

Beyond Liveable: Planning Cities for Wellness

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Introduction

The past two years have prompted much reflection among urban planners and designers as the Covid-19 pandemic has upended habits, assumptions, and urban spaces. For the first time in decades, issues of health have become dominant in planning discourse as our profession recalibrates and examines how we can respond to this new post-pandemic world. Of course, this is not a new world, but an old world seen through a new lens. The risk of a global pandemic has been increasing in recent decades, and, even two years into an outbreak, we see a lack of action to address root causes and risk factors. Alongside acute threats, economic and lifestyle changes throughout the past century have resulted in an exponential rise in chronic illnesses and so-called ‘lifestyle diseases’ (WHO, n.d.a), yet during this time there has been no collective examination of the intersection of public health and urban planning at the scale that is needed.

While our current state of reflection is overdue, it is also timely, as the place of health and healthcare in our society undergoes a paradigm shift. The prevalence of chronic illness has led to a shift towards long-term care and health maintenance (WHO, n.d.a). As healthcare facilities are still largely based on acute care models and doctor-led treatment, this requires us to rethink how and where new models of care may take place. Alongside this is a growing understanding of health and wellness from a holistic perspective, recognising the impact of psychological factors on mental and physical health. This has been accelerated by the pandemic, during which we have seen record levels of mental health issues come to the fore (Ellyatt, 2022), but the collective nature of the struggle has also broken down barriers in the discourse around mental health and helped cultivate a more holistic view of health and wellness.

Together, these trends have shone a light on the spaces in which we spend our lives: our homes, neighbourhoods, and cities. This has prompted reflection not only on how we might plan to avoid future risks, but also how we might plan for better lives in general, with wellness at their core. Now, we face the task of planning not only for health, through active health planning and resilience; but planning also for wellness, through designing spaces for physical activity, mental resilience, and social stability. The concept of liveable cities is no longer enough – we need cities in which people can not only survive, but thrive. Here, we explore how the groundwork for wellness can be laid by planning for a proactive city, an active city, and a connected city:

A proactive city: A city planning for wellness must implement policies and development that support the social and economic factors influencing health, and look ahead to anticipate and plan for risk management, as seen in strategic urban planning projects such as the Ben Tre Strategic Vision and the Thu Duc City master plan.

An active city: Planning for physical activity means enabling both incidental and intentional activity for all sectors of the population, through policies as broad as universal accessibility and an affordable public transit system, urban green cover, and access to public parks and shared spaces, as seen in policy-driven interventions in Fayetteville, Arkansas, USA and Singapore’s city-wide urban greening strategy, as well as urban regeneration projects such as the Raval in Barcelona, Spain.

A connected city: Planning for resilient and connected communities prioritises the intangible social ties cultivated through heritage, identity, and purpose, as seen in district plans such as the North Dalat District (Figure 1), Thu Duc City master plan, site-specific interventions such as Kampung Admiralty, and grassroots initiatives such as Park(ing) Day.

These three steps lay the core foundation for a healthy city. A city that aspires to enrich and support the health of its residents may go beyond these measures and look to innovative technologies and strategies – as long as it begins with the basics.

A Healthy City Is a Proactive City

Healthy cities do not come about by accident. The most important step in building a healthy city is proactively planning to be a healthy city. A city that plans with health in mind, and implements these plans, will typically be healthier than a city that does not (WHO, n.d.b). Several nations have begun taking the first steps towards health planning. In 2020, the United Kingdom published a Health Index for England, measuring health outcomes, health-related behaviours and wider determinants of health, with the aim of developing an inclusive approach to health and focusing public debate and public policy on this topic (Office for National Statistics, 2020). Similarly, the Australian Urban Health Indicators project will develop a suite of new indicator data, including demographic, socioeconomic, health service and environmental data, to generate new insights for health and social infrastructure planning in Australian cities (Australian Research Data Commons, 2022). In Singapore, a Healthy Precinct Framework and Toolkit to better understand the health behaviours of residents and socio-environmental determinants in housing precincts is in development (MOHT, 2021). Though far from being ubiquitously implemented, identifying and measuring social, economic, and environmental factors is a crucial first step for understanding the depth and spread of underlying issues and enabling cities to address these issues and proactively plan for health.

Proactive resilience planning

Beyond daily health planning, proactive resilience planning is needed, from health crises to climate resilience. The varied and often poor response to the pandemic across Western countries in particular has highlighted fundamental flaws in resilience planning. In contrast, many Asian countries that experienced the Severe Acute Respiratory Syndrome (SARS) outbreak in the early 2000s performed better in the early days of the pandemic, having learned from past mistakes. Extreme weather events resulting from climate change are both a direct threat to safety and well-being and an indirect threat. Flooding brings the risk of contaminated water and water-borne diseases; drought and extreme temperatures bring risk of respiratory and cardiovascular issues, as well as increased accident and mortality rates (ISGlobal, 2018). Climate adaptation at all scales is a fundamental component of a healthy city to ensure a baseline of safety and security for residents. This includes ensuring safe and clean management of storm water; flood prevention and management; drought resilience; managing microclimate at both a city-wide and neighbourhood scale. Even measures such as urban greening can have an impact, with data showing that heatwaves affect poor neighbourhoods disproportionately to wealthy ones due to disparity in tree cover and microclimate (Anderson & McMinn, 2019).

Climate resilience in Ben Tre province

The Ben Tre Strategic Vision Plan takes a holistic approach to addressing climate resilience at a regional scale. The province is made up of four low-lying coastal islands separated by branches of the Mekong River, and the predominantly agricul-

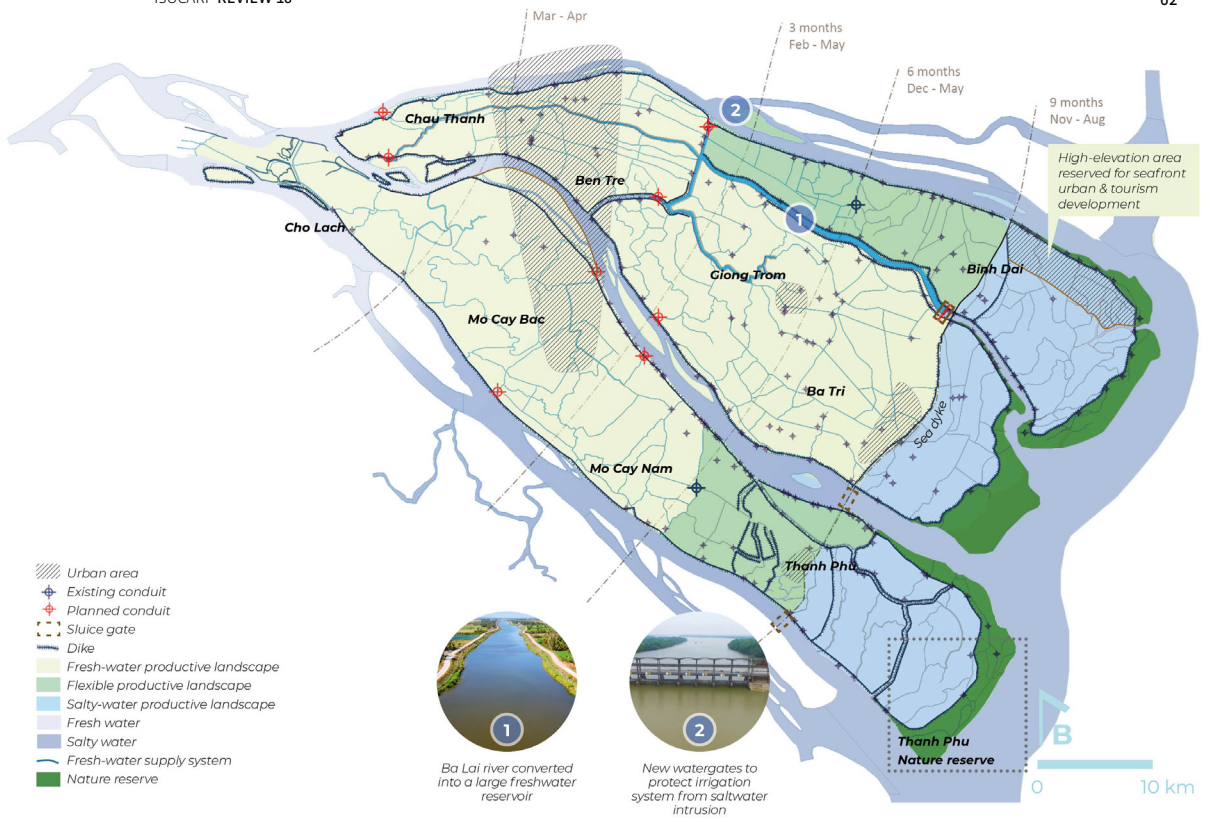


Figure 2. Water resource management in Ben Tre province. © enCity Urban Solutions, 2021

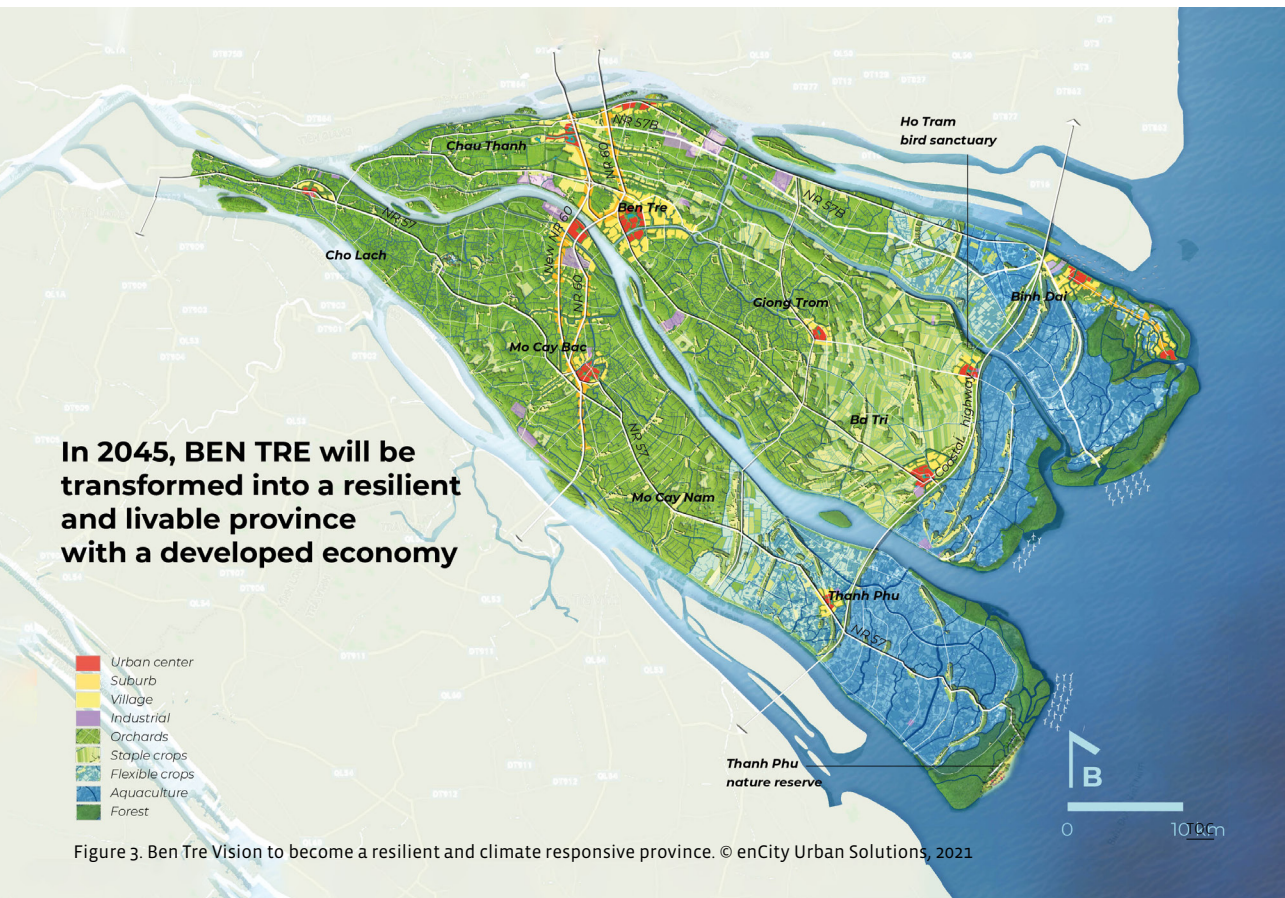


Figure 3. Ben Tre Vision to become a resilient and climate responsive province. © enCity Urban Solutions, 2021

tural economy is under threat from fluvial flooding, sea level rise, and saltwater intrusion. The objective of the Strategic Vision Plan is to lay a strong framework for development, anchored in resilience and context-specific, nature-based solutions. It does this through strengthening intra- and inter-provincial infrastructure with two north-south highways. The coastal highway doubles as a dyke, enabling the water systems within the dyke to be redesigned, developing a land use system based on water resources to secure irrigation supplies and enabling agricultural adaptation (Figure 2). Urban development is applied in key locations, and designed to promote local water-sensitive urban morphologies already present across the province. Overall, the plan envisions an efficient and cohesive solution to potential climate threats, proactively preparing for risk to mitigate excessive impacts when crisis strikes (Figure 3).

Climate resilience in Thu Duc City

In Ho Chi Minh City, the 22,000-ha Thu Duc City Masterplan sets out the framework for the city's new innovation district. Among other interventions, flood mitigation strategies are of crucial importance given the district's low elevation and proximity to the Saigon River. In order to reduce the risk of urban flooding due to heavy rain and high tides, retention ponds and green infrastructure are proposed to capture runoff and increase permeability. These include existing natural systems such as canals, ponds and lakes, low-lying open spaces with water storage capacity such as parks, and newly built underground water storage tanks (Figure 4).

Overall, the concept behind a proactive city is simple: to understand the policy and planning factors that influence the health of a population, and implement those that support and promote health; and to anticipate risks and take preventative action. Together, these must be the baseline for any healthy city.

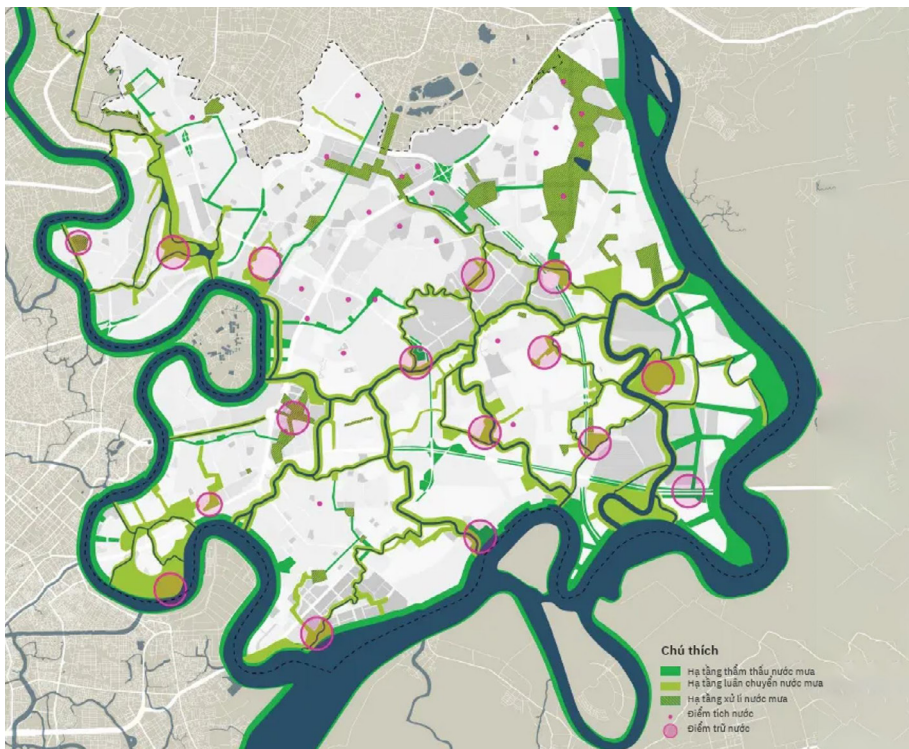


Figure 4. Proposed retention ponds (large dots) and detention ponds (small dots) for stormwater management in Thu Duc City. © enCity Urban Solutions, 2021

A Healthy City Is an Active City

Physical activity is at the core of both preventative healthcare and management of chronic conditions. It has positive impacts on everything from our immune system to brain chemistry and is a foundational element of health. Despite widespread awareness of this, many people still struggle to fit physical activity into their day-to-day routines. In planning a healthy city, creating opportunities for physical activity, both incidental and intentional, has the potential to create broad, far-reaching health impacts and positive feedback loops.

Planning for incidental activity

Of the two, planning opportunities for incidental activity has the largest potential for widespread impact, as it requires no specific location, allocation of time, equipment, or team mates. Incidental activity can be as simple as standing or walking instead of sitting. It has been shown to improve mood, energy and social and emotional well-being (AIHW, 2018), as well as reduce risk of chronic conditions and improve mobility (Diabetes WA, 2021).

Urban accessibility is a key determinant of incidental activity, through residential density, walkability, and transit networks. Residential density is an important starting point, as it creates the critical mass needed to support public transit and local amenities such as schools and shops. Density brings people closer to the things they need in their daily lives, and proximity encourages pedestrian activity. Increasing walkability in neighbourhoods, through small measures such as urban greening, shading, and even decreasing distance between traffic intersections, helps to get people out onto the street. This activity is increased where extensive public transit and cycle networks are provided within walking distance of residences, reducing reliance on private vehicles.

Aside from increasing incidental activity, these measures have broader impacts. Busier streets create safer neighbourhoods, increased foot traffic supports local economies, and regular informal interactions build stronger community networks. A reduction in parking requirements for businesses on Dickson Street in Fayetteville, Arkansas, USA, required shoppers to park further away and walk to their destination, increasing foot traffic. Rather than suffering, businesses saw an increase in revenue (Gould, 2022). Strong local economies also enable economic opportunity and increase social equality, which is strongly correlated to health. Finally, public transit and mobility networks not only support walkability, but increase accessibility across the city. This enables residents to reach more economic opportunities and engage with different areas of the city, both of which have been shown to improve social cohesion and equality, which are correlated to lower levels of stress and greater overall health in a society (Wilkinson & Marmot, 2003).

Planning for intentional activity

While incidental activity is supported through increasing accessibility in our day-to-day lives, planning opportunities for intentional activity requires ensuring accessibility to specific locations, venues, and networks. Primarily, this means green spaces such as parks and park connectors, but also includes public sports amenities, especially in cities where weather can be a barrier to activity.

Access to public green spaces is one of the most direct ways to create opportunities for intentional activity. Proximity to greenery decreases stress and

supports mental health; tree-lined streets that provide shading and thermal comfort increase walkability and provide ideal running and cycling routes; and local parks encourage outdoor gathering and play (Engemann et al., 2019). Access to these spaces removes common barriers to individual exercise and team sports such as cost concerns and travel time (Richardson et al., 2013; Wang et al., 2019). The International Union for Conservation of Nature (IUCN) has proposed a 3:30:300 approach – a view of three trees from every home, 30 percent tree canopy cover in every neighbourhood (or equal levels of vegetation, in arid climates), and a park or green space within 300 m (Konijnendijk, 2021).

Public green spaces came under the spotlight early on in the pandemic, as the use of parks and other green areas for socially-distanced socialising and exercise increased (Korpilo et al., 2021). However, so did the disparity in access to these spaces across different neighbourhoods and income groups and disparity in the quality of spaces (McPhearson et al., 2020). This is a concern for any aspiring healthy city, both in normal times and during a public health crisis. One study showed that proximity to green spaces was effective in protecting against depression and anxiety during the pandemic (Wortzel et al., 2021), while another found correlations between racial disparity, limited access to urban greenery, and higher Covid-19 case numbers (Spotswood et al., 2021). Increasing area and quality of green spaces should be a priority for cities, particularly in more vulnerable neighbourhoods.

Leveraging density for urban greening in Singapore

Singapore is one city that is actively increasing parks, green connections, and tree cover even as it expands development across the island on which it is built. From 36 percent green cover in 1986, targeted urban greening strategies have seen an increase to 56 percent green cover by 2020, even as urbanisation has increased. Green spaces are also highly connected, with over 300 km of green corridors, known as the Park Connector Network (PCN) and further expansion already underway (Lambert, 2020). The city has also implemented requirements for high-rise urban greening through the Landscaping for Urban Spaces and High-Rises (LUSH) policy, which provides incentives for developers to meet targets for the Green Plot Ratio (URA, 2017).

Injecting green public space through revitalisation of the Raval Boulevard

Public space can be a key tool for revitalising undermined neighbourhoods. This is the case of the Raval in Barcelona, which demonstrates how high-quality public space can socially transform a derelict neighbourhood into a district integrated into the city fabric. Like Haussmann's 19th-century renovation of Paris, France, in Barcelona the city council used 'creative destruction', demolishing 62 buildings to make way for a new public square. The main goals were to provide a central public space in a neighbourhood lacking one, and to 'sponge out' the dense urban fabric to provide light and natural ventilation (Figure 5). Residents were relocated to new housing nearby, and the new square became a focal point of community activity. Parallel interventions along the new Raval Boulevard used urban culture as a driving force for social transformation, such as the new Centre of Contemporary Culture or the Catalonia Film Archive. Since then, the neighbourhood generally, and the Raval Boulevard specifically, have become internationally recognised, and, with their commitment to the city, have contributed to a new cultural circuit and tourist itinerary in a re-emerging Raval (Figure 6).

An active city does much more than promote physical movement or provide a lot of parks. Planned effectively, it strengthens the social and economic fabric; en-



Figure 5. 'Sponging out' of the Raval to create a new public space: area in 1993 (left) and in 2022 (right). © ICGC.cat, 2020



Figure 6. Urban art as a means to promote quality public space. © Pablo Acebillo, 2018

ables opportunity and choice; and protects and restores mental resilience. Many of the strategies that enable an active city are also those that make a neighbourhood attractive and 'liveable'. When applied at a city-wide scale with care and intention, or in targeted interventions that have ripple effects beyond their site, they can have a much more equal and long-lasting impact.

A Healthy City Is a Connected City

Beyond physical activity, a sense of belonging, social equality and support networks are strong indicators of health. Some studies emphasise strong correlations between social and economic stress, and poor health and life expectancy (Wilkinson & Marmot, 2003). Stress elicits a physical response; long term stress can put pressure on our bodies and increase vulnerability to a range of conditions, such as high blood pressure, heart attack, and stroke. While broad policy approaches, such as an emphasis on education, support in finding secure employment, and better standards of housing are more direct-impact solutions, planning can lay a foundation for these by strengthening social fabric. This begins with building a sense of belonging and shared identity in cities and neighbourhoods through preserving heritage; connecting communities with shared public spaces that facilitate informal interactions; and empowering communities through participatory planning and grassroots initiatives.

Curating belonging through shared identity

Identity and belonging are tenuous concepts, particularly in the multi-cultural and transient populations that define most urban areas today. Yet they are also fundamental human needs, and they play a role in managing stress and mental health. Planning can help by cultivating spaces and enabling practices from which identity can grow over time, such as conserving or adapting built heritage, from historic buildings to distinctive elements such as old industrial structures. This helps to preserve and enhance each city's unique urban fabric and materiality; it also drives downtown regeneration and the back-to-the-city movement, which can improve economic opportunities for local residents; and, finally, regeneration has also been shown to create more and better-quality jobs with higher incomes compared to new construction, producing a greater multiplier effect (Rypkema, 2008).

Revitalising cultural heritage in North Dalat

The North Dalat District is a regeneration project within Dalat, the Vietnamese heritage city known for its rich local culture and distinctive colonial architecture (Figure 7). The proposed master plan preserves and adapts built heritage while expanding new development around the old, to create a vibrant town centre on the restored lake; a commercial spine facing onto a bioswale corridor that runs along the central valley; and new residential communities amid restored pine forests. The proposal emphasises creating new economic opportunities for existing and future residents, expanding amenities within the district, and enhancing tourism potential through both physical and intangible heritage. The architectural styles of the new development are designed to reference vernacular and heritage typologies, and public spaces highlight features of cultural value, from the central lake that will anchor community activities to the outlook over Lang Bian Mountain, a site considered sacred to local culture (Figure 8).

In the previously mentioned Thu Duc City project, the new developments to attract research and development labs and new tertiary services are carefully planned, respecting local culture and existing heritage assets. The newly proposed FinTech Hub in the Thu Thiem area blends with the existing Congregation of the Holy Cross Lovers (Figure 9). This strategy is aimed at preserving the history of the place and emphasising the identity of the area.



Figure 7. Restoration of Van Kiep Central Lake as the district's main public gathering space. © enCity Urban Solutions, 2021



Figure 8. Outlook over the sacred Lang Bian Mountain. © enCity Urban Solutions, 2021



Figure 9 New FinnTech Hub integrated with the conserved Congregation of the Holy Cross Lovers centre. © Sasaki & enCity Urban Solutions, 2019

Cultivating belonging through community spaces

Beyond heritage and culture, shared public spaces and vibrant streets that enable informal interactions can also foster stronger, connected communities. The public transit and urban greening strategies discussed earlier are key elements in building these spaces; so too is a thriving local economic centre that provides employment, hosts amenities for the community, and acts as a collective destination. Particularly in new developments, zoning shared public spaces and pockets of commercial development is crucial to avoiding isolating bedroom communities. In Singapore, for example, the Housing Development Board (HDB) has made a concerted effort to do this from the earliest days of their public housing policy in the 1960s. As residents were relocated from traditional villages, or *kampongs*, authorities were concerned that community networks and social fabric would suffer. This risk has been proven in housing projects across the world, with poor design and short-sighted policies leading to a breakdown of social structures and subsequent rising crime: the Pruitt-Igoe project in St Louis, Missouri, USA is a salient example of such failed design. To prevent this, the HDB designed their developments to include shared public spaces such as ‘void decks’ at street level, where residents could gather informally or hire space to hold events, as well as shared neighbourhood parks, playgrounds and open green spaces. Developments also had commercial zoning clusters at street level where subsidised rents encouraged food vendors and other small businesses to set up shop. Combined, these strategies helped build habitual gathering spaces and foster a new shared identity centred on HDB living, which quickly became a distinctive feature of Singaporean life.



Figure 10. Multi-layered rooftop gardens provide green views from residences, medical clinics and community centre.
© Patrick Bingham-Hall, 2020



Figure 11. The covered plaza is the main point of arrival, central event space and functional heart of the project.
© Patrick Bingham-Hall, 2020

Village living in a high-rise city at Kampung Admiralty

Informal interactions also help to strengthen social ties and urban vibrancy in vulnerable communities. Kampung Admiralty is a pilot project by architectural practice WOHA in Singapore that applies this in a mixed-use, high-density aged care development. The development has a direct pedestrian connection to the train network and co-locates apartments for the elderly with public medical clinics, shops, a community centre, a food court, and a public plaza, topped with a terraced landscaped roof where residents can exercise and garden. Informal spaces allow residents to socialise with each other; spend quiet time in the rooftop gardens (Figure 10); see their doctor or get a meal; people-watch or participate in public events at the plaza (Figure 11); or hop on a train into the city, all within a few minutes of their residence. Residents have seen improvements in overall health and well-being as well as in chronic conditions such as diabetes (Zhuang, 2020). The success of the project has led to similar developments being planned across Singapore Island, with the next one being constructed in the nearby neighbourhood of Yew Tee.

Belonging through empowerment

Lastly, empowering communities through participatory planning and grassroots interventions is crucial to designing and implementing successful long-term planning solutions for a healthy city. Not only does this ensure more specific and targeted solutions that have the support of residents and suit local culture, habits and lifestyle, but is also fundamental for shaping how residents relate to their cities and see their place in the urban social structure. This process should also involve experts beyond the planning profession, particularly health professionals and social scientists who can advise on the potential psychological and social impacts of the proposals. Especially in disadvantaged communities, participation and grassroots initiatives can be a powerful way of taking back control and creating opportunities for unique solutions with direct positive impacts on community health.

Citizen-led design

Park(ing) Day is a global participatory project, typically hosted by advocacy groups and small civic organisations, where street parking spaces are temporarily repurposed as spaces for art, music, relaxation and activism (Park(ing) Day, 2022). Originally an installation in San Francisco to make a statement about car parking and a lack of open space in the city, Park(ing) Day has gained popularity across the globe, and spurred formal programmes and toolkits for the conversion of parking lots into ‘parklets’, providing clear guidelines and financial support for ground-up interventions. Projects like these encourage urban dwellers to take an active role in reappropriating and reimagining urban space for community- and health-centred objectives.

Social ties such as heritage, culture, belonging and purpose cannot really be created; yet they are often the secret ingredient that separates the generic from the iconic and successful urban spaces from failures. In terms of health, they determine the strength of a city’s social fabric, and therefore its resilience and ability to thrive. As planners, all we can do to help this process is to identify the unique features that are important to maintaining this fabric in each place; to curate and cultivate the right conditions to enable them to take root and to flourish; to protect them when they are under threat; and to reimagine and adapt them as the city changes around them. Many of these strategies have far-reaching impacts and knock-on effects that support health in a multitude of ways, and many of the

	PROACTIVE CITY	ACTIVE CITY	CONNECTED CITY
	<ul style="list-style-type: none"> › Study environmental, social + economic determinants of health › Identify risks and prepare for resilience 	<ul style="list-style-type: none"> › Design for and encourage incidental activity › Support and enable intentional activity 	<ul style="list-style-type: none"> › Build shared identity and community ties › Create opportunities for engagement and stewardship
BEN TRE STRATEGIC VISION PLAN	<ul style="list-style-type: none"> › Resilience through coastal adaptation › Context-specific economic growth strategies 		<ul style="list-style-type: none"> › Development based on existing urban patterns and forms
THU DUC CITY MASTER PLAN	<ul style="list-style-type: none"> › Climate resilience strategies through WSUD and landscape 		<ul style="list-style-type: none"> › Preservation of heritage structures within new urban development
SINGAPORE URBAN GREENING POLICY	<ul style="list-style-type: none"> › Using urban greening to create clean air, shade and thermal comfort 	<ul style="list-style-type: none"> › Using urban greening to increase walkability, street activity, and opportunities for outdoor recreation 	
RAVAL BOULEVARD		<ul style="list-style-type: none"> › Using public space and urban greening as a tool for revitalisation and economic opportunity 	<ul style="list-style-type: none"> › Increasing social activity and engagement through shared spaces
NORTH DALAT DISTRICT MASTER PLAN	<ul style="list-style-type: none"> › Resilience through landscape restoration and WSUD strategies 	<ul style="list-style-type: none"> › Creating walkability and community spaces through landscape strategies 	<ul style="list-style-type: none"> › Integration of built and intangible heritage within new district plan
SINGAPORE HOUSING DEVELOPMENT BOARD POLICIES	<ul style="list-style-type: none"> › Economic opportunity through accessible housing › Social equity through mixed housing 	<ul style="list-style-type: none"> › Supporting economic opportunity through accessible housing 	<ul style="list-style-type: none"> › Building community through shared 'void deck' spaces for formal and informal interactions
KAMPUNG ADMIRALTY	<ul style="list-style-type: none"> › Understanding of risk factors for residents › WSUD strategies applied vertically through structure 	<ul style="list-style-type: none"> › Shared spaces for incidental and intentional activity for across all ages 	<ul style="list-style-type: none"> › Co-location of functions to keep residents engaged › Spaces that support informal interactions
PARK(ING) DAY			<ul style="list-style-type: none"> › Engagement of public in design › Reallocation of urban space for community activities

Figure 12. Health strategies. © enCity, 2021

case studies implement different forms of these strategies through a variety of approaches (Figure 12). There is no single formula for success; what matters most is to take the first steps towards understanding the context of each city, and then just start with the basics.

Where to Begin? With the Basics

The approaches outlined here – proactive planning, public transit, urban greening and community building – are broad, yet as we begin examining what health means for cities of today, it is important to begin with the fundamentals. The question of health is extremely complex; it means very different things in different places, and to different people; yet as humans we all share the same underlying needs. We need safety and stability; basic mobility, autonomy and opportunity; and a sense of belonging and purpose. Where any of these are lacking, more targeted initiatives such as personal health tracking devices or data-driven healthcare innovations can only be band-aid solutions. As planners, our task is to be proactive in understanding the social and economic factors influencing health, so that good planning can make the city the front line in preventative care, and to identify the risks faced by each individual place so that we can proactively prepare for them. Preventative care begins with planning for incidental and intentional activity, supporting physical health, autonomy, independence, and opportunity while promoting mental well-being. At the same time, cultivating a highly connected social fabric through heritage, belonging and purpose fosters both individual and collective resilience. Real, lasting planning strategies for healthy cities must be anchored in a deep understanding of the fundamental elements of health, and a broader understanding of wellness. We must set aside our assumptions to re-examine and recalibrate planning practices through this lens. Then, we may begin to see the emergence of cities that are truly healthy, where residents not only survive, but thrive.

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