churches, shops and other local destinations to encourage patrons to make 'active travel' an integral part of their visit?

12. *On-going management as important as initial provision.*

Initial capital expenditures will be wasted if facilities are not managed properly. Facilities will not be used if they are poorly maintained, do not have convenient opening hours, do not adequately manage user behaviour, are not affordable, or lack child care.

The study found examples where:

- (i) Use of a major park is limited by poor supervision (and selfish use) of its other function as an off-leash dog park, with consequent issues with dog droppings.
- (ii) The availability of community garden space for general use is unclear because of the absence of associated signage or information.
- (iii) Residents desire more group activities in the local library and extended opening hours as a way to increase their social interactions in a new estate where there is otherwise little street activity and associated informal interactions.
- (iv) Older residents on fixed incomes express concern about the cost of otherwise useful and enjoyable aqua-aerobics classes.
- (v) Various recreation facilities were provided over time: a swimming pool, squash courts and gymnasium equipment. However, they have been progressively closed due to lack of on-going financial support and/or maintenance.
- (vi) Use of informal ball court facilities was restricted by domination by a particular group (suggesting additional facilities were needed) and by the lack of a booking system
- (vii) Use of active recreation facilities within a development by older children and teenagers is restricted by rules requiring they be accompanied by a resident adult.

Key questions for practitioners to ask include:

- How will this feature / facility be managed?
- What is the quality of the experience, and will it be maintained?
- Will opening hours meet the needs of the local population?
- Will user fees and/or commercial pricing be affordable for the local population?
- Is it convenient, safe, comfortable, attractive, accessible? Is there child-care?
- Is there a need for concurrent, personalised programs to assist uptake?
- Do by-laws assist or hinder residents to be more active, to socially interact, and to access healthy foods?

13. *Effective local information (for residents).*

It can take time for new residents to get to know neighbours, and local facilities. There is competition from settling in to new homes, schools and the like, and a new journey to work. Action to assist – and so establish early patterns of healthy behaviour – is worthwhile. One way is via employment of community development officers and sponsorship of welcome programs. However, the study participants indicated some programs work better than others.

The study found examples where:

- (i) A face-to-face welcome by a dedicated person who is also visible from time-to-time letter-boxing the community newsletter and organising events was particularly appreciated.
- (ii) Residents expressed frustration about the non-personalised and essentially invisible service where the community development role is out-sourced and organised via a website and emailed newsletters.
- (iii) Although appreciation is expressed about the effectiveness of a dedicated community development officer, there is concern the position is not now adequately resourced as the population of the neighbourhood increases.
- (iv) Residents are not aware of walking and cycling destinations in the surrounding locality, how to use the local bus service, a weekly fresh food van visiting a nearby centre, or of the available range of regional active recreation facilities.

Key questions for practitioners to ask include:

- Is there a need to establish an initial community development program, including personalised welcomes, to encourage socialisation and to make residents aware of local and regional facilities?
- Are facilities, and their management and protocols for use, legible without the need for (often alienating) signs and regulations or expensive supervision?
- If supervision or management is required, is this also legible, localised and friendly – and inviting to use?

14. Co-opt contemporary trends.

The use of health-supportive facilities is of course still largely dependent on personal choice. Such choices can also be substantially influenced by current trends and fashions. The design and management of built environments should facilitate such trends where supporting healthy activity, even if potentially only short-lived.

The study found examples where:

- (i) Food vans provide a generally healthy take-away food alternative, with consequent social interaction co-benefits.
- (ii) A desire for a local café as a social focus will not be achieved for some time. But an interim pop-up facility could be located on existing open space.
- (iii) Semi-formal community gardens have served as social catalysts in the early stages of the development, with nutrition co-benefits.
- (iv) Giving all new households a personalised shopping trolley may encourage walking to the local shops, and reverse a tendency to default to the motor car.
- (v) A weekly farmers' market in the central park provides fresh foods, as well as a social meeting point where neighbours in multi-unit buildings otherwise have difficulty meeting each other.
- (vi) There is extensive use of an off-leash dog park, and where residents of a newly-established estate indicate such a facility would be similarly popular.

Key questions for practitioners to ask include:

- Does the design and management of facilities support current social trends that are consistent with, and reinforce, healthy personal behaviours?
- Is the design and management of facilities flexible, allowing changes over time that respond to new, health-supportive social trends and fashions?
- Are facility managers sufficiently aware and empowered to recognise and respond to such trends?