



Built & natural environment

City of Port Phillip Health Profiles

The environments in which we live, work and play have a significant role in shaping our health. Land use planning and urban design can support socially cohesive and inclusive communities, as well as healthy lifestyles. For example, development of good quality buildings, social housing, pedestrian-friendly neighbourhoods, accessible public open spaces, high quality bike networks, frequent and reliable public transport and healthy food environments can improve health. Building health into the design of environments (and advocating for healthy design) is a key role of local government.

What do we mean by the built and natural environments?

The built environment refers to the human-made surroundings that provide the setting for people to live, work and recreate. It encompasses physical buildings and parks, and their supporting infrastructure such as transport, water and energy networks (Coleman, 2017).

The natural environment is made up of the atmosphere, land, water, oceans and the diversity of living things (United Nations, 2019).

All environmental systems are interrelated. Extension of the built environment to meet the needs of the population growth puts pressure on the natural environment by using more land, water and energy resources, as well as producing waste and emissions through consumption activities (Australian Institute of Health and Welfare, 2020).

How does the built environment affect health?

Urban density can lead to a loss of green public open space, particularly tree canopy coverage, and can cause increased temperatures in urban areas. Urban density also plays a role in the spread and transmission of communicable diseases, such as COVID-19, as it can be more difficult to maintain physical distance from one another where a lot of people are sharing the same spaces. However, well-planned urban density can improve access to a variety of services, amenities and destinations; it can reduce travel distances making walking and bike riding more attractive.

Physical activity is an important factor in maintaining good health as it reduces the risk of physical illness and chronic disease and improves mental health. The built environment can be designed to encourage physical activity through 1) promoting walking, bike riding and using public transport, 2) connecting streets to make trips direct and convenient and developing mixed-use areas that allow



20-minute access to daily needs without a car and 3) having a range of public spaces which provide opportunities for formal and informal sport and recreation.

Access to healthy food in the local area through improved routes and neighbourhood shops is vital for supporting healthy eating. Adequate fruit and vegetable consumption is associated with reduced incidence of heart disease, some cancers, Type 2 diabetes, obesity, osteoporosis, dental caries, gall bladder disease and diverticular disease (Levy, 2012). Land use zoning and regulation can be used to influence food retail environments, accessible supermarkets and other fresh food outlets and food production systems by supporting farmers markets and community gardens.

Social interaction and community connectivity are strongly linked to good health. The built environment can facilitate and foster broader, more creative interaction and a resilient community through enabling day to day interactions with people and nature in safe and accessible environments. Quality public spaces with seating and activities, cafes, libraries and bookstores, are examples of places where people can relax in public. These kinds of environments strengthen social connections, inclusion and civic engagement.

Housing is an important influence on health. The availability of affordable and adequate housing enables people to more easily participate in the social, economic and community aspects of their lives, while inadequate housing has significant impacts on the mental and physical health of residents. Planning and Building design codes regulate the insulation, ventilation, room sizes, ceiling heights and access to sunlight of dwellings. However, regulations managing the built environment are slow to respond to climate change, including increases in extreme heat events. Consequently, heat-related deaths are expected to increase over time (Coleman, 2017). The built form needs to be future-ready to meet ongoing challenges such as housing diversity, affordability and responding to climate change. This also applies to the office buildings in Port Phillip.

Effective transport networks are essential part of a healthy built environment. They provide access to the opportunities, resources and facilities people need for a healthy life, such as education, employment, health care and recreation (Chandrabose, et al., 2019). Car use also increases the level of greenhouse gas emissions, reducing air quality in built-up areas. High traffic speeds and volumes compromise the quality of our streets which are the most frequently accessed public spaces, which reduces the opportunity for recreation, exercise and community gathering, and affects biodiversity. Transport systems can positively influence health by promoting walking, bike riding and using public transport, or negatively influence health through increasing car dependence, space set aside for parking cars, and active transport networks can reduce greenhouse gas emissions and climate change, air pollution and noise, and lead to more useable public space (Kent & Thompson, 2019).

Perceptions of safety are affected by the built environment. If residents (especially women, those from CALD backgrounds and people with a disability) feel unsafe (including at night) while on the street or in public spaces, their participation in education, employment and activities which connect them to others are likely to be curbed. Actions that can be taken to improve perceptions of safety include installing appropriate street lighting, creating places that attract people to provide passive surveillance, graffiti management and reducing vacant premises located across municipalities.

Green and public spaces are important for both physical and mental health (Australian Institute of Health and Welfare, 2020). Spending two hours or more in natural environments over a week is associated with higher levels of self-reported good health compared with those who spend no time in them (White, et al., 2019). Research also indicates that people are three times more likely to undertake physical activity if they live within 400 metres of a park while access to a larger park within 1.6 kilometers of home increases the likelihood of walking for 150 minutes or more in a week (Sugiyama, Leslie, Giles-Corti, & Owen, 2008; Mavoa, et al., 2016). Well-planned green spaces also support biodiversity, improve air quality and reduce noise pollution and heat in urban areas (Kent & Thompson, 2019). Contact with the natural environment may also benefit our immune system (World Health Organization and Secretariat of the Convention of Biological Diversity, 2015).

How does the natural environment affect health?

Air quality is impacted by pollutants emitted from natural or human sources such as factories and cars, which are associated with increasing urbanisation and development. It can also be negatively impacted by bushfires. Long-term exposure to air pollution increases the risk of morbidity and mortality from cardiovascular and respiratory diseases, and particularly asthma (Australian Institute of Health and Welfare, 2020).

Ultraviolet radiation from the sun is essential for good health, as it helps the body to manufacture vitamin D. However, excess exposure puts individuals at risk of a number of cancers, cataracts and sunburn (World Health Organization, 2019). The provision of adequate shade in public spaces such as parks and the foreshore, as well as reminders to the public of the importance of sun safety are an important part of protecting our community from the effects of dangerous sun exposure.

Extreme weather events such as storms, floods, heatwaves, bushfires and persistent droughts pose a significant risk to property, infrastructure such as roads and human life. It is expected that extreme heat events will occur more often and with greater intensity in the future due to **climate change** (Bureau of Meteorology, 2018). The 2019/20 bushfires were unprecedented, with 21 per cent of Australia's temperate forests burning, compared with the two per cent typical of previous major fire years (Boer, Dios, & Bradstock, 2020). 2022 was Australia's equal-22nd-warmest year on record, with the mean national temperature being 0.50 degrees Celsius above the 1961-1990 average. 2022 was also Australia's ninth-wettest year on record, with the nationally averaged rainfall being 26 per cent above the 1961-1990 average of 587.8 mm. (Bureau of Meteorology, 2023). In the future, sea level rises and changed rainfall patterns will also contribute to increased flooding and poorer water quality in the bay.

How is the built and natural environment contributing to the health of the Port Phillip community?

- Port Phillip's resident, worker and visitor population is forecasted to continue to grow. Urbanisation and densification bring benefits of proximity to services, destinations and attractions, but also raise challenges of rising land prices and greater demand on public



assets including public space, as well as the potential negative health impacts of noise and overcrowding.

- Port Phillip has about 353 hectares of open space distributed over 169 open spaces (17 per cent of our city), as well as some noteworthy public spaces that adjoin our municipality including Fawkner Park, Kings Domain/Melbourne Royal Botanic Gardens, Rippon Lea Gardens and Elsternwick Park Nature Reserve.
- The foreshore and Albert Park Reserve are our largest open spaces, contributing significantly to the public space network and attracts people from across greater Melbourne.
- Compared to neighbouring municipalities, the City of Port Phillip has the second highest amount of public space as a proportion of its total area (17 per cent) and the second highest population proportion living within 400m of public open. The amount of public space, and effective access to this space, however, varies significantly across neighbourhoods
- Road space makes up approximately 17 per cent of Council controlled land in the municipality and approximately 20 per cent of this road space is used solely for car parking. There are opportunities for the city to adapt some of this space to use for walking, bike riding, public space and seating.
- There are many tree-lined streets that are well loved for their contribution to character, comfort and walkability however some are not accessible to people of all abilities due to missing tactiles or kerb ramps. And some streets offer little shade or places or incentive to rest.
- Much of the soil in Port Phillip is contaminated from former industrial uses which presents an ongoing risk that must be managed to ameliorate potential health impacts.
- Many new dwellings being built in the City of Port Phillip do not cater for larger or family households and are not always accessible for people with disabilities and an ageing population.

How does the built and natural environment impact different groups in our community?

- Many people who are economically or socially disadvantaged rely on walking as primary mode of transportation and exercise. Appropriately lit, comfortable footpaths and walkable neighbourhoods making it easy to access services and social connections help to address inequities for this group.
- Within Port Phillip, relatively advantaged neighbourhoods, such as Albert Park and Middle Park, have lower population density and greater availability of public spaces.
- People on lower incomes are at heightened risk of preventable diseases and have fewer alternatives to using public transportation and green public spaces for exercises, so even



small changes in the availability of public spaces, public transport and services can have significant impacts on health outcomes.

Current impacts on the built and natural environment?

- Usage of local parks, facilities and infrastructure has largely returned to pre-pandemic levels, due to COVID-19 restrictions no longer being in force.
- 'On street dining' has largely stopped due to COVID-19 density requirements no longer being in place. However, the Blessington Street Outdoor Precinct was improved in 2022 and has become a semi-permanent fixture, providing outdoor dining areas for local businesses.
- The EcoCentre in St Kilda Botanical Gardens is currently being redeveloped, which is due for completion in late 2023.

What is the City of Port Phillip's role in creating healthy environments?

Much of the public open space in Port Phillip is managed by the Victorian Government, in particular the Albert Park Reserve. Council is also required to adopt state legislation, policies and procedures as they relate to management of the environment. In particular, the City of Port Phillip is mandated to:

- Oversee all public space within the municipality (excluding Albert Park) including parks, gardens, reserves, foreshore, streetscapes, playgrounds and urban spaces.
- Administer, enforce and continually review the Port Phillip Planning Scheme including its Local Planning Policies
- Make decisions on planning permit and subdivision applications
- Issue permits and enforce building regulations
- Administer and enforce permits for construction activity and commercial or private use of public spaces
- Register and inspect domestic swimming pools and spas
- Manage parking controls and road design

Over the next three years Port Phillip can address the drivers of poor health outcomes resulting from the built and natural environment by:

- Delivering greening outcomes which increase canopy cover, biodiversity and vegetation across the municipality
- Refining parking management to encourage fair and equitable use
- Delivering infrastructure and programs that encourage walking and bike riding
- Designing and engaging on integrated spatial policies and projects



- Further developing place-based strategies and land use policies
- Updating Local Planning Policy to increase greening and canopy cover, reduce heat and improve the indoor environment quality of new buildings
- Contributing to advocacy for Victorian Planning Policy and regulatory reform
- Delivering public realm projects and precinct management
- Providing urban design and heritage advice
- Advocating for investment and design improvements on state controlled public realm and transport projects
- Enhancing our streetscapes and public spaces through commissioning public art
- Creating policy and programs to facilitate appropriate use of public space for edible gardens and enhancing food security
- Advocating for more frequent and reliable public transport
- Advocate for early delivery of connections to public transport, public space and streetscapes, footpaths and bike lanes in Fishermans Bend

Who are our partners?

As many of the factors influencing the built and natural environment are outside of Council's control, partnerships with individuals and organisations in other sectors are crucial. Some of our key partners include:

- Fishermans Bend Taskforce and neighbouring municipalities
- Victorian Government including Department of Transport and Planning Department of Energy, Environment and Climate Action (formerly part of the Department of Environment, Land, Water and Planning) and Parks Victoria
- Melbourne Water
- EcoCentre
- Developers
- Community members and the community groups that represent them (such as the bicycle user group_
- Friends of parks or gardens groups

What may change over the next five years?

- Port Phillip will experience population growth and associated pressure on transport networks and parking.



- Extreme weather events are expected to become more frequent and intense.
- Use of public spaces will continue to become more contested as more people live in apartments, and parks replace backyards and urban spaces become the 'living rooms' where people meet and interact.
- The EcoCentre will be completed in late 2024, which will improve the centre's ability to deliver education, programs and services, which it does to more than 19 000 participants annually.
- The Blessington Street Outdoor Precinct may be dismantled when finances from the COVIDSafe Outdoor Activation Fund run out or are discontinued.

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