

SOUTH YARRA

URBAN FOREST PRECINCT PLAN 2025-35



CITY OF MELBOURNE

Acknowledgement of Traditional Owners

The City of Melbourne respectfully acknowledges the Traditional Owners of the land we govern, the Wurundjeri Woi-wurrung and Bunurong / Boon Wurrung peoples of the Kulin and pays respect to their Elders past and present.

We acknowledge and honour the unbroken spiritual, cultural and political connection they have maintained to this unique place for more than 2000 generations.

We accept the invitation in the Uluru Statement from the Heart and are committed to walking together to build a better future.

Council Plan 2021-25

The Council Plan 2021-25 sets out our strategic direction and commitment to the community for the next four years. Based on six strategic objectives for our city, this is our detailed plan for our city's revitalisation and considers the needs of all people who access and experience the City of Melbourne municipality. For more information visit melbourne.vic.gov.au/council-plan



Climate and biodiversity emergency

Melbourne is a city setting the standard on climate action. Prioritising our environment and taking urgent action to reduce emissions and waste is key to protecting public health, strengthening the economy and creating a city that mitigates and adapts to climate change.

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30 December 2024

Cover: Illustration by the artist Lilian Darmono

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FOREWORD FROM THE LORD MAYOR OF MELBOURNE AND COUNCILLOR



Melbourne's trees are justly famous for the character and the environmental benefits they bring to our city. More than 80,000 trees in our municipality are so important in cooling the streets and parks and providing habitat for birds and animals. We're very proud that all the trees we plant are thoughtfully planned through our Urban Forest Precinct plans.

The plans grew out of an Urban Forest Strategy that has embedded healthy city principles in our thinking. The social, environmental and health benefits of urban forests have become more clear with every year. From parks to wetlands, river embankments, balconies and roof gardens, Melbourne's urban forest creates an enjoyable and healthy place for people to work and live. Now we have an opportunity to renew our urban forest planning for the next decade.

The past ten years in Melbourne have seen innovative urban forest management across ten precincts. We celebrate and embrace the distinctive quality of each. A key part of our approach is planting trees appropriate to each neighbourhood, in consultation with the community. Building on these discussions, ten new Urban Forest Precinct Plans have been developed that will enhance each neighbourhood's character.

Why renew the plans? The beauty of Melbourne's trees and gardens has always enchanted residents, workers and visitors, and our urban forest planning must evolve to protect and expand this natural asset. Looking ahead, it's important to focus on climate change. This is crucial.

We recognise Melbourne's vulnerability to extreme heat, and we know that trees play a key role in reducing the impact of heat on people and wildlife. The great value of urban forest planning lies in increasing canopy cover, improving amenity and consulting with the community to maximise the benefits of trees for everyone in our city.

Creating healthy ecosystems, protecting biodiversity, becoming a water-sensitive city, reducing the urban heat island effect - all these aims help position Melbourne as a leader in urban forestry. These plans recognise and strengthen the deep connection our community has to the natural environment. In the next decade let's continue to create a legacy with an urban forest of which Melbourne can be proud.

A handwritten signature in black ink that reads "Nicholas Reece". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lord Mayor
Nicholas Reece

A handwritten signature in black ink that reads "Davydd Griffiths". The signature is bold and stylized, with a long horizontal stroke at the end.

Councillor Davydd Griffiths
Environment Portfolio Lead

THE URBAN FOREST

What is an Urban Forest?

The urban forest is made up of all of the trees and other vegetation – and the soil and water that supports it – within our municipality. It includes vegetation in streets, parks, gardens, plazas, campuses, river and creek embankments, wetlands, railway corridors, community gardens, green walls, balconies and roofs.

The land on which the City of Melbourne sits has been managed for thousands of generations by the Wurundjeri Woi-wurrung and Bunurong / Boon Wurrung peoples of the Kulin. The *urban* forest that we experience today is a result of our environmental, economic, social, political and cultural history.

What are the Urban Forest Precinct Plans?

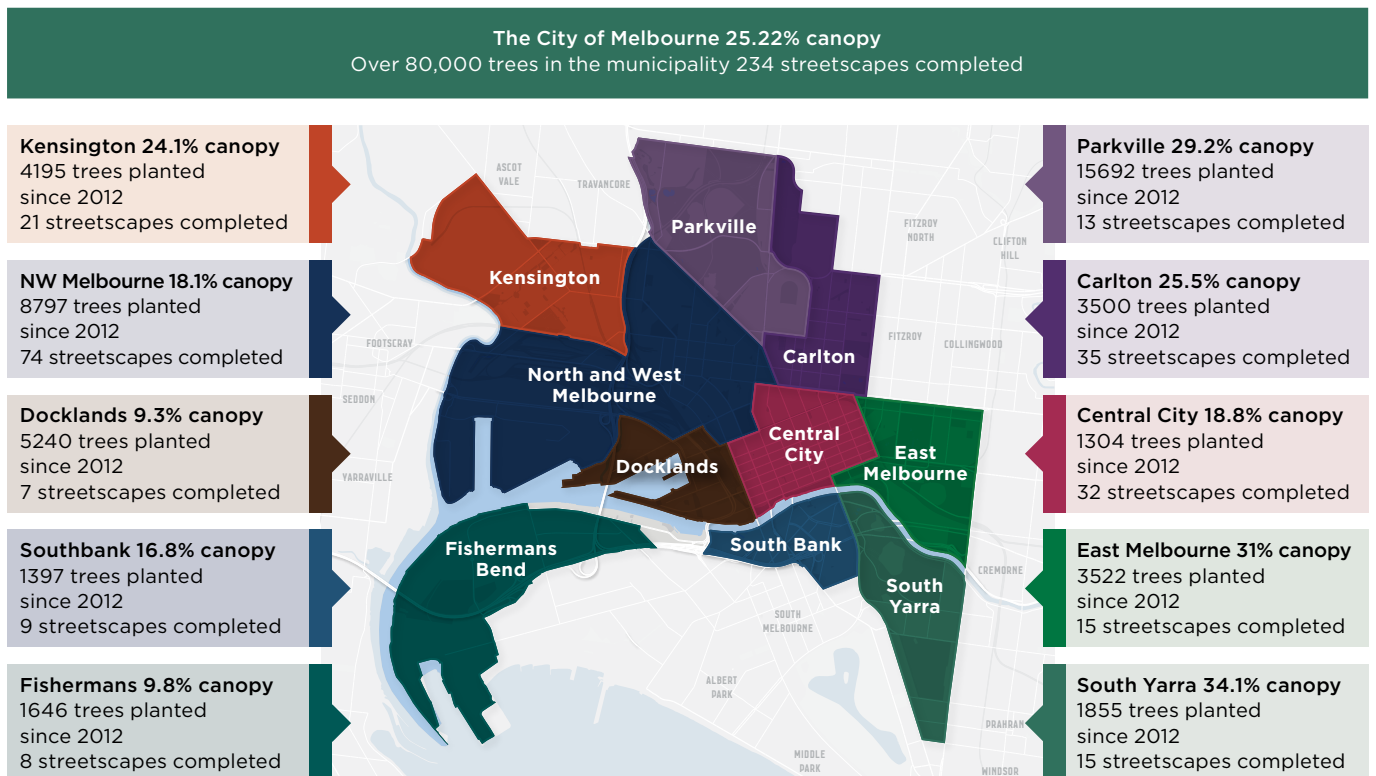
We have divided our municipality into 10 urban forest precincts (Map 1). The Urban Forest Precinct Plans guide tree planting in streets over a 10-year period. The precinct plans complement our 2012 Urban Forest Strategy and form a key component of the strategy’s implementation.

The precinct plans direct tree planting to achieve the Urban Forest Strategy objectives, protect and enhance neighbourhood character, and to prioritise works and budgets. The plans build on many decades of urban forest management and respect the legacy of thousands of generations of management of this Country.

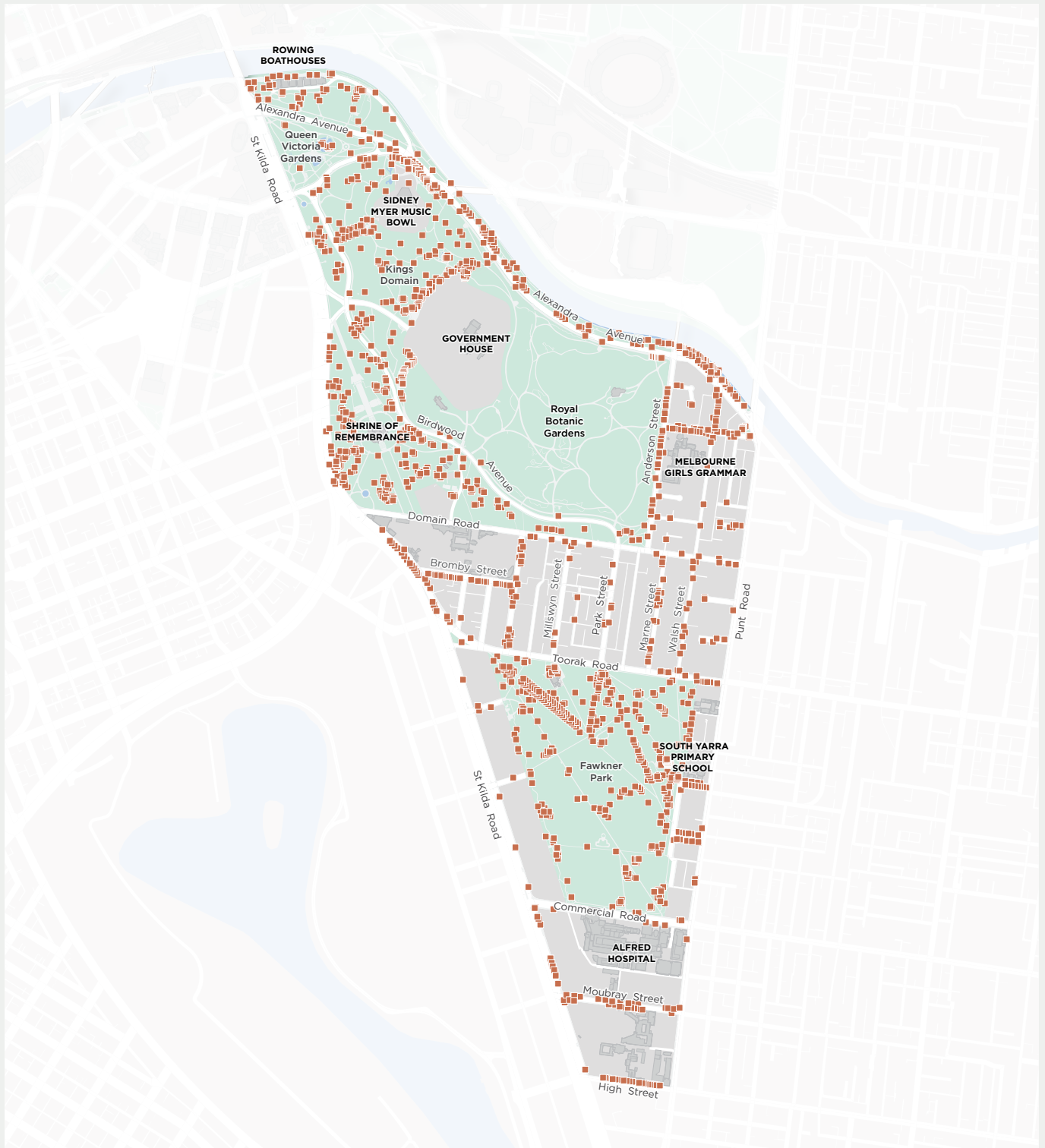
Each Urban Forest Precinct Plan has been developed together with the community. They are based on science urban design principles. The first round of precinct planning occurred between 2013 and 2015. Those documents were designed with the local community to determine shared vision for the urban forest.

Map 1. shows the targets outlined in the original Urban Forest Precinct Plan’s and the current canopy cover in each of the precincts. Since 2012 our trees numbers have risen to over 80,000 in the municipality with 1855 trees planted in South Yarra including 15 major street tree planting projects completed.

Map 1. Trees planted in the municipality



Map 2. Trees planted over the last 10 years in South Yarra



Key

- Trees planted since 2012
- Parks / green spaces



Why is the urban forest important?

Our Urban Forest Strategy (2012) was one of the first in the world. Since its introduction, many other strategies and policy documents around the world have been introduced that support a similar approach to supporting and building healthy cities through urban forestry.

Urban forests provide many environmental, economic and social benefits that make cities enjoyable places for people to live and work. Trees are appreciated for their beauty, but they also provide many other benefits.

Early urban forest management focused on how trees looked, but research in the 1990s began to quantify the other benefits of urban trees with cooling and slowing of stormwater recognised as particularly important. More recently, urban trees have been identified as integral to ecology in cities – urban trees support a wide variety of wildlife, are a key tool to help keep cities healthy, adapt to climate change and mitigate the urban heat island effect (whereby urban areas are several degrees hotter than surrounding rural areas).

Urban forests support human health and wellbeing in many ways:

- Cooling the city
- Supporting health, wellbeing and happiness of people
- Improving social connection
- Cleaning air and water
- Attracting people to live, work and visit the city
- Providing habitat for native birds and animals
- Stimulating economic activity in retail and dining precincts
- Creating a unique sense of character to an area
- Supporting cultural practices of First Nation people

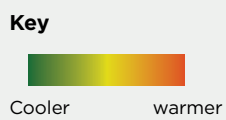
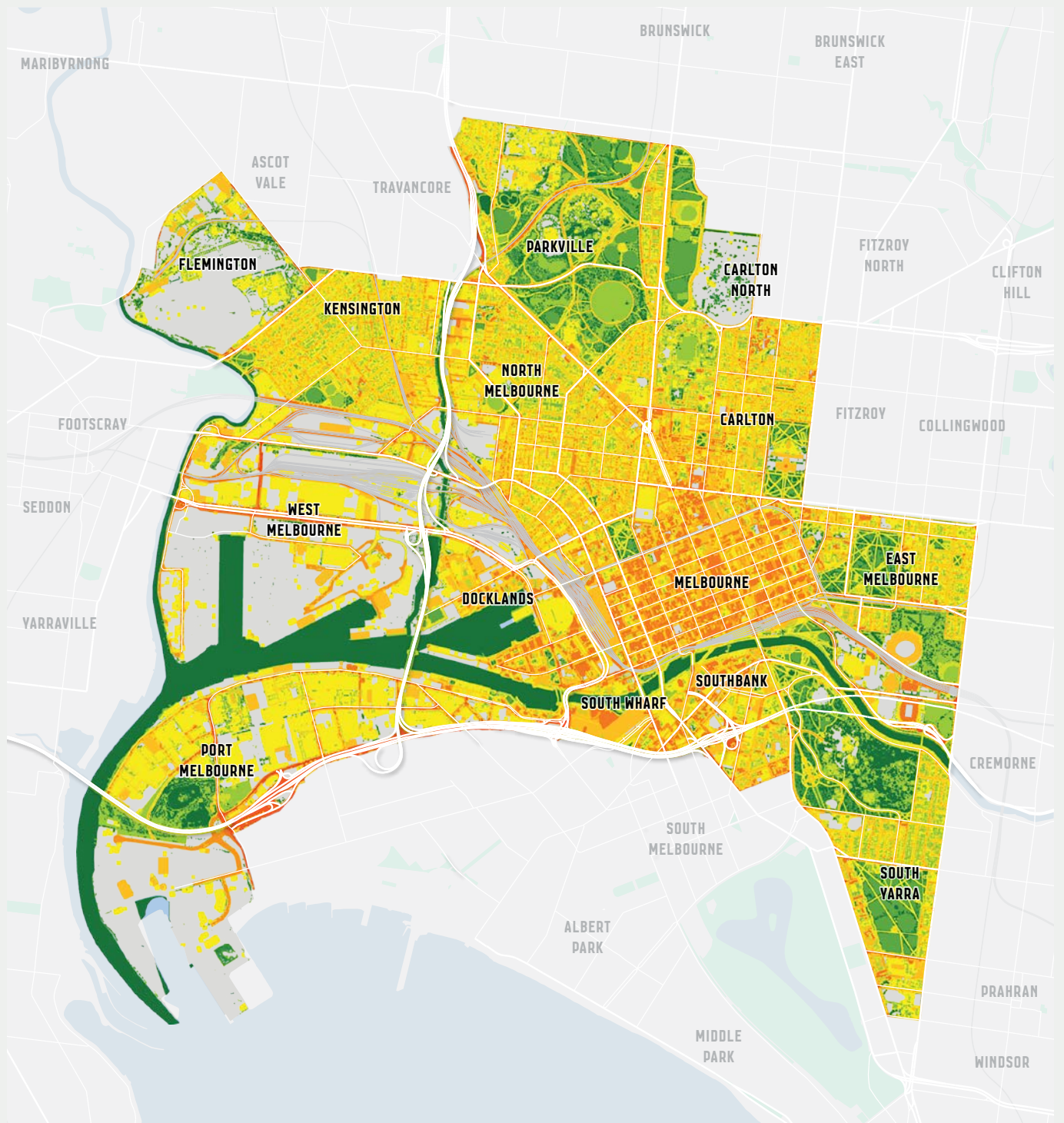
The urban forest has been identified as one of the most cost-effective ways to reduce the impacts of climate change and heat on our city. The Urban Forest Strategy has established principles and targets that will help us to maximise the benefits of the urban forest for people and wildlife.

How does the urban forest help with climate change?

Climate change impacts to human health and wellbeing are a significant concern for our municipality. Climate change science tells us that Melbourne is likely to experience an increase in the frequency and severity of extreme weather events such as heat waves, drought and flooding. Heat waves kill more people in Australia (and the world) each year than any other natural disaster (Coates et al 2014; 2022). When the global average temperature rises above pre-industrialisation levels by 1.5C it will likely cause major and irreversible damage to global ecosystems, putting liveability everywhere at risk. This critical 1.5C threshold is expected to be reached within the next ten years regardless of global emission reductions (World Meteorological Organization Report 1338, 2023).

The urban heat island compounds the effects of climate change. This means that central Melbourne will reach temperatures associated with heat related illness in vulnerable populations more often and for longer than surrounding suburban and rural areas. The urban heat island is a result of hard surfaces that absorb heat, human activity that generates heat and low vegetation cover that does not provide enough shade and natural cooling.

Map 3. A human thermal comfort model across the municipality, green represents the greatest human thermal comfort, whereas orange represents areas with the lowest human thermal comfort ranges.

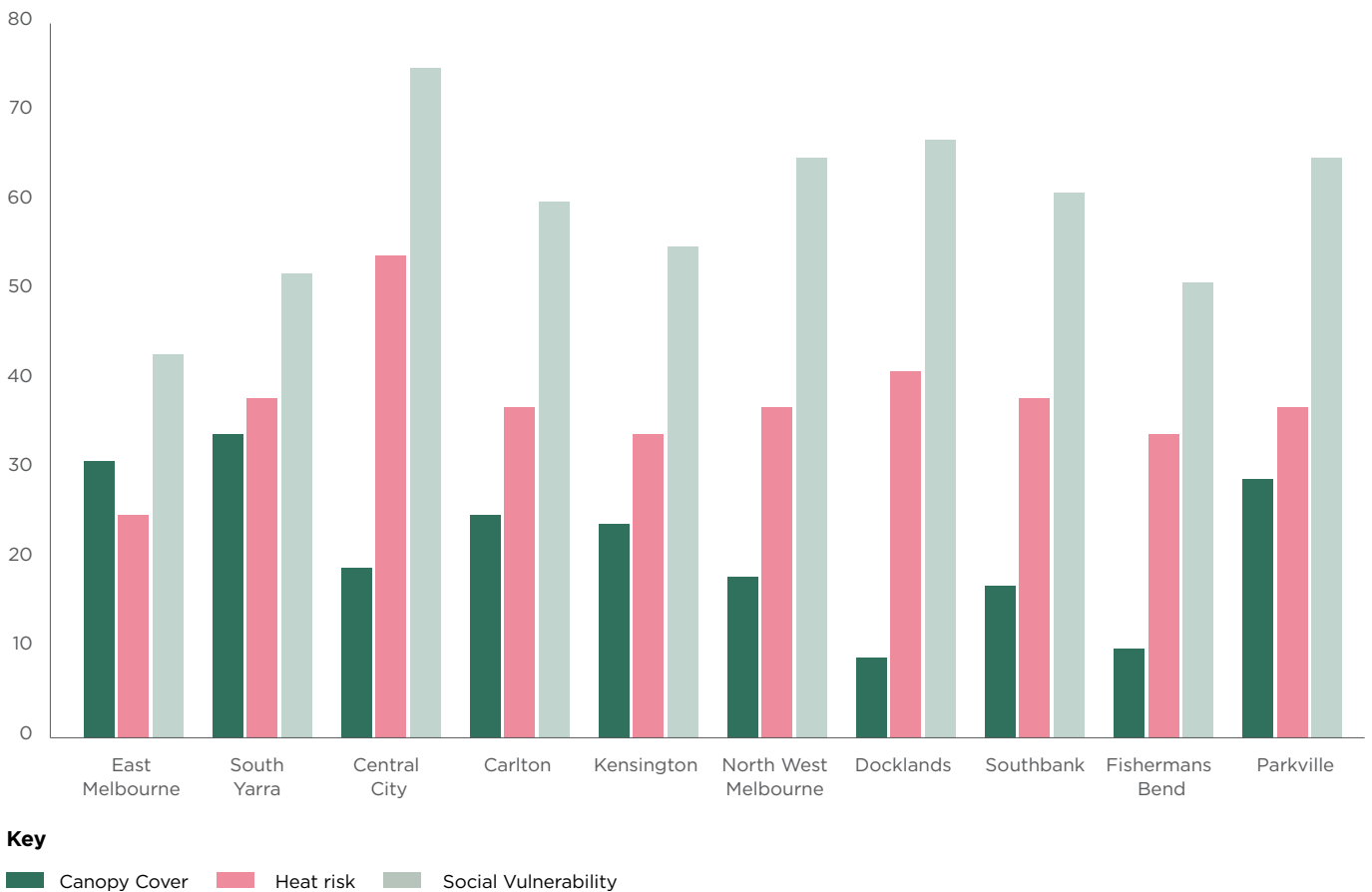


The City of Melbourne's heat vulnerability

We monitor heat vulnerability in the municipality by considering many factors. It is not only about where the hottest places are, but also about the level vulnerability of that local community to heat. Figure 1. shows social vulnerability, heat risk and canopy cover across the urban forest precincts. Social vulnerability is a measurement that considers information such as the numbers of very old or young people, people who need assistance, people renting,

people below the poverty line and other potentially isolated groups. The heat risk is a metric which combines exposure to heat, the number of heat hazard days and the social vulnerability. While the City of Melbourne is recognised as a liveable city, there are areas of high social vulnerability within each of our neighbourhoods and this increases our heat risks. Locations with high heat risk are often areas with low canopy cover as well. Planting trees can help to provide comfortable and cool places in areas of high heat risk. South Yarra has some of the lowest social vulnerability, heat risk and one of the highest canopy covers in the municipality.

Figure 1. Social vulnerability, heat risk and canopy cover across the urban forest precincts



The Urban Forest Strategy (2012 – 2032) sets out high level principles to guide management of Melbourne’s urban forest:

- Mitigate and adapt to climate change
- Reduce the urban heat island effect
- Design for health and wellbeing
- Create healthier ecosystems
- Design for liveability and cultural integrity
- Become a water sensitive city
- Position Melbourne as a leader in urban forestry

These principals are supported by targets to help us achieve a healthy urban forest:

- **Increase canopy cover;** achieve 40% by 2040
- **Increase urban forest diversity;** no more than 5% of one species, 10% of one genus and 20% of one family
- **Improve vegetation health;** 90% of our tree population will be healthy by 2040
- **Improve soil moisture and water quality**
- **Improve urban ecology;** protect and enhance urban ecology and biodiversity
- **Inform and consult with the community;** increase community understanding and connection to our urban forest

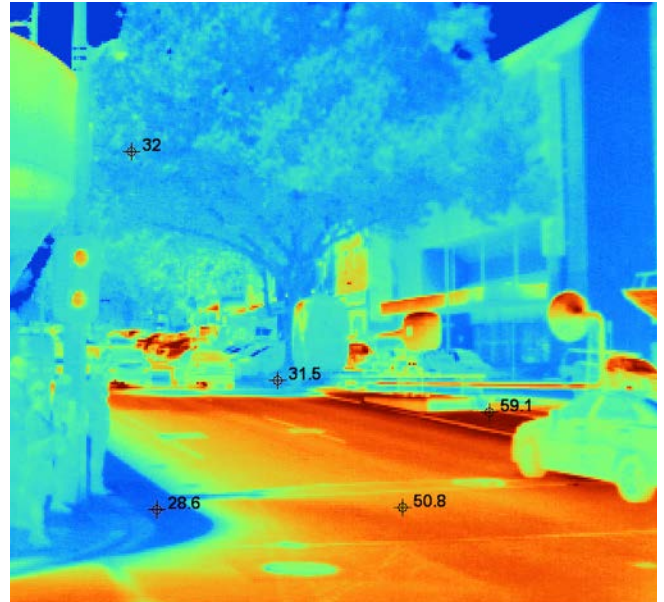


Image. Thermal image of Russel Street, Melbourne



Image. Urban street tree in the central city Melbourne

History of land management in Melbourne

We recognise that Aboriginal peoples are the First Nations people of this land and that they have strived to retain their cultures and identity through colonisation for more than two centuries.

The urban forest today is a mixture of plant types from all around the world, but it hasn't always been this way. Before buildings and roads came to dominate the landscape, this place was a more ecologically diverse environment. There were many different plant communities which indicated different soil types, as well as major areas such as rivers and swamps.

The Bunurong / Boon Wurrung people and Wurundjeri Woi-wurrung people are the Traditional Owners of the area known today as South Yarra. Colonisation had profound and irreversible impacts on the land, plants, animals and people. Prior to colonisation, the landscape was mainly grassy woodlands, riparian woodlands, reed swamps and swamp scrub. This land was actively managed for thousands of generations by the Bunurong / Boon Wurrung and Wurundjeri Woi-wurrung people.

Trees were an important part of Country prior to colonisation and continue to have cultural significance for First Nations people today. We believe that we can do better at respecting First Nation people values and priorities in the urban forest. The precinct plans present an opportunity to collaborate with Traditional Owners to ensure that the urban forest is managed in a way that protects and enhances its cultural importance. Through this plan, we aspire to:

- Respect Aboriginal values and priorities through the planning of the urban forest
- Maintain regular meetings with Traditional Owners to discuss management of our urban forest
- Identify culturally significant trees and collaborate with Traditional Owners on programs to protect and celebrate them
- Ensure that pre-colonial tree species and other vegetation are visible in the urban forest and throughout the city

These are not all of our aspirations and ongoing collaboration with Traditional Owners may lead to further opportunities.

The Manna Gum (*Eucalyptus viminalis*) is a culturally important tree for Traditional Owners, and the health and wellbeing of the Manna Gum in the municipality is of prime importance to continue our commitment to reconciliation. Currently, there are over 450 Manna Gums in the city, mostly located around Royal Park. Prior to colonisation, Manna Gums would have been found closer to waterways. The City of Melbourne is working with Traditional Owners on long-term programs to protect and celebrate Manna Gums throughout the city.

Images: Artistic representation of pre-colonial vegetation in the area now known as The City of Melbourne. All images created by ASPECT Studios and TCL Studios.





Early Treeless Melbourne

The colonisation of Melbourne had profound impacts on this land. The open woodlands, brackish swamps and herb-rich plains were quickly changed to a bare, compacted and dry landscape. Early paintings clearly show the widespread land clearing.

This changed landscape was then 're-built' to form the city we know today. The process of urbanisation changed the environment of the city, such as industrialisation polluting our soil and water and the compaction of our clay soils. After the initial colonisation of Melbourne, when indigenous bushland was cleared to make way for a township, trees were given little priority. In the early days trees were seen

as a resource to be used and little thought was given to the way the town looked. Between 1850 and 1870 the desire was to create shelter from wind and as quickly as possible. By the 1870s the city fully recognised the benefits of street tree plantings and in 1888 a planned program of street planting started. By the early twentieth century, planes, elms, oaks, poplars, lagunarias, chestnuts and palms were planted along the boulevards, streets and parks of Melbourne. For the drier areas north of Melbourne, kurrajongs, silky oaks, Moreton Bay figs, she-oaks and golden wattles were planted. This period shows a diverse range of trees planted and highlights that thought was given to trees environmental benefits and tolerances.

Images: Historic images of early Melbourne streets, and a 1854 painting (Nathanial Whittock)





SOUTH YARRA'S URBAN FOREST

Historical tree planting

Early tree planting in South Yarra was influenced by the need to create shelter from wind and sun. The first significant street tree plantings in the South Yarra precinct occurred in the 1850s when St Kilda Road was planted with fast growing blue gums and radiata pine. While the tree species have changed, St Kilda Road has continued to have trees planted there since this time. Elm trees were planted along Alexandra Avenue in approximately 1900 after the Yarra River was straightened. Boulevards were planted to make the streets look more beautiful in the lead up to the Royal visit in 1901. Records suggest that tree planting was occurring in Melbourne streets from that period up until World War I. Major tree planting occurred in South Yarra in the 1930s when the majority of roundabouts and median strips were constructed, historic photos show that lots of residential streets in South Yarra were planted prior to the 1940s.

South Yarra Character

The character of the urban forest in South Yarra is heavily influenced by the landscapes of the Royal Botanical Gardens (not managed by the City of Melbourne), Domain Parklands and Fawkner Park. These landscapes contain an eclectic mix of evergreen natives, conifers, deciduous trees and palms and this character is reflected in the diverse mix of street tree plantings in the precinct. The roads and footpaths throughout the precinct are relatively narrow (15 m) and providing space for canopy trees that means that trees are ideally planted in the road rather than the footpath.

Tree Diversity in South Yarra

The core tree genera that form South Yarra's urban forest are elms and planes, with the remainder of the forest being quite mixed. The precinct also contains lots of significant trees such as the golden elm on the corner of Punt Road and Alexandra Avenue, the *Eucalyptus cornuta* planted by Baron von Mueller at Rotary Corner and many others that are either heritage listed or on the City of Melbourne's Exceptional Tree Register. South Yarra has the highest percentage of exotic species and the lowest per cent of native species in the municipality.

South Yarra Community Vision

Community perspectives are central to our urban forest planning. A range of different community engagement approaches were used to capture diverse community perspectives. This plan reflects the many community ideas, priorities and values shared during this process.

“South Yarra’s urban forest preserves it’s green heritage with large old trees and parklands that include climate-adapted native trees, is a refuge from climate extremes, is open to the river and accessible to all, provides food for the community, and creatively embraces greening innovation such as vines, micro-forests and biophilic design”.

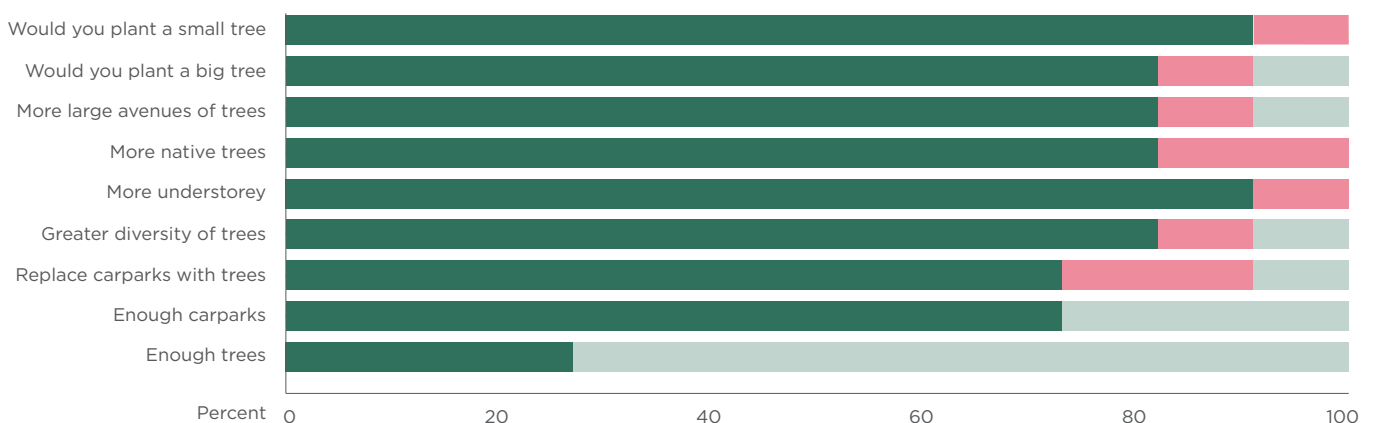
Your urban forest, community recommendations

A diverse range of views were expressed by the community, but some consistent themes can be used to guide future planting:

- South Yarra’s existing urban forest character is large old trees providing shade and green landscapes e.g. turf. This character should be maintained into the future where possible.
- It is acknowledged that range of species that contribute to this character (such as elms) are both abundant and potentially at risk from increasing temperatures, pests and diseases.
- There were polarised views on diversity and nativeness in the community. Street upgrades that increase nativeness and diversity should be tested further with local residents where possible.
- Understorey plantings are likely to be supported by the community provided that consideration is given to existing neighbourhood character.
- Some community members would like to see innovation around biodiversity and food such as understorey planting, and the use of indigenous, native and food tree species.

Map 4. shows the community priority places for greening from the community engagement in South Yarra. The community valued the urban forest for many different reasons and sometimes there were conflicting opinions. The major themes from our engagement are illustrated with representative quotes. These values are reflected in the vision statement.

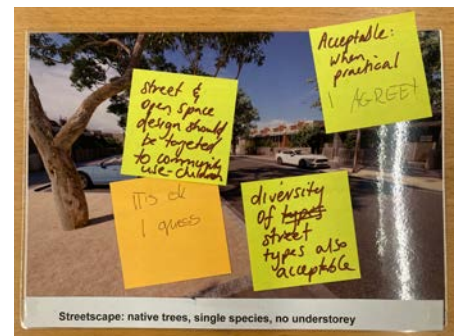
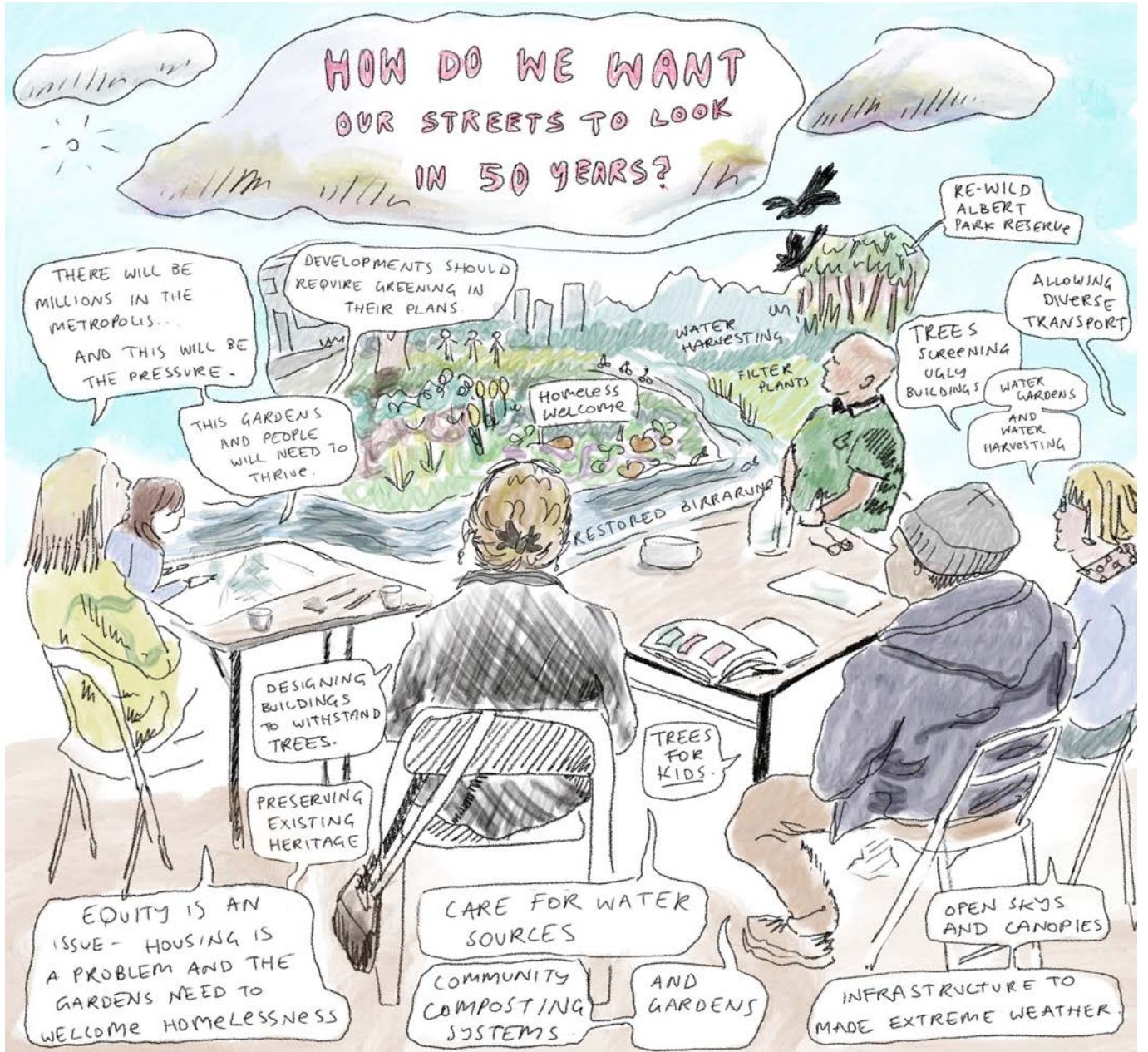
Figure 2. Community attitudes towards trees and competing demands in South Yarra



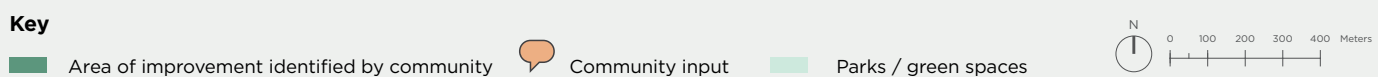
Key

Agree Disagree Neither

Images: South Yarra community workshop in March 2023



Map 4. Areas highlighted green for improvement based on community workshops. The comment icons indicate all the locations of in-depth comments posted by the community, with major themes and illustrative quotes from our engagement are also presented.







South Yarra

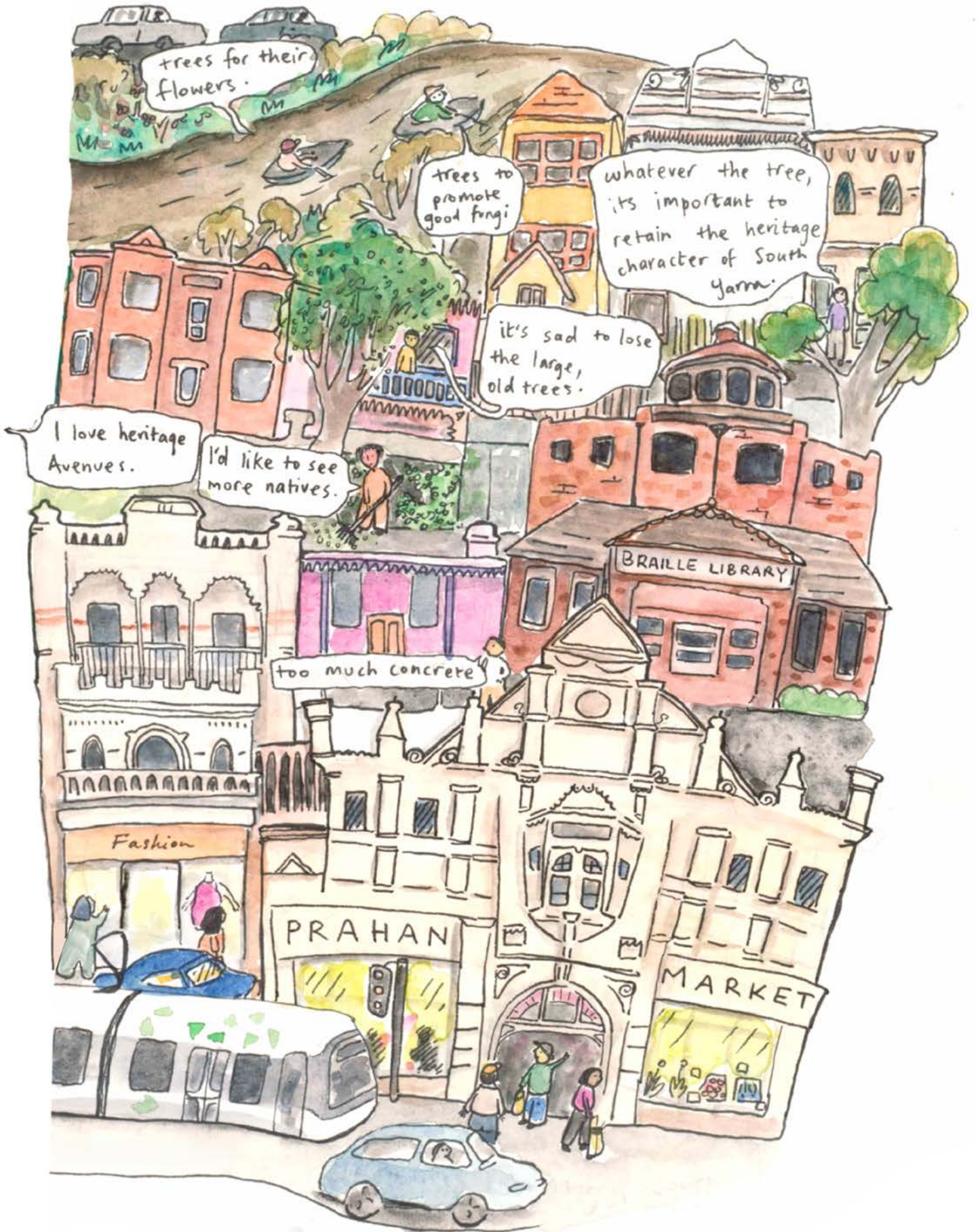


Image. Comics by artist Sofia Sabbagh