

Review of Strategic Direction **Box Hill Metropolitan Activity Centre Analysis & Options**

June 2019

Prepared by MGS Architects | TQ Planning
Movement & Place Consulting | SGS Economics & Planning



Company details

MGS Architects Pty Ltd
10-22 Manton Lane
Melbourne Victoria
3000 Australia
T 03 9291 9900
mgsarchitects.com.au

ABN13 006 488 302
ACN006 488 302

Directors

Eli Giannini
Chris Jones
Cameron Lacy
Robert McGauran
Mun Soon
Joshua Wheeler

Contact person

Robert McGauran
rmcgauran@mgsarchitects.com.au
Simon Wollan
swollan@mgsarchitects.com.au

Description

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Box Hill Metropolitan Activity Centre
Analysis & Options

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Client

Whitehorse City Council

Client Representative

Jeff Green
Kim Marriot
Allison Egan
Vanessa McLean

Consultant Team

Architecture, Urban Design &
Project Lead:
MGS Architects

Strategic & Statutory Planning:
TQ Planning

Demographics & Economics:
SGS Economics & Planning

Transport Planning:
Movement & Place Consulting

Landscape Architecture:
Mary Papaioannou

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Glossary of terms

ABS	Australian Bureau of Statistics
BHI	Box Hill Institute (formerly Box Hill TAFE)
BHTI	Box Hill Transit Interchange
BHURT	Box Hill Urban Realm Treatment — operational Council document providing guidelines for urban treatments within Box Hill
CBD	Central Business District
DELWP	Department of Environment, Land, Water and Planning (State Government of Victoria)
DDA	Disability Discrimination Act 1992
DDO	Design and Development Overlay
FAR	Floor Area Ratio — the ratio of a building's total floor area (gross floor area) to the size of the piece of land upon which it is built.
ITS	Integrated Transport Strategy
IV	Infrastructure Victoria
MAC	Metropolitan Activity Centre (<i>Plan Melbourne 2017-2050</i>)
MUZ	Mixed Use Zone
MSS	Municipal Strategic Statement
NEIC	National Employment and Innovation Cluster (<i>Plan Melbourne 2017-2050</i>)
NEL	North East Link
P&E Act	Planning & Environment Act 1987
PDZ	Priority Development Zone
PTV	Public Transport Victoria
R1Z	Residential 1 Zone (now superseded by reformed residential zones)
RGZ	Residential Growth Zone
SRG	Stakeholder Reference Group
VCAT	Victorian Civil & Administrative Tribunal
VIF	Victorian Government's Victoria in the Future forecasts
VPA	Victorian Planning Authority
VPP	Victorian Planning Provisions
WOSS	Whitehorse Open Space Strategy

Introduction

1

1.1 Project overview

1.1.1 Project Team, Project Scope and Timeline

MGS Architects was engaged by the Whitehorse City Council in December 2018 to prepare a review of the strategic direction for the Box Hill Metropolitan Activity Centre (hereinafter referred to as 'Box Hill' unless explicitly stated otherwise), alongside a multi-disciplinary team including TQ Planning (statutory and strategic planning), SGS Economics and Planning (economics and demographic projections), Movement and Place Consulting (strategic transport) and Mary Papaioannou Landscape Architecture (public realm).

Project team
MGS Architects Urban Design & Precinct Planning Project Management & Consultant Team Co-ordination
TQ Planning Strategic & Statutory Planning
SGS Economics & Planning Demographic & Economic Analysis
Movement and Place Consulting Strategic Transport Planning
Mary Papaioannou Landscape Architecture

The scope of the project is contained within the study area boundary identified in the *Box Hill Transit City Activity Centre Structure Plan 2007* (hereinafter referred to as the '2007 Structure Plan'), see Figure 1.1 opposite.

This boundary remains unchanged as there is adequate space within this study area to accommodate future projected growth, consistent with the principles of activity centre planning. The area contained within the boundary is 130 hectares.

The project has been prepared and delivered in three phases over a period of approximately nine months. Multiple key stakeholders have been engaged through critical points of the project. This report disseminates the key findings of Phase 1 of the project.

1.1.2 Purpose of Document

The purpose of this document is to provide a context for strategic decision-making by providing a summary of existing issues within the centre and provide options for alternative strategic planning approaches that could be incorporated into the strategic planning for Box Hill. This report will identify the key emerging issues within Box Hill, describe the strategic drivers of development and identify the key enablers of change.

The *2007 Structure Plan* forms the starting point for this planning investigation. The findings and analysis contained here seeks to review the first decade of implementation, extend the original analysis with new data and update the planning framework to respond to emerging trends and external influences.

This document will form a technical background report supporting the recommendations contained in the *Structure Plan Review* and *Urban Design Framework*, contained in separate volumes.

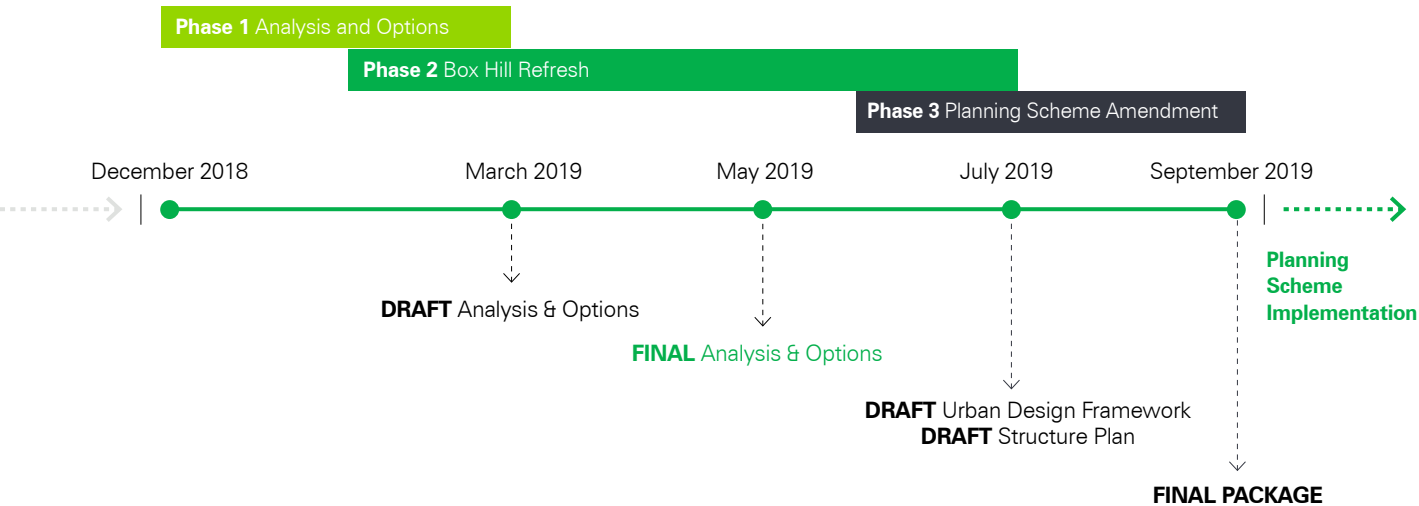
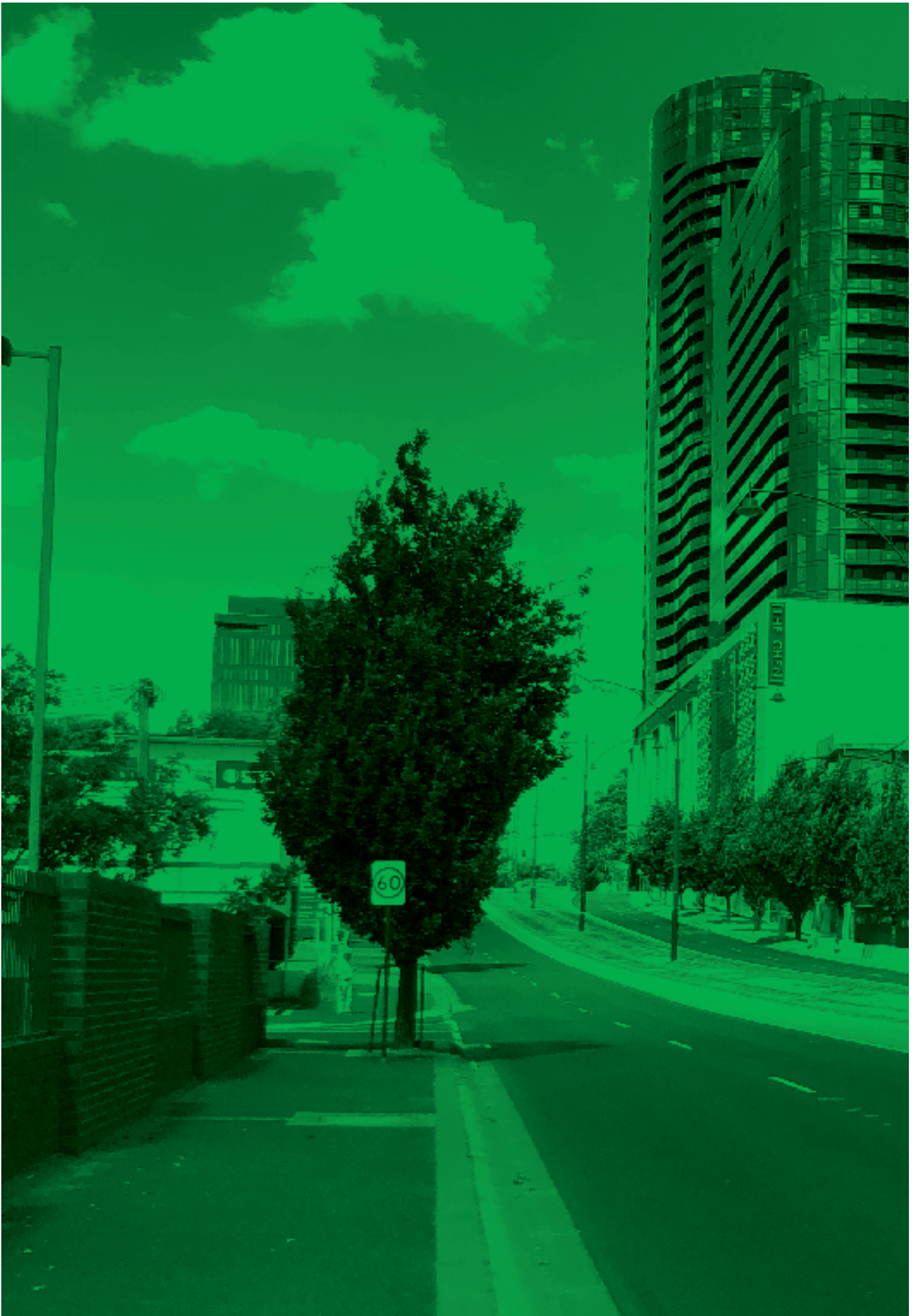


Figure 1.1 Geographical scope of the project





Strategic Context

2

2.1 Overview

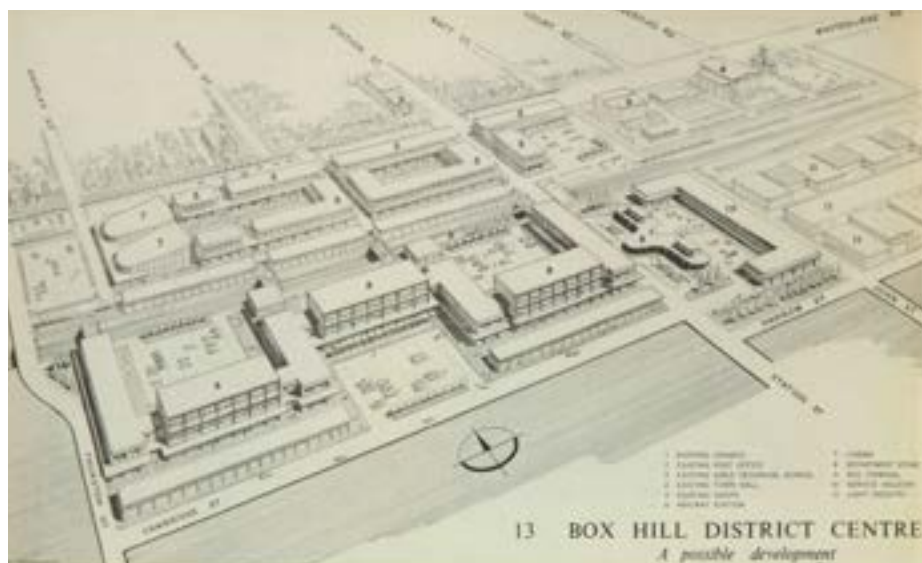
The Wurundjeri– Balluk Tribe are the traditional custodians of the land on which Box Hill is located. The tribe, whose traditional language is Woi Wurrung, is one of the five tribes that make up the Kulin nation. The tribe has historical links with the wider area now known as the City of Whitehorse extending over 40,000 years. Whitehorse City Council respectfully acknowledges the Traditional owners of the land which is now called Whitehorse, the Wurundjeri people and their elders past and present.

Box Hill is located approximately 14km east of Melbourne’s Central Business District (CBD). Box Hill is located in what is considered Melbourne’s ‘middle ring’ with a gateway role in connecting the outer region with inner Melbourne. The centre is located at an important location on the Lilydale and Belgrave rail line, Whitehorse Road and at the terminus of the 109 tram route.

Box Hill’s origins are completely dependent on transport and it being a focal point for economic activity and transfer of goods and services. This role has strengthened over time, though been less relevant over the last 50 years of automobile dependence. As traffic congestion increases we are now at a tipping point where Box Hill’s locational strengths could again be a key driver of growth.

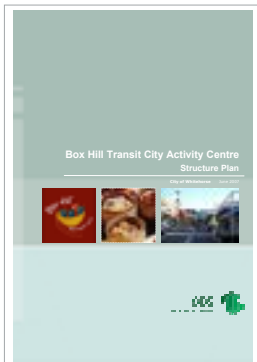
Box Hill has consistently been considered a strategic centre in Melbourne metropolitan planning policy since its designation as a District Business Centre in the 1954 Metropolitan Planning Scheme, see Figure 2.1. This has continued through to the current iteration of the metropolitan plan, *Plan Melbourne 2017-2050*. In each plan, the important regional role of the centre for the provision of employment, services and increased development has been reiterated.

Figure 2.1 A illustrative view of a ‘possible development’ of Box Hill District Centre in the 1954 *Metropolitan Planning Scheme*.



2.2

Box Hill Transit City Activity Centre Structure Plan 2007



The 2007 *Structure Plan* was written in the context of Melbourne 2030, with the aim of guiding the early stages of Box Hill's transformation into a higher-density transit oriented urban centre. There was explicit and general recognition, supported by Council, that Box Hill had the potential to support substantial growth in the transition from a suburban centre to an urban centre. The structure plan set out a framework for development with actions for both the public and private sectors in delivering the necessary amenity improvements that support the change.

The vision set out within the structure plan is as follows:

“Box Hill will be sustainable, safe and accessible to all. It will be a distinctive, vibrant, diverse, inclusive, participatory, caring and healthy community where you live, work and enjoy – day and night.”

Importantly, the vision is also composed of six constituent sub-points:

- Box Hill will be a place where people can live, work, shop and access social networks and personal services.
- Box Hill will be a focus for regional health care, educational and community services.
- Box Hill will support a diverse, inclusive, participatory, caring and healthy community.
- Box Hill will be a distinctive, vibrant and enjoyable place – day and night.
- Box Hill will be sustainable.
- Box Hill will be accessible to all.

Figure 2.2 'Activity Precincts' | Reproduced from the 2007 *Structure Plan*, pg.16



2.3 Key Changes in the Broader Strategic Planning Context Since 2007

In the time since the adoption of the *2007 Structure Plan*, there have been substantial changes in the broader strategic planning context that need to be considered in relation to their impact on the future planning for the Box Hill.

- Metropolitan planning for Melbourne has extended significantly in this time. In high-level terms, *Melbourne 2030* had a relatively greater emphasis on centre hierarchies derived from retail floor space and encouraging residential intensification within transit rich locations. *Plan Melbourne* extended the residential and retail planning by introducing a relatively stronger focus on the importance of supporting employment opportunities, health and community services and integrating transport planning into the consideration of the overall metropolitan form.
 - The shift in emphasis within metropolitan planning has coincided with an increased focus on jobs and economic development across government. The important economic and social role of the health and education sectors has been emphasised through increased recognition and new investment in major facilities. The particular importance of distributing these services across the whole city has become an important consideration for state government, both for their role in providing key services closer to where people live and also for distributing employment opportunities more broadly. Investment decisions for major transport infrastructure have also increasingly been considered in metropolitan terms.
 - The Victorian zoning regime has undergone significant reform since 2007. Of particular relevance is the removal of the Priority Development Zone (PDZ) which was a feature of the *2007 Structure Plan*. In addition to this, reforms to residential zones introduced mandatory and discretionary height controls. In Box Hill, the previous Residential 1 Zone (R1Z) was largely replaced by the reformed Residential Growth Zone (RGZ) with a discretionary maximum building height of 13.5m (nominally 4 storeys). Commercial zones were also reformed and simplified with the purpose of providing greater flexibility and growth opportunities. This allows for a broader range of as-of-right land uses including allowing for accommodation and retail uses within commercial zones.
 - Increasing house prices and greater numbers of apartment development have led to increased scrutiny of the role of planning schemes in facilitating both affordable housing and acceptable levels of internal amenity within higher density parts of the city. The *Better Apartment Standards* have influenced development typologies through the need for improved solar access and ventilation. More recently, affordable housing has been legislated as a specific objective of planning in Victoria, allowing for greater support for this housing sector to be implemented within planning schemes.
 - Activity centres across Melbourne have been a focus for contestation and divergent views amongst the wider community on acceptable development outcomes. A significant proportion of larger development applications have been subject to VCAT review, increasing costs and uncertainty both for applicants and the affected community members. During 2018, DELWP (Department of Environment, Land, Water & Planning) prepared new guidance and practice notes from the *Activity Centre Pilot Program* to clarify preferred planning approaches for activity centres, for example on the appropriate use of mandatory and discretionary heights to give greater planning certainty and guidance about preferred built form outcomes.
 - Other municipalities across Melbourne have begun to investigate and implement new planning tools that provide stronger guidance on preferred outcomes while allowing a managed level of flexibility to respond to individual circumstances. Tools such as Floor Area Ratios (FAR) and dwelling density controls have been successfully implemented by the City of Melbourne and Port Phillip to facilitate substantial change but constrain excessive intensification. These tools have also successfully been extended to include mechanisms to incentivise community benefits from intensive development through density bonus schemes. There are transferable lessons from other municipalities and interstate examples that could be applied to Box Hill.
- The impact on planning for Box Hill emerging from each of these shifts will be considered in detail in this document.**



2.4 Consultation Findings

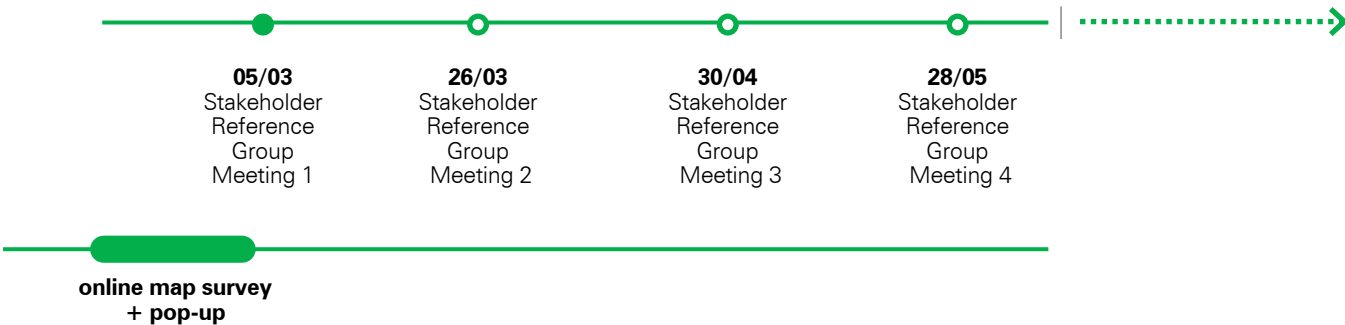
2.6.1 Consultation strategy

In reviewing the strategic directions for Box Hill, we have engaged with stakeholders and the wider community to fill the gaps in understanding of the key issues and concerns for future development. Engagement is a critical part of the project given the issues cited by the Panel Report in relation to the lack of engagement preceding Amendment C175. The Panel’s conclusions on the matter of stakeholder engagement noted that ‘the process of developing the DDO did not engage with relevant stakeholders who control land uses that are specifically identified in metropolitan policy for change...’ This is addressed as a priority within our approach. The current process has sought to extend on the existing submissions received by Council for the C175 amendment.

The stakeholder engagement and consultation strategy is composed of three main components:

- Direct engagement with key agencies and landowners for strategic development sites in the form of one-on-one or small group meetings;
- Broad public consultation using an online map survey and a pop-up event within Box Hill; and
- Establishing a Stakeholder Reference Group composed of key representatives from community, institutions, land owners and agencies

Each of these components has been started over the January-February period of the first phase of the project. The consultation process will continue through the remainder of the project. The preliminary findings to date are detailed in sections 2.6.4 - 2.6.6 of this report.



2.6.2 Consultation Themes

All consultation to date (in meetings and through surveys) has been structured using the same broad themes relevant to the *2007 Structure Plan*. This was conceived specifically to broaden the conversation beyond a focus on built form outcomes towards a wider range of potential opportunities for the plan to respond to. We asked participants to direct their feedback towards the following broad areas of interest.



Places and Spaces for People: this theme relates to public and community facilities, both indoors and outside. The questions covered the needs of the community as a whole as well as the more specialised needs of smaller community sectors such as the elderly, children and families. This theme also introduced cultural diversity as a topic for feedback.



Living in Box Hill: this theme relates to providing homes for a growing and changing community. The need to house a significantly larger future population was one consideration, as were the specific needs of families, students and an aging community. We made specific reference to different types of housing including higher-density apartments as well as lower height developments.



Working and learning in Box Hill: our questions highlighted the important role of the centre in providing employment opportunities and we raised the significant future employment growth as an important factor to consider. The questions within this theme introduced the important role of both small and large enterprises as well as health and education institutions as employment generators.



Shopping and visiting Box Hill: this theme provided a context for discussions about the people who visit Box Hill, their reasons for visiting and what attracts people to stay. This included visiting Box Hill for shopping, recreation, entertainment, for business or to visit friends.



Getting around Box Hill: this very broad category of questions concerned the multiple ways people get to, from and around Box Hill, including by walking, bicycle, public transport or private vehicles. Box Hill's major role as a transport interchange was a focus but also the challenges of managing traffic congestion and parking were introduced as topics to consider.



Buildings, character, and image: this area of discussion concerned questions of what Box Hill looks and feels like – its 'character', its 'image and identity' and what makes it a distinctive and special place for the whole community. The question of landmarks and key streetscapes was introduced considering both built form and the public realm.

2.6.3 Community Engagement Approach

The main component of the broader community engagement was an online map survey hosted on Whitehorse City Council's consultation website. The aim of this online interface was to rapidly engage with a potentially broad (though self-selected) portion of the community both living within and visiting Box Hill for work or recreation. The approach meant that the process was open to people who were not physically in Box Hill during the specific consultation period.

The structure of the interface allowed for both simple and deeper participation and feedback. Initially participants were invited to drop a pin on a map sorted by the consultation themes, and provide an open written response to two questions: "Why did you choose this location?" and "How would you like this place to look or feel in the future?" Participants were also asked to rate the place on a scale from "very bad" to "very good". Once pin feedback was given participants were invited to provide more detailed feedback in response to survey questions related to the theme of interest.

A pop-up event formed an extension of the online survey. Members of the project team plus council officers participated in a three-hour event within the Box Hill mall that was primarily intended to raise awareness of the survey but also secondarily intended to gain additional feedback from members of the community that might not otherwise have access to the website. Community members were invited to give feedback on a hard-copy survey or to go to the website to give their ideas.

The result of the combined online and pop-up was as follows:

- 70+ conversations at the pop-up event
- 771 unique visitors to the online map
- 122 pins provided by 54 authors
- 63 votes on the pin comments provided by 13 voters
- 31 people provided answers to the more detailed survey questions
- 8 survey responses were provided a written hard copy submissions
- Additional comments provided via Facebook

The online interface for the map and survey allowed the collection of basic demographic details of the participants. Of the 59 separate participants in the map interface (providing either pins, votes or comments), 29 were female (49%), 18 were male (31%) and 12 unknown (20%). Of the 31 participants in the detailed survey, 20 were female (65%) and 11 were male (35%).

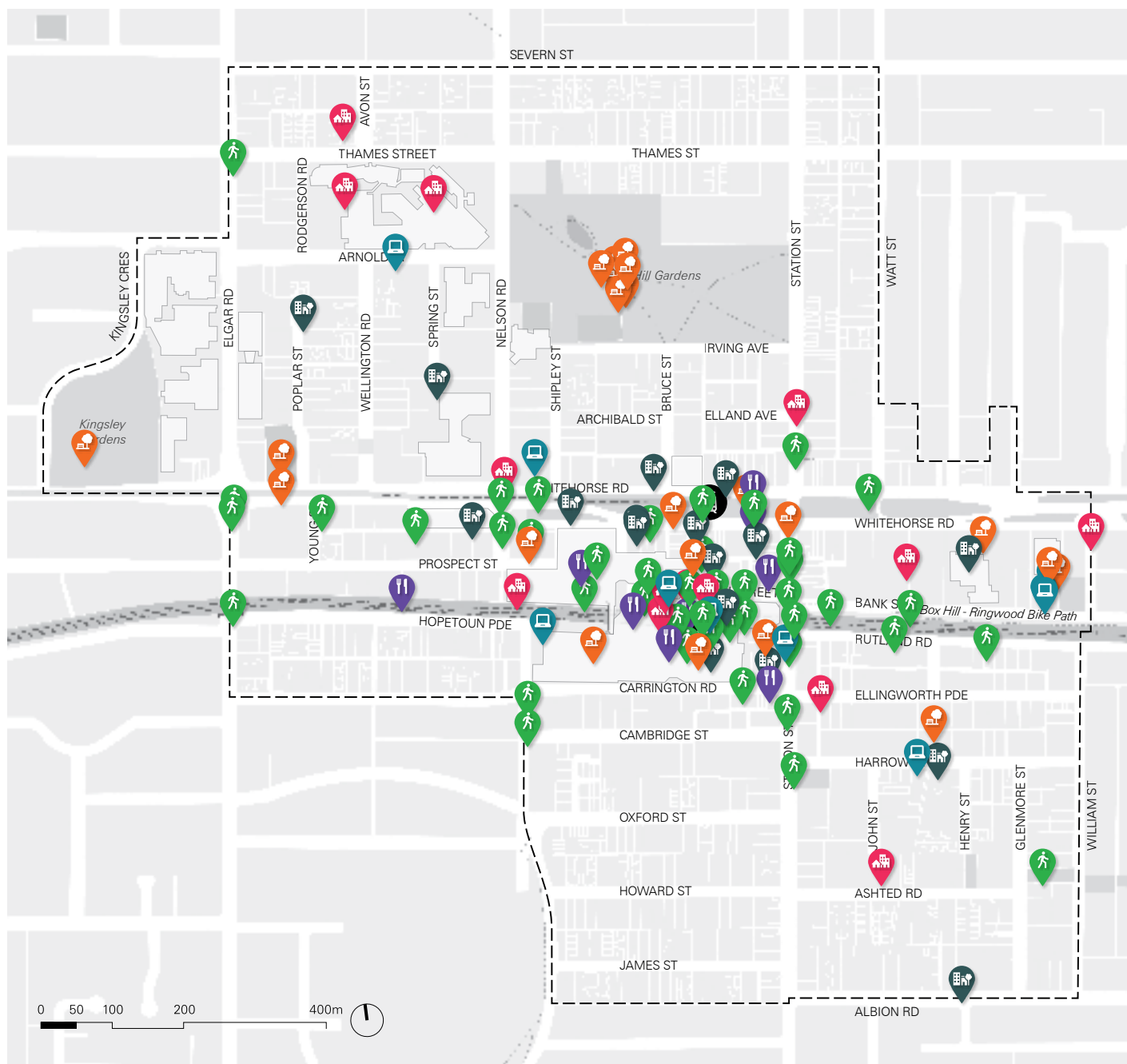


Figure 2.3 Survey results by theme

Legend

[] Structure Plan boundary

Pin themes

- Places and Spaces for People
- Living in Box Hill
- Working and Learning in Box Hill
- Shopping and Visiting Box Hill
- Getting around Box Hill
- Buildings, character and image

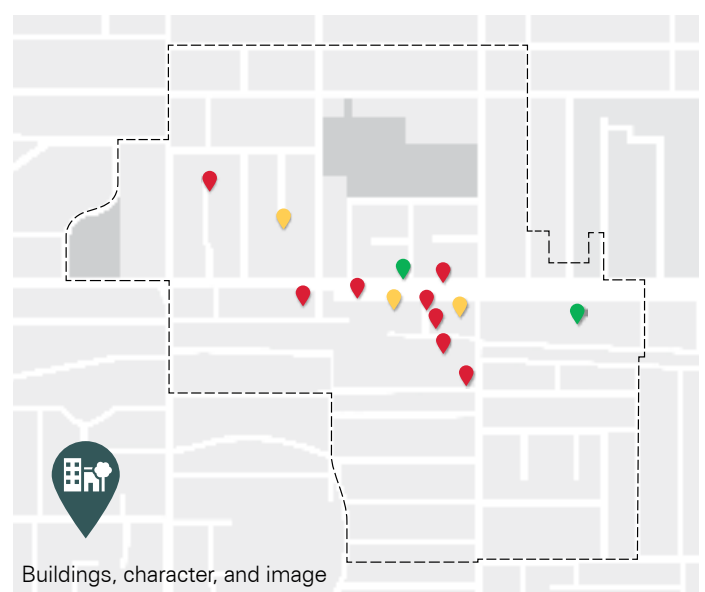
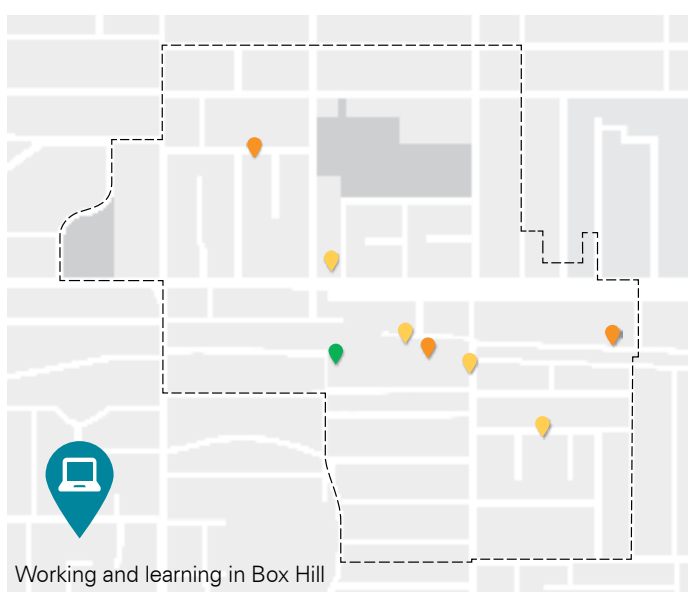
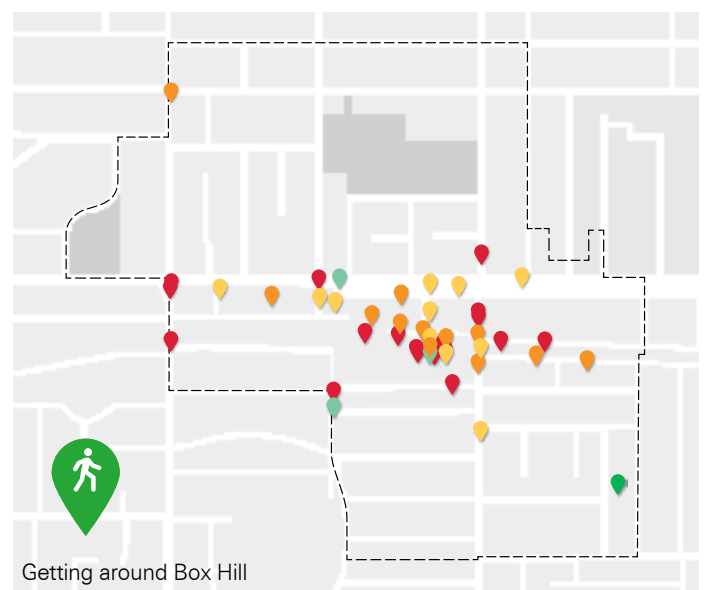
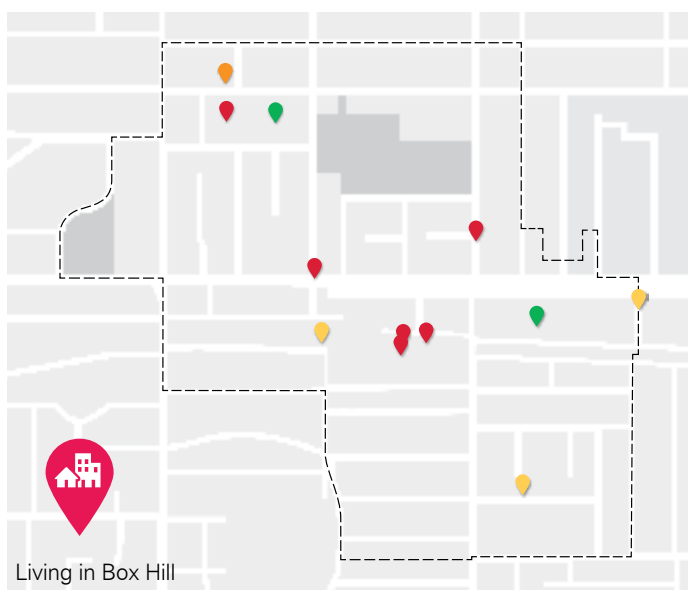
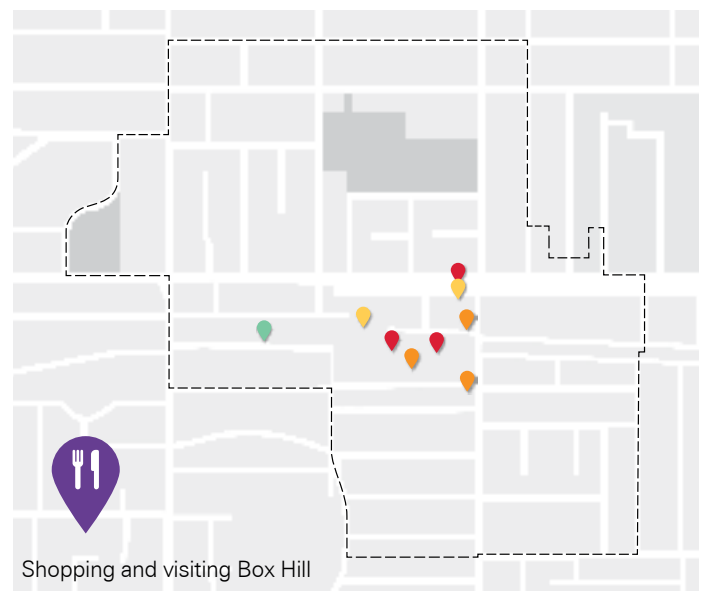


Figure 2.4 Survey results by ranking for each theme



2.6.4 Community Perspectives

A preliminary review of the responses to the map and the survey has provided a series of key perspectives to address through the structure plan process.

The importance of quality places

The places that received the most positive responses were predominately examples of public and community infrastructure. Box Hill Gardens, Kingsley Gardens, Box Hill Hospital, the library and the town hall were all identified as valued elements of Box Hill's identity. In the future these valued locations should look and feel similar to how they are now – the key message was that these important places should be protected. More access to leafy green places and more community space was described as important. Better connections between the bus and other transport interchanges was nominated as important, as was more nightlife and opportunities for more restaurants, shops and spaces for events.

Dissatisfaction with degraded facilities

In general terms there were many more places that received negative responses than positive. The poor quality of the transport interchange was repeatedly raised as a major issue, using words like old, dirty, shabby, narrow, crowded and poorly connected to describe it. The only positive aspect of the transport interchange was its functional value as a means to access multiple public transport options. Improved interconnectivity for pedestrians and mobility impaired patrons between buses, trams and trains was an obvious and repeated preferred future change, but so was the importance of clean and bright spaces that were safe and inviting and include greenery.

The interchange was not the only location described using these similarly negative terms. Many public areas (both in the public realm and the quality of private buildings) particularly in the core of the centre were also described as tired or dirty. The underpass across Station Street was repeatedly noted by respondents as a poor space for pedestrians and unsuitable for cyclists. Poor lighting in public spaces was also repeatedly raised as an important perceived safety issue.

Increasing congestion

Traffic congestion and parking issues was another dominant characteristic of many negative responses. Various respondents referred to the difficulty in driving through the centre and finding parking at the core. Equally, traffic was seen as a key barrier to walking around the centre, alongside inconsistent footpath quality and accessibility. The very poor quality of bicycle infrastructure was noted in multiple locations. Overall, however, the preferred future response to congestion and accessibility was surprisingly diverse. While some saw the importance of more parking, others suggested removing car parking and even the pedestrianisation of parts of the core to make it easier to get around. Improved north-south pedestrian connections across Whitehorse Road and across the rail line was mentioned repeatedly. Completion of major cycle routes was raised by more than one respondent.

Built form and character

Multiple respondents raised the issue of development scale. Many responses focussed on poor quality high rise development, loss of trees and the wind tunnel effect created by taller buildings. Interestingly, some responses that were highly critical of high rise apartments still nominated heights of up to five or six storeys as "lower rise" development that might be appropriate for the centre. There were multiple references to increasing the amount of greenery and a reduction in building bulk as a potential improvement. Multiple responses included references to the problem of uncoordinated development – neighbourhoods were described as collections of individual buildings with no unified vision. Multiple responses referred to the importance of leafy streets and good public spaces as a way to make the neighbourhoods feel like places.

Cultural diversity

A significant number of respondents pointed to tensions from a perceived dominance by two major cultural groups rather than the diversity more representative of broader Melbourne. Very few responses described Box Hill as a multicultural place at the moment, even though festivals and public places such as the fresh food market and Carrington Road were noted as positive features of the area. Multiple responses suggested that Box Hill would benefit from greater cultural diversity. Specifically there was a desire for a greater range of cultures to be represented in the range of shops and restaurants in Box Hill.

2.6.5 Stakeholder Perspectives

A Stakeholder Reference Group (SRG) has been established in order to more deeply engage with key stakeholders across the local community, major institutions, business groups, land owners, developers, and key government agencies. This group has met once but will continue to meet across the whole planning review process in order to ensure they are informed, involved, updated, tested and listened to and that their engagement is genuine and positive.

The first meeting of the Stakeholder Reference Group focussed on the overall vision for the centre. This included the broader aspects that make Box Hill distinctive and the future priorities for individual neighbourhoods and parts of the activity centre. Some of the key messages raised by participants included:

- The distinctive role of the transport hub, the hospital and Box Hill Institute amongst other activity anchors of Box Hill need to be explicitly referenced in the future vision for the activity centre.
- Box Hill's special role in providing diversified employment opportunities needs to be protected and enhanced. This will require explicit support for health and education institutions but also sensitive consideration of the challenges of incentivising office and startup spaces. There is a genuine risk of the erosion of employment opportunities over time if they are not better supported.
- The layers of Box Hill's history – including both buildings and major open spaces – needs to be celebrated as an important aspect of its character.
- Multicultural diversity is a core part of Box Hill's character, however Box Hill is maybe not as diverse as originally perceived. The centre currently effectively serves two dominant monocultures (predominantly Caucasian and predominantly Asian) and is not necessarily welcoming for all cultures. Box Hill needs to be welcoming for all cultures.

- The centre needs to be more easily accessible, both for pedestrians inside the centre and also for areas surrounding the centre. Improving access to nearby major open spaces will improve the amenity for residents within the centre. Improving access to nearby activities such as Deakin University will help integrate Box Hill within its region.
- Need for a radical recalibration of the town centre including significant growth in retail and entertainment as well as integrated community spaces, indoor and out.
- An appetite for provision of high quality workplaces within Box Hill.

The specific future plans (where these are known) for the key institutions and strategic sites in the centre (Council, Box Hill Institute, Box Hill Hospital and Vicinity Centres) will be discussed further in Section 3.4 of this report.

For reference, a copy of the presentation slides from the first Stakeholder Reference Group workshop is located in the Appendix to this report (Appendix 2).



Figure 2.5 Excerpt from presentation to Stakeholder Reference Group meeting

2.6.6 Councillor and Council Officer Workshops

Alongside workshops with stakeholders and engagement with the wider community, the project team has engaged in workshop discussions with Councillors and council officers on the future vision for Box Hill and its multiple neighbourhoods. Some early points of feedback include the following:

- The existing vision provides a positive message, but the words used are very broad and does not capture the distinctive qualities or strengths of Box Hill, see Figure 2.5.
- Ensuring that Box Hill remains open and welcoming is a core quality that needs to be emphasised. This refers both to the amenity and activation within the central area as well as the quality of the pedestrian and cycle links to the surrounding areas outside of the activity centre boundaries.
- There are distinctive strengths in relation to health and education that need to be articulated within the vision. Equally, the vision should relate to future employment trends and emerging opportunities for employment growth and change. The future vision needs to be agile enough to respond to change and have sufficient resilience to provide guidance through multiple cycles of change.
- Box Hill should be a place for people – the quality of the public realm and community infrastructure is critically important to ensure that the community feels welcome and included throughout the centre.
- Box Hill is made up of a lot of communities and a lot of parts. The vision needs to talk about multiple generations and their different relationships with the centre. It needs to be conceived of as a series of connected villages that come together to function as a city centre.

We can conclude that a redrafting of the vision is necessary. This will be discussed within the subsequent stages of the project.



Review of Box Hill Metropolitan Activity Centre

3

3.1 Economic and Demographic Projections

3.1.1 Trends and Drivers of Growth

The Box Hill has the unique distinction of an ongoing designation as a metropolitan activity centre since 1954. The current structure plan for the activity centre was adopted in 2007 and sought to encourage investment in the centre – both employment and housing – to underpin future economic growth in Whitehorse.

Over the last 10 years, Box Hill has experienced strong population growth, growing from 6,400 in 2006 to 8,500 in 2016 (an average growth rate of 2.9% per annum). Growth of the working age population and tertiary students has been particularly strong.

In the same period growth in employment has grown at a rate of 2.3% per annum. Growth in the health and education industry sectors was particularly strong. These sectors added an estimated 2,500 and 600 jobs respectively between 2006 and 2016 (average growth rates of 4.7% and 5.1%).

Future employment growth is likely to be influenced by the deepening of the knowledge economy, further strengthening of the health and education specialisation, and opportunities for retail growth. The proposed suburban rail route would result in better connectivity between Box Hill to areas to the north and south and further increase the attractiveness of the activity centre for firms and households.

3.1.2 Population and Housing Forecasts

The project team have prepared population and employment forecasts for Box Hill drawing on the Victorian Government's Victoria in the Future (VIF) forecasts. The VIF forecasts are prepared at the SA2 level and then assigned to smaller geographies ('travel zones'). For population, this assignment process is based on recent trends in housing development and the capacity for dwellings, derived from a variety of sources (e.g. the Urban Development Program, VPA Precinct Structure Plans, renewal precinct specific information and state and local planning policy documents).

Two population forecasts have been provided. The first is based directly on the VIF forecasts, whilst the second assumes a slightly slower rate of population growth. This second scenario considered the possibility that the high number of recent residential approvals suggests a degree of speculative planning approval activity, which may not be an accurate reflection of the true extent of latent demand.

Taking these two scenarios as a range, the population of the activity centre is forecast to grow by between 8,400 and 10,100 people between 2016 and 2036. This would translate to demand for 4,200 to 5,000 additional dwellings. Table 3.1 shows the population and dwelling forecasts under both scenarios in 2036.

Table 3.1 Population and Housing Forecasts

	2016	Base forecasts			Revised forecast (lower population growth than base)		
		2036	2016-36 growth	Growth rate	2036	2016-36 growth	Growth rate
Estimated Resident Population (ERP)	8,500	18,600	10,100	4.0%	16,900	8,400	3.5%
Structural Private Dwellings (SPD)	3,900	8,900	5,000	4.2%	8,100	4,200	3.7%

Source: SGS Economics & Planning, derived using VIF 2016.

3.1.3 Employment Forecasts

Employment forecasts for the activity centre are derived from VIF total labour force growth estimates for the State and Greater Melbourne. This growth is assigned to smaller areas, by industry, using ABS Census Journey to Work data and the ABS Labour Force Survey.

Two employment scenarios were considered. The first is SGS's base employment forecasts for the activity centre, whilst the second assumes a slightly higher rate of growth in office, retail, health and education. This second scenario reflects the findings of early stakeholder consultations that have suggested significant appetite to grow employment in these sectors.

The resulting employment growth forecasts for the 20 year period to 2036 are in the order of 8,400 to 11,000 additional jobs. Table 3.2 outlines the employment forecasts by broad land use type for each scenario to 2036. The largest employment growth is forecast in the health sector, followed by office-based employment.

Table 3.2 Employment Forecasts

	2016	Base forecasts			Revised forecast <i>(higher employment growth than base)</i>		
		2036	2016-36 Growth	Growth rate	2036	2016-36 Growth	Growth rate
Office	7,500	10,100	2,600	1.5%	11,100	3,600	2.0%
Retail	2,800	3,800	1,000	1.5%	4,100	1,300	1.9%
Industrial	100	100	-	0.0%	100	-	0.0%
Education	1,500	2,400	900	2.4%	2,700	1,200	3.0%
Health	6,200	9,900	3,700	2.4%	10,900	4,700	2.9%
Entertainment/ Recreation	100	200	100	3.5%	200	100	3.5%
Construction	300	400	100	1.4%	400	100	1.4%
Total	18,500	26,900	8,400	1.9%	29,500	11,000	2.4%

Source: SGS Economics & Planning derived from VIF 2016.

3.1.4 Floorspace Demand

These forecasts for dwelling and employment growth have been converted into floorspace demand to understand the additional floor space required in the activity centre, see Table 3.3. Employment floorspace requirements have been estimated using floorspace to job ratios by land use type. Residential floorspace requirements have been estimated using an average dwelling size assumption. These floor space estimates are for the gross floor area of new buildings, excluding areas for parking. Demand for additional employment floor space is in the order of 266,000 to 346,000 square metres. Over half of this demand is for health floorspace. Demand for office and education floorspace is also forecast to be significant. Demand for additional residential floor space is in the order of 417,000 to 498,000 square metres.

Combining the VIF forecasts and the revised forecasts (higher employment growth and lower residential growth than the base forecasts) suggests that the total demand for additional floor space could be between 763,000 and 764,000 square metres.

These floor space forecasts are intended to inform future planning for the activity centre by providing an indication of the quantum of additional floor space required, the mix of employment and housing, and the mix of different types of employment floor space.

To facilitate the efficient development of the additional floor space required to satisfy forecast demand, future planning will need provide development opportunities that are in excess of the identified floor space requirements.

Table 3.3 Floorspace Demand Forecasts (square metres)

	2016	Base Forecasts		Revised Forecast (lower population; higher employment)	
		2036	2016-36 Growth	2036	2016-36 Growth
Office	187,000	253,000	66,000	278,000	91,000
Retail	84,000	113,000	29,000	123,000	39,000
Industrial	8,000	8,000	-	8,000	-
Education	92,000	146,000	54,000	161,000	69,000
Health	185,000	297,000	112,000	327,000	142,000
Entertainment / Recreation	8,000	13,000	5,000	13,000	5,000
All Employment Floorspace	564,000	830,000	266,000	910,000	346,000
Residential Floorspace	391,000	889,000	498,000	808,000	417,000
Total Floorspace	955,000	1,719,000	764,000	1,718,000	763,000

Source: SGS Economics & Planning, derived from VIF 2016.

Note: The 2016 floorspace estimate is based on job to floorspace ratios applied to employment estimates in 2016, due to data limitations on current floorspace within Box Hill.



3.2 Emerging Urban Character

3.4.2 Street and block characteristics

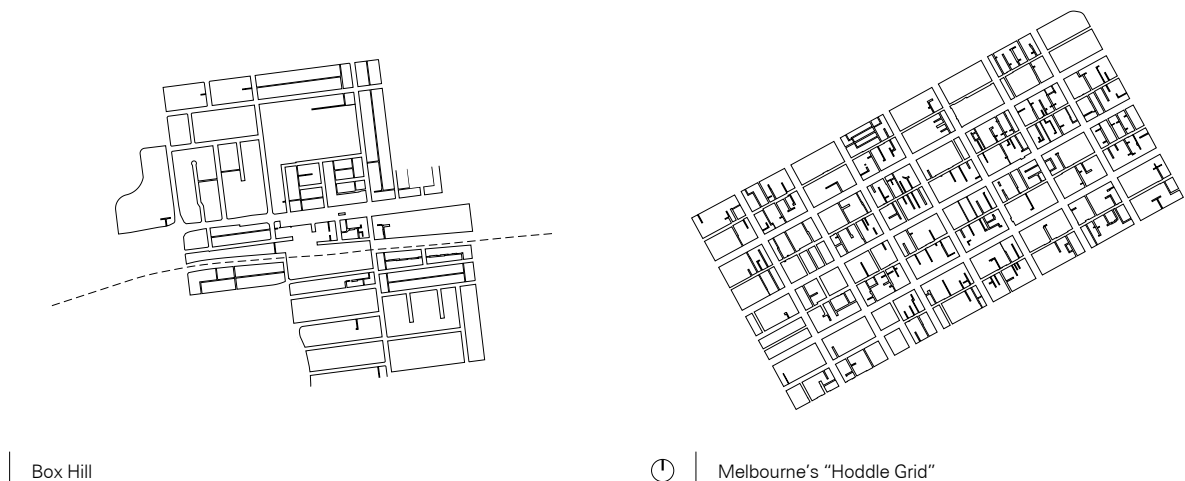
The streets of Box Hill are distinct from many other centres in Melbourne. Box Hill's street grid is defined by two parallel transport corridors of Whitehorse Road and heavy rail. Box Hill's streets are few, narrow and suburban in character and form comparatively large urban blocks — these are not CBD-type characteristics which typically have smaller urban blocks coupled with an extensive network of streets.

Box Hill characteristics include:

- Two large transport corridors - Whitehorse Road (60 metres wide) and heavy rail (30 metres wide).
- Narrow suburban streets of 15 and 20 metres wide, including the two major north-south streets of Elgar and Station Streets which are 20 metres wide.
- Large urban blocks with limited permeability with the exception of the traditional town centre and the area bounded by Shipley Street and Station Street north of Whitehorse Road.
- South of Box Hill Central largely consists of horizontal urban blocks 300-400 metres in length. The lack of north-south laneways results in poor levels of permeability.
- North of Whitehorse Road features a mixture of substantially large blocks (except for Shipley and Station Streets) and narrow suburban streets.

Figure 3.1 compares Box Hill with Melbourne's CBD at the same scale, illustrating the clear difference in street and block typology. The street grid of Melbourne's CBD has a clearly defined and legible geometry with generous 30 metre wide streets that are complemented by smaller parallel east-west 10 metre wide streets and an intricate and predominately north-south network of laneways. By contrast, Box Hill's street grid has an irregular geometry with fewer and narrower streets and a comparatively limited network of laneways. These characteristics inevitably create tension for road space allocation between modes of transport and their capacity, the public realm and their amenity. As Box Hill grows, so will this tension, which highlights the need for their deliberate resolution towards achieving the future vision of Box Hill. This underscores the need for an overall strategy for the activity centre's streets and laneways.

Figure 3.1 Comparison of streets and blocks of Box Hill and Melbourne CBD (shown to same scale)



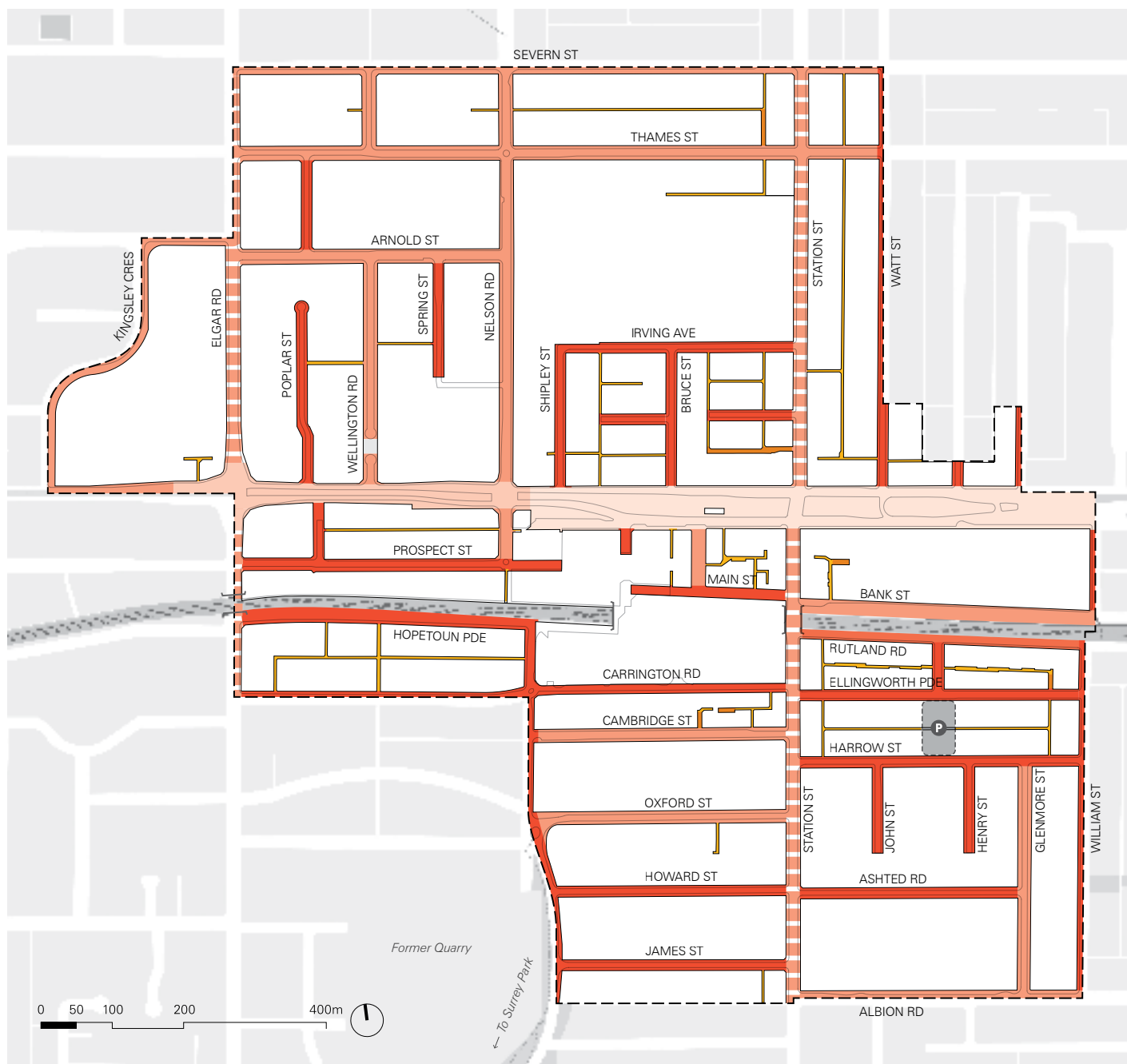


Figure 3.2 Street width

- Legend**
- Structure Plan boundary
 - Street type & width**
 - Major arterial road | 60m
 - Arterial road | 30m
 - Key north-south street | 20m
 - Local street | 20m
 - Local street | 15m
 - Wide laneway | 6 - 10m
 - Laneway | 3 - 6m
 - Street edge | kerb

3.4.3 Lot size

The total area of all lots (including parks and crown land but excluding road reserves) in the Box Hill activity centre is approximately 100 hectares. A substantial amount of land is held by larger institutions such as Box Hill Institute (approximately 7.8ha) and Box Hill Hospital / Epworth Eastern (5.5 ha). The largest single non-institutional landholder is Vicinity, the owner of Box Hill Central (approximately 3.6ha of leasehold VicTrack land and 1.8ha of freehold).

The fabric of land parcels demonstrates some important characteristics that differ by individual neighbourhood.

- A cluster of lots near to the intersection of Station Street and Whitehorse Road, extending as far west as the Market Street Mall and south to Ellingworth Parade, provide a distinctively narrow width subdivision pattern consistent with this area's original role as the town centre. The average size of lots in this area is 380m² but the majority of lots are sized between 200–550m², which is notably different to other parts of Box Hill.
- The commercially zoned land between Rutland Road and Ellingworth Parade provides another cluster of anomalously small lots in a single area. Most lots within this neighbourhood are sized between 450–600m², with quite consistent rhythm of lot dimensions and proportions.
- The subdivision pattern of lots adjoining Prospect Street defines a coherent precinct with consistent lot sizes and depths. The lots in this area are generally a little larger, with a median size of 1200m².
- Apart from the larger institutional landholdings or consolidated sites, most other areas within the activity centre boundary have lot sizes that are typical for suburban house subdivisions across Melbourne, ranging between 700–900m².

3.4.4 Lot access and street frontage width

The type of access to lots has implications on how future development may impact the public realm, streetscapes and the broader movement network. For instance, proposed developments on lots with a narrow single street frontage would necessitate cross over access to car parking within these developments from the street frontage. Wider lots with two or more frontages have increased flexibility in relation to prioritising pedestrian amenity by locating vehicular access away from key pedestrian movements. Figure 3.5 demonstrates how lot access varies across Box Hill due to its street and block characteristics.

Lot access characteristics:

- Poplar Street consists predominately of single-frontage lots. This is similarly reflected in the residential areas south of Cambridge and Harrow Streets.
- Large proportion of lots on Rutland Road, Ellingworth Parade and Prospect Street (Fairbank Lane) are serviced by narrow rear laneways.
- The fine grain of the existing laneway network between Nelson and Station Streets results in the majority of lots having two frontages or more. This is similarly reflected along Station Street and part of Thames Street.

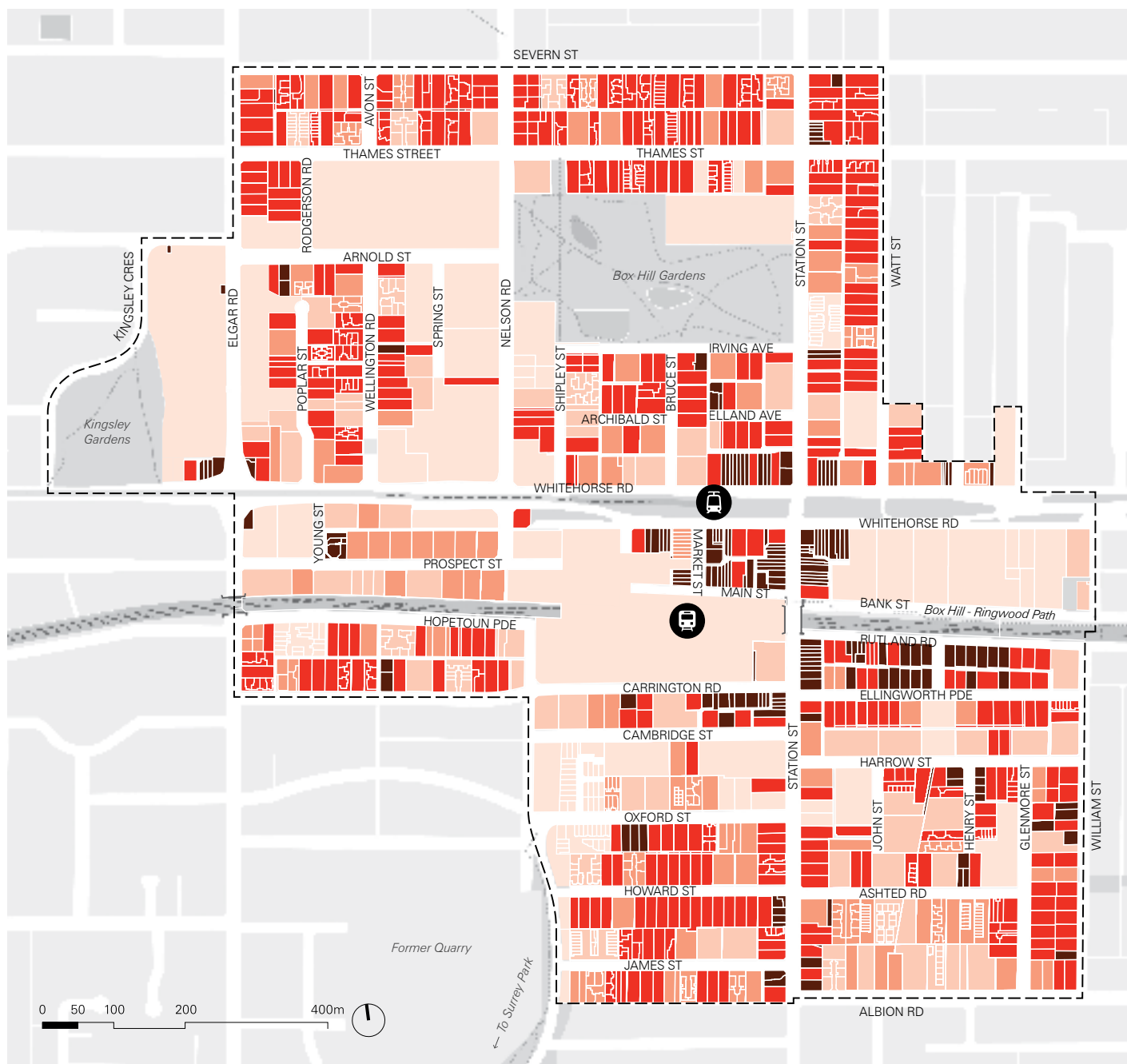


Figure 3.3 Lot size

Legend

[] Structure Plan boundary

Lot Size (m²)

- 0-500 | very small
- 500-1000 | small
- 1000-1500 | medium
- 1500-3000 | large
- > 3000 | very large

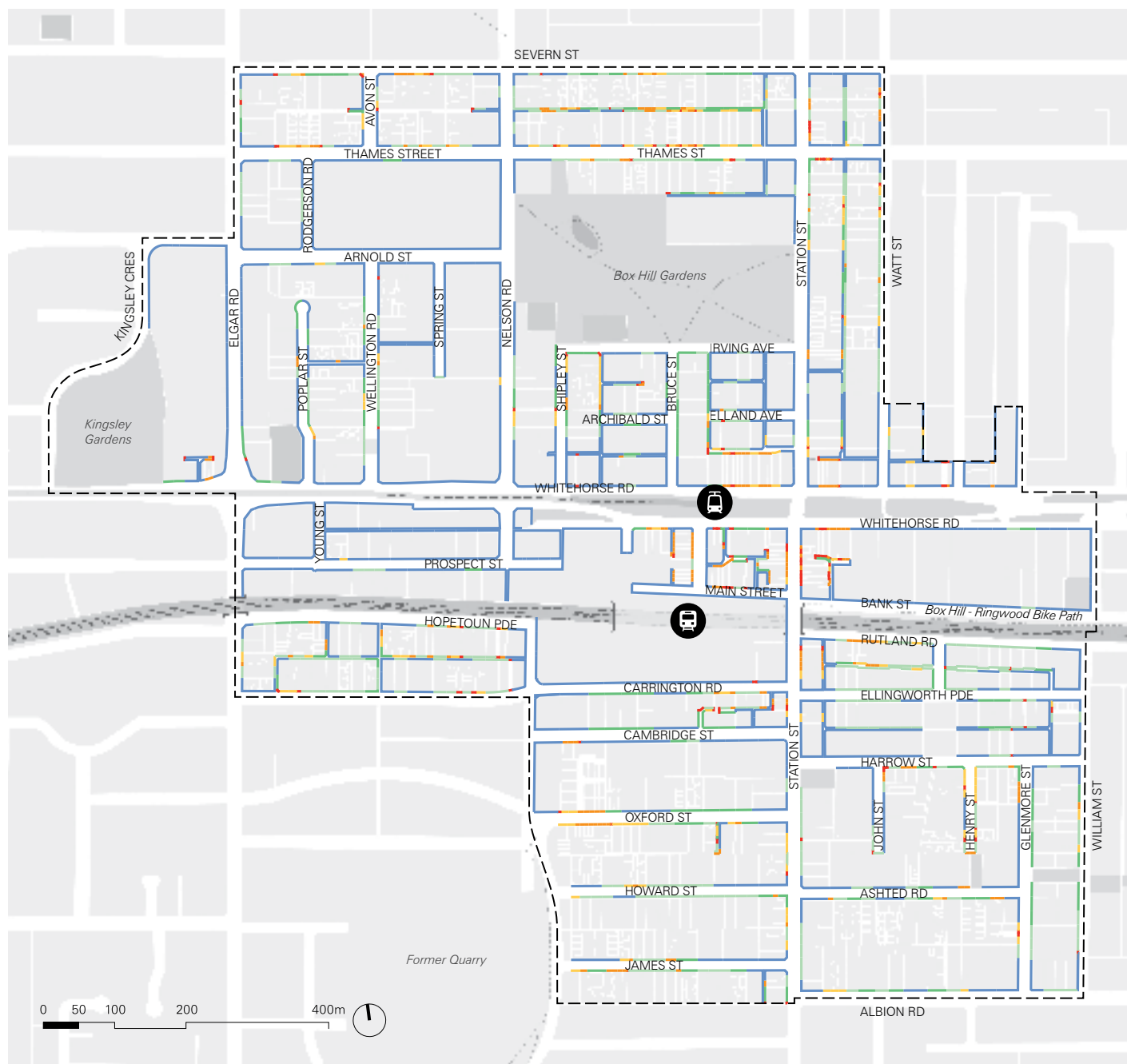


Figure 3.4 Street frontage width

Legend

[] Structure Plan boundary

Street frontage width (metres)

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 30
- > 30

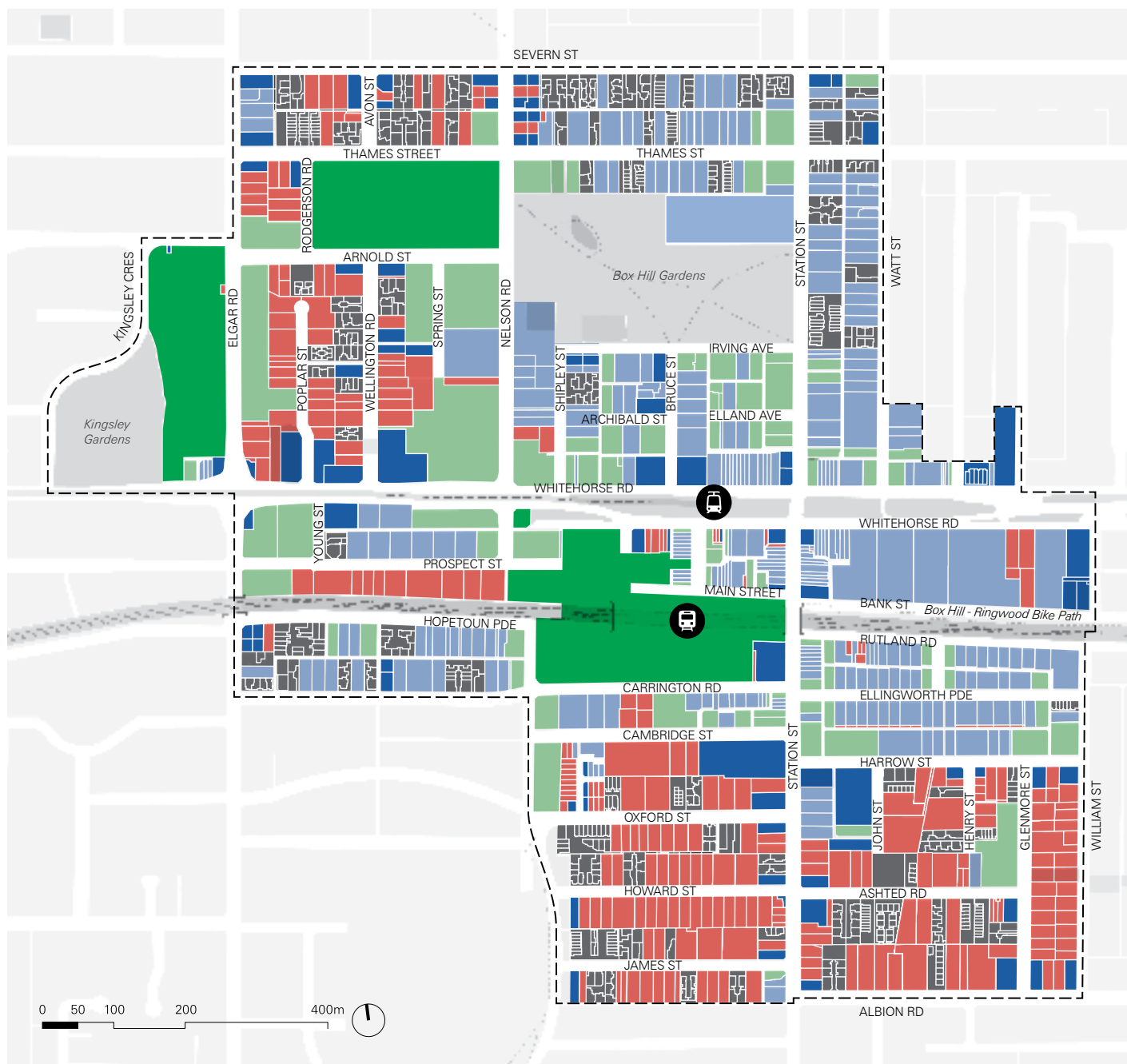


Figure 3.5 Lot access

Legend

[] Structure Plan boundary

Access type

- Single frontage
- Dual frontage
- Corner (dual) frontage
- Three frontages
- Island site | more than three frontages

■ Townhouse or unit lot

3.4.5 Density and floor area

Since 2007, Box Hill has experienced an increase in density and floor space with ongoing development resulting in residential, office, education and health of significantly higher densities. However, Figure 3.6 demonstrates how this significant increase in density and floor space has been unevenly scattered across the activity centre with the majority of the increase located on and north of Whitehorse Road on relatively few sites with the exception of the area between Shipley Street and Station Street which has seen a clustering of low to mid-rise residential developments. Elsewhere in Box Hill has seen smaller and gradual increases in density, particularly in transitional residential where low-rise (3-4 storeys) multi-residential developments have occurred along streets such as Thames Street.

Table 3.4 Selected major developments constructed since 2007 or currently under construction

	Completion date	Predominant land use	Total GFA	Maximum storeys	Site size	FAR
ATO (913 Whitehorse Road)	2015	Commercial	35,440m ²	19	1,775m ²	20
Box Hill Hospital redevelopment	2015	Health	approx. 55,000m ² GFA added	10	28,440m ²	3.8*
Whitehorse Towers (850 Whitehorse Road)	2017	Hotel and Residential	42,420m ²	36 and 29	3,315m ²	12.8
SkyOne Box Hill (545 Station Street)	Late 2019	Residential	69,880m ²	36	2,435m ²	28.9
12-14 Nelson Street	Late 2019	Residential	24,300m ²	20	3,315m ²	15.1

Source: MGS Analysis of City of Whitehorse Data

* Total site density including both new and old buildings

Figure 3.6 Estimated FAR of development of valid & pending permits.

Legend

[- -] Structure Plan boundary

Floor Area Ratio (FAR)

- 0 - 1
- 1 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 - 20
- > 20

2019

Constructed &
permits under
construction

Approved
permits

Approved permits
& permits under
consideration

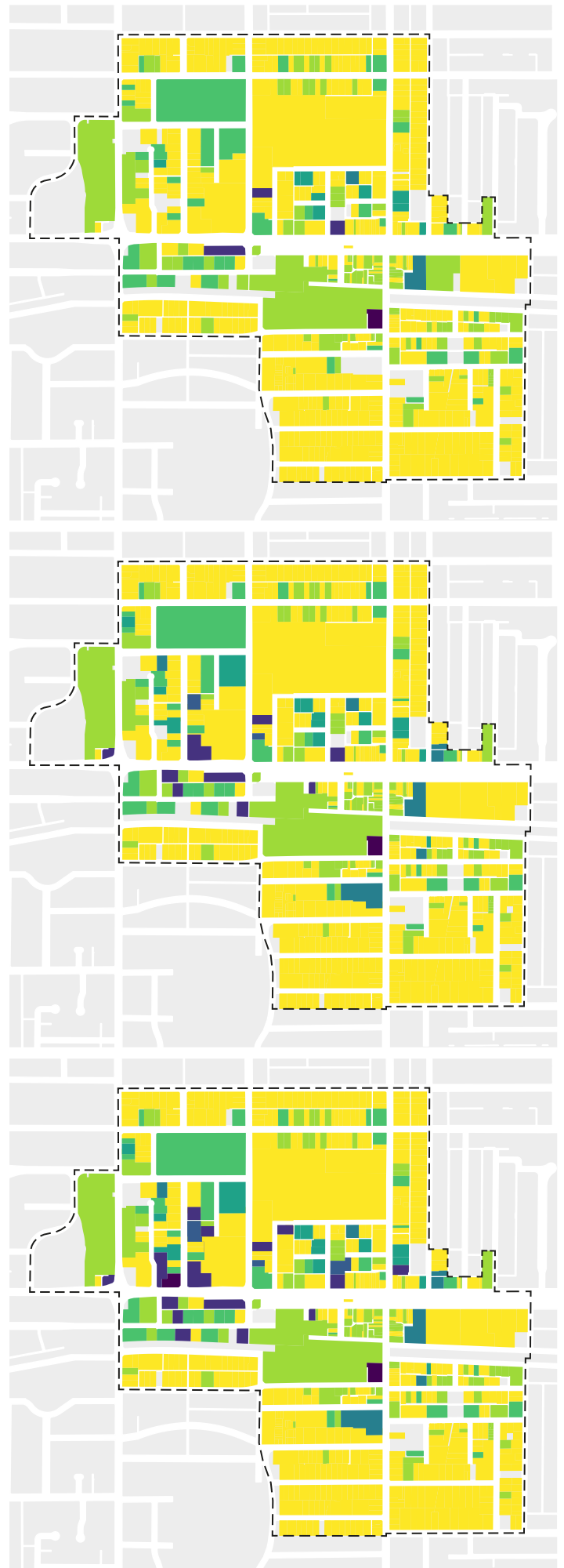


Figure 3.7 View of cumulative impact of development of valid and pending permits.

3.4.7 Cumulative built form outcomes

2019

Constructed & permits under construction

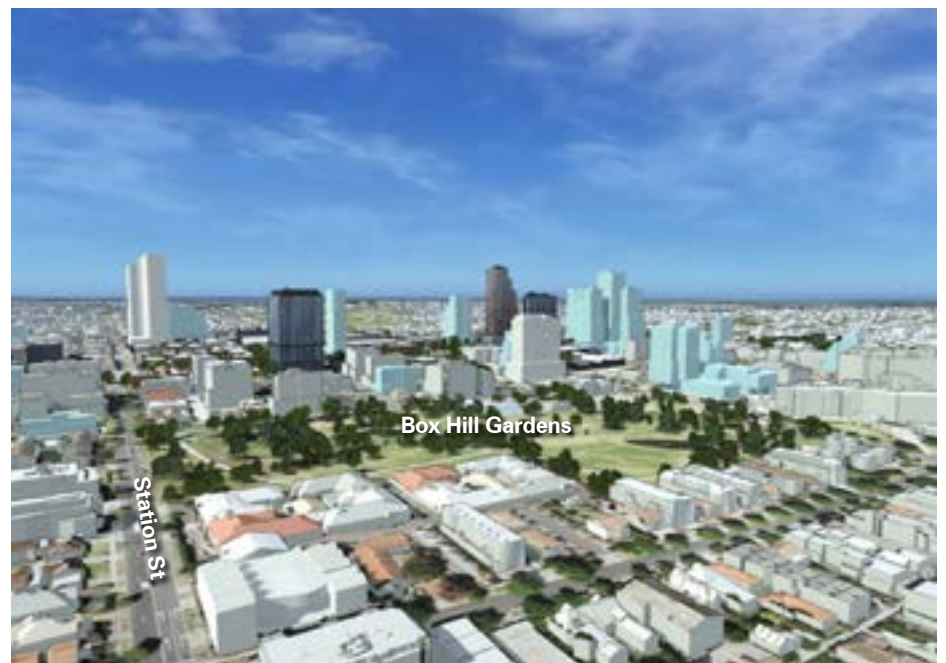
ATO | 913 Whitehorse Road **1**

SkyOne | 545 Station Street **2**

Whitehorse Towers | 850 Whitehorse Road **3**



Approved permits



Approved & pending permits



Figure 3.8 Cumulative impact of development in Precinct A: Box Hill Transport and Retail Precinct

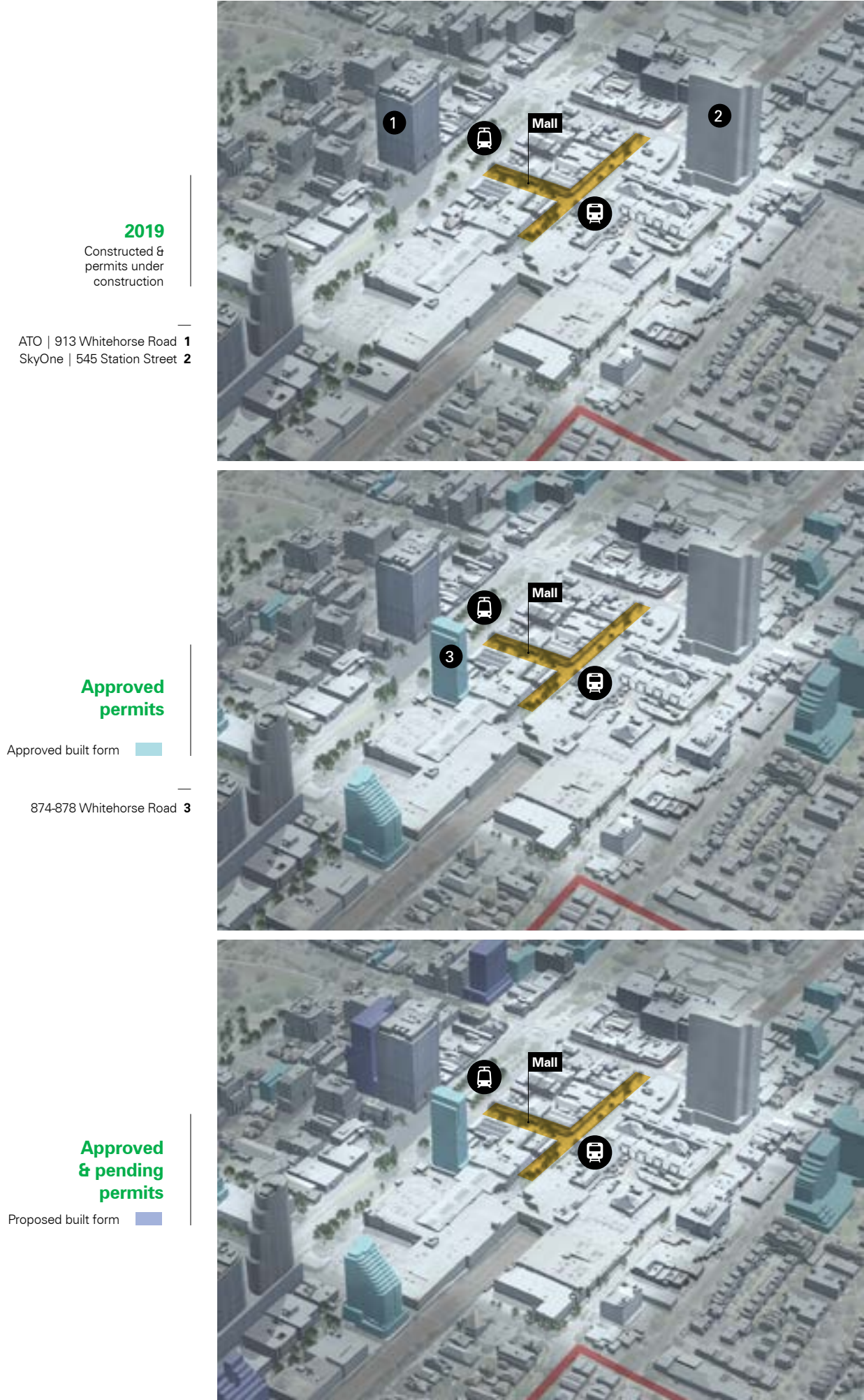


Figure 3.9 Cumulative impact of development in Precinct B: Prospect Street Precinct.

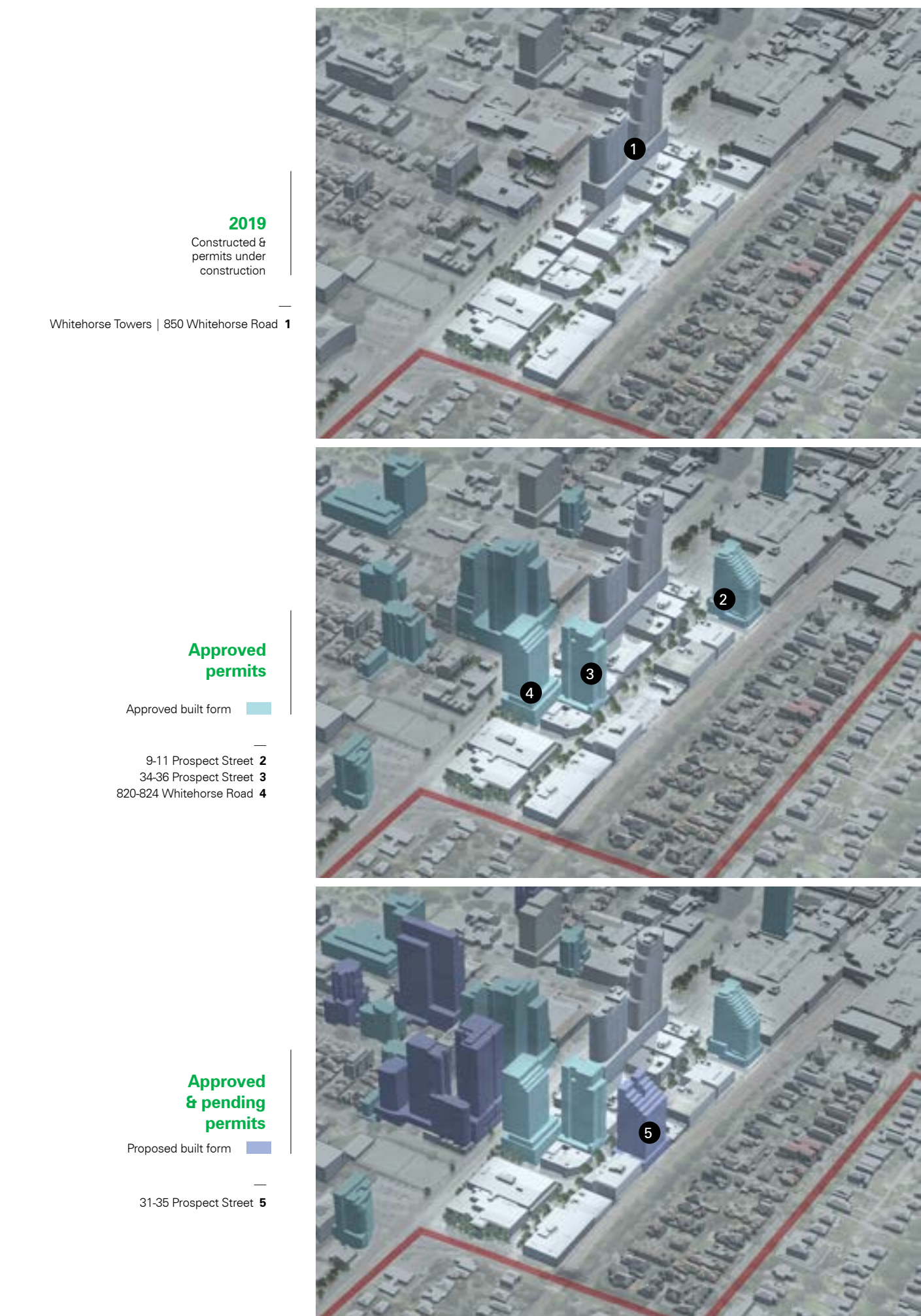


Figure 3.10 Cumulative impact of development in Precinct C: Civic and Eastern TAFE Precinct and Precinct F: Southern & Eastern Precinct

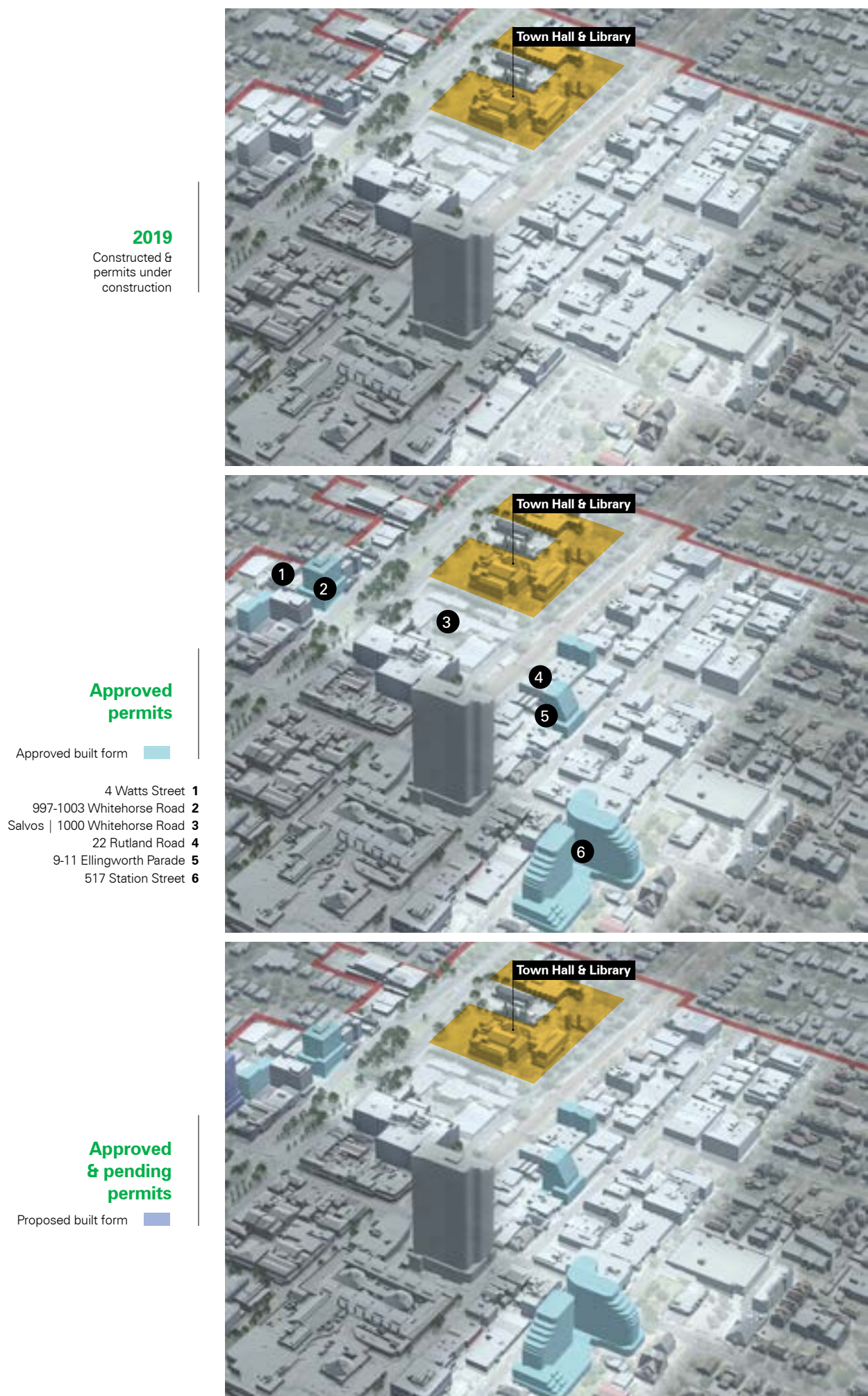


Figure 3.11 Cumulative impact of development in Precinct D: Hospital and Western TAFE Precinct.

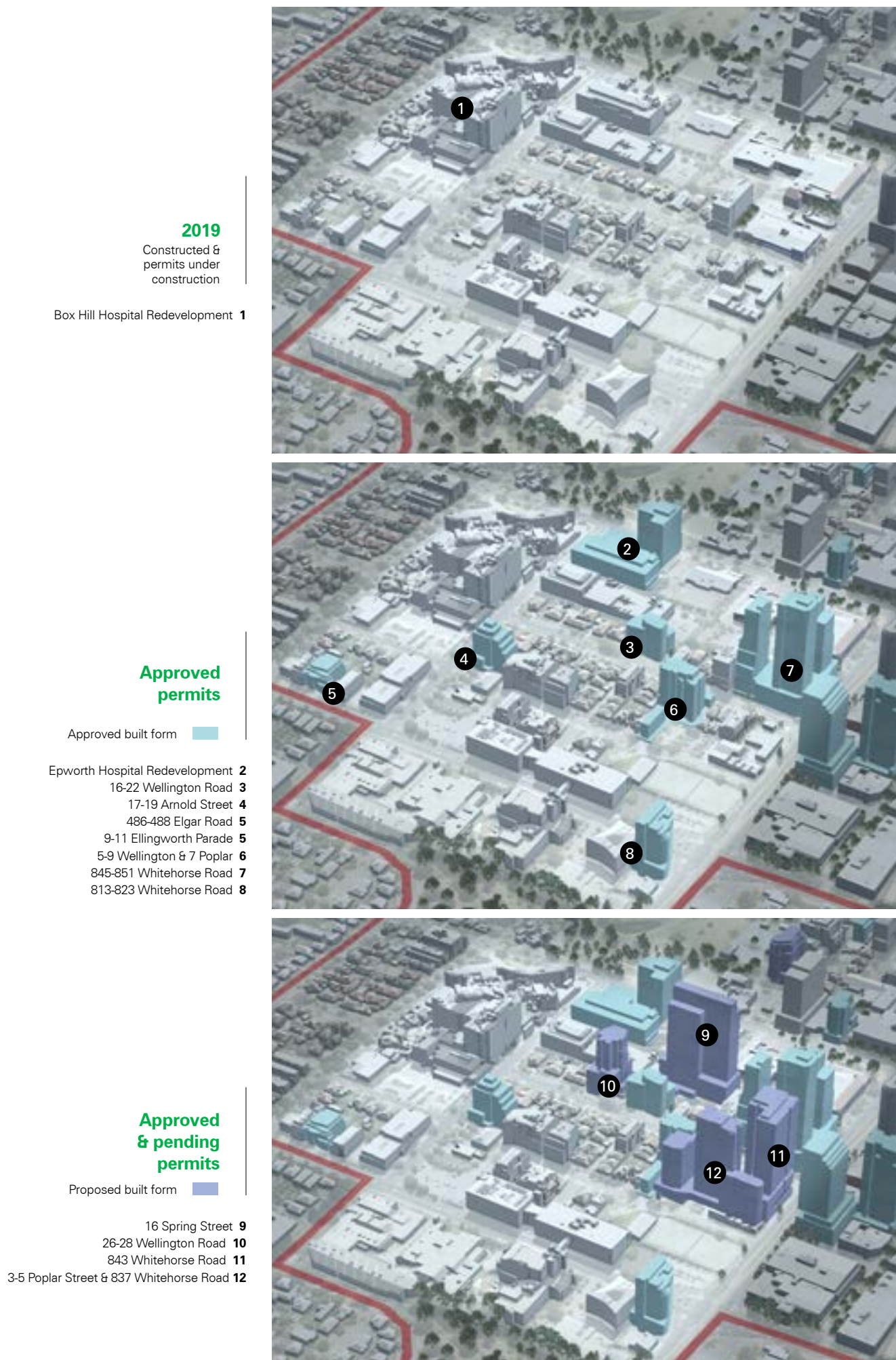


Figure 3.12 Cumulative impact of development in Precinct E: Box Hill Gardens Precinct



3.4 Transport

The *2007 Structure Plan* access framework is focussed on the need to:

- Improve pedestrian amenity and safety
- Make riding a bicycle a viable transport option
- Prioritise public transport
- Manage traffic to minimise negative impacts
- Reduce parking and support walking as the primary means of access in and around Box Hill
- Encouraging most trips of 1km or less to be made on foot

It is notable that the *2007 Structure Plan* emphasises the importance of the shift to pedestrian priority and provides a plan to guide this shift. With respect to the dominance of private vehicles, through traffic and parking, the structure plan also states that this dominance needs to be reduced, but it does not provide a robust plan to manage the issues. There is reference to reducing parking requirements, and reducing lanes of traffic. However, the actions are relatively broad and are focused on encouragement and deferred action through a series of investigations.

For the most part the rhetoric, the objectives and strategies related to the transport network discussed in the *2007 Structure Plan* are commendable, but very little change has occurred over the past decade.

The future transport vision should therefore build on Box Hill's strengths and focus on a high-amenity centre with high quality pedestrian spaces, excellent active transport links and efficient public transport. Car parking will be required, but should be provided carefully so as to minimise the negative impacts that large parking areas have on centres (effectively creating large dead-zones of reduced or no economic activity).

There is a need to reallocate space to more efficient modes or suffer very significant increases in traffic and pedestrian congestion. In addition to this, projected growth in population and employment will place significant pressure on open spaces and raise the need for improved linkages to Box Hill Gardens, Kingsley Gardens, Surrey Park and new open space areas in the heart.

From a range of incomplete data sources it is roughly estimated* that on each average weekday:

- There are around 100,000 people in Box Hill
- Around 13,000 people arrive in Box Hill by train
- Around 6,000 people arrive at Box Hill by bus
- Around 1,500 people arrive at Box Hill by tram
- Around 1,000 people ride a bicycle to Box Hill
- Around 30-35,000 people arrive at Box Hill by car
- Around 40-45,000 people walk to Box Hill

Of course, once inside the activity centre itself, all people are pedestrians when moving between various destinations within Box Hill. The pedestrian network needs to be proportioned to accommodate significant numbers at peak periods.

A total of 68,700 vehicles are driven into Box Hill each day (including buses, trams, cars and trucks). Whitehorse Road carries 20,000 vehicles per day. Elgar Road carries over 30,000 per day. Considering the number of people accessing the centre itself (set out above), this means that around half the cars on the road in Box Hill are through traffic. Through traffic makes no contribution to the economic vibrancy or function of the activity centre and would be better diverted elsewhere.

* **Note:** These figures are rough estimates due to lack of data availability. For instance, data is available for total traffic volume, however, no data is available from VicRoads on through traffic. An accurate figure would require further data collection and it is recommended that this exercise is undertaken as part of any current or future transport study.

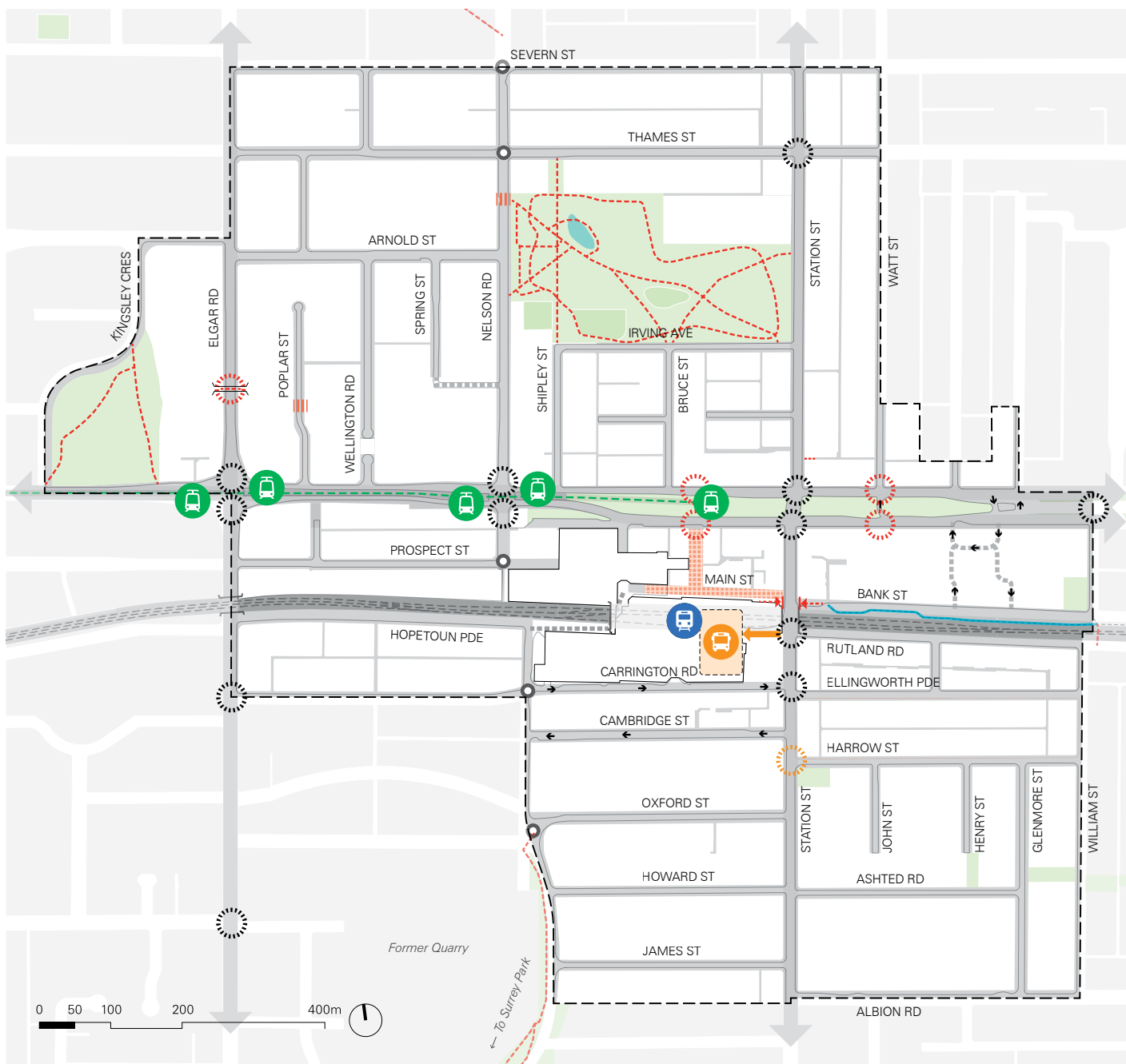


Figure 3.13 Movement Network

Legend

[] Structure Plan boundary

Vehicular movement

- ➔ Arterial or key road
- ➔➔ One way road
- ⊙ Signalised intersection
- ⊙ Roundabout
- ⌈⌋ Above grade crossing | bridge

Pedestrian movement

- ▤ Pedestrian mall
- Pedestrian pathway
- ⊙ Signalised crossing
- ⊙ Proposed signalised crossing
- ▤ Zebra crossing
- ⌈⌋ Pedestrian underpass

Cycling movement

- Bicycle route

3.5 Public Realm

As cities increase in density, providing access to high quality and useable open space, safe and inviting streets and public spaces becomes increasingly important. However, strategies to support urban planning that is resilient to climate change and enhances comfort for people as well as increasing opportunities for biodiversity have become increasingly challenging for city leaders.

Increasingly, the public realm within Box Hill does not meet the needs of an emerging higher-density environment, due in part to the domination of private motor vehicles over everything else. The amenity and useability of the public realm is often directly impacted by buildings including by articulation, depth, separation, overshadowing, landscape treatments and pedestrian and vehicle access. Council has recently prepared an operational document, *'Box Hill Urban Realm Treatment Guidelines'* by Hansen Partnership, which contains the specification of an improved landscape and material palette throughout the activity centre. These guidelines, yet to be realised, are relevant and its implementation should be complimentary to future public realm enhancements outside its scope, for example, new public spaces and potential reconfiguration of streets.

Box Hill's centre comprises a number of existing public realm typologies as follows:

- Arterial road streetscapes including Whitehorse Road which (east of Nelson Road), features a wide, vegetated median, tram terminus and treed service lanes.
- Well used main streets on Whitehorse Road, Station and Carrington Streets featuring City of Whitehorse paving and furniture palette
- The Box Hill pedestrian mall with a bespoke landscape palette
- Residential streetscapes featuring predominantly established avenue plantings of both native and exotic tree species
- Public open space in the form of parks and gardens, road reserves and closures and linear open spaces

Public Realm Analysis

- 1 Traditional Residential Streets. Generally good quality, with mix of exotic and native canopy trees, some quite established. New developments are changing established rhythm of garden frontages.
- 2 Two 'disconnected' sides of Whitehorse Road. Limited pedestrian crossing opportunities.
- 3 Underutilised central median and garden space features established tree specimens. Can be better utilised for the creation of a new civic space.
- 4 Pedestrian shopping Mall lacks 'civic' presence. Link to Train Station is underplayed.
- 5 Inconsistent streetscape treatments and poor integration of Shopping Centre
- 6 Generous setbacks and established landscapes are currently underutilised.
- 7 Poor street interface with rail. Precinct would benefit from streetscape upgrade to improve pedestrian connectivity.
- 8 Public realm treatment of laneways used by pedestrians need improvement.
- 9 Existing public open space is a valuable passive space and needs improvement.
- 10 Traffic volumes and narrow footpaths make Station Street unattractive for pedestrians. Opportunities for improvement of presentation and removal of pedestrian underpass.
- 11 Valuable public open space at Kingsley Gardens, with established tree canopy and playground. Some intensification of use may be appropriate as well as improved pedestrian connectivity through to Elgar Road.
- 12 Valuable public open space at Box Hill Gardens, with established tree canopy, playground, multi-use ball court, pond and circuit path. Poor interface with rear of residences to north. This area would benefit from introduction of mid block connections and improved streetscapes to encourage north-south pedestrian circulation.
- 13 Established streets trees and good quality streetscape to Nelson Road.
- 14 'Institutional' uses with forecourts and gardens but little activation of street frontages.
- 15 Little mid-block connectivity between institutions and between buildings.
- 16 Traffic volumes and narrow footpaths result in constrained public realm to Elgar Road.
- 17 Poor landscape treatment to Whitehorse Road. Potential for streetscape improvement.

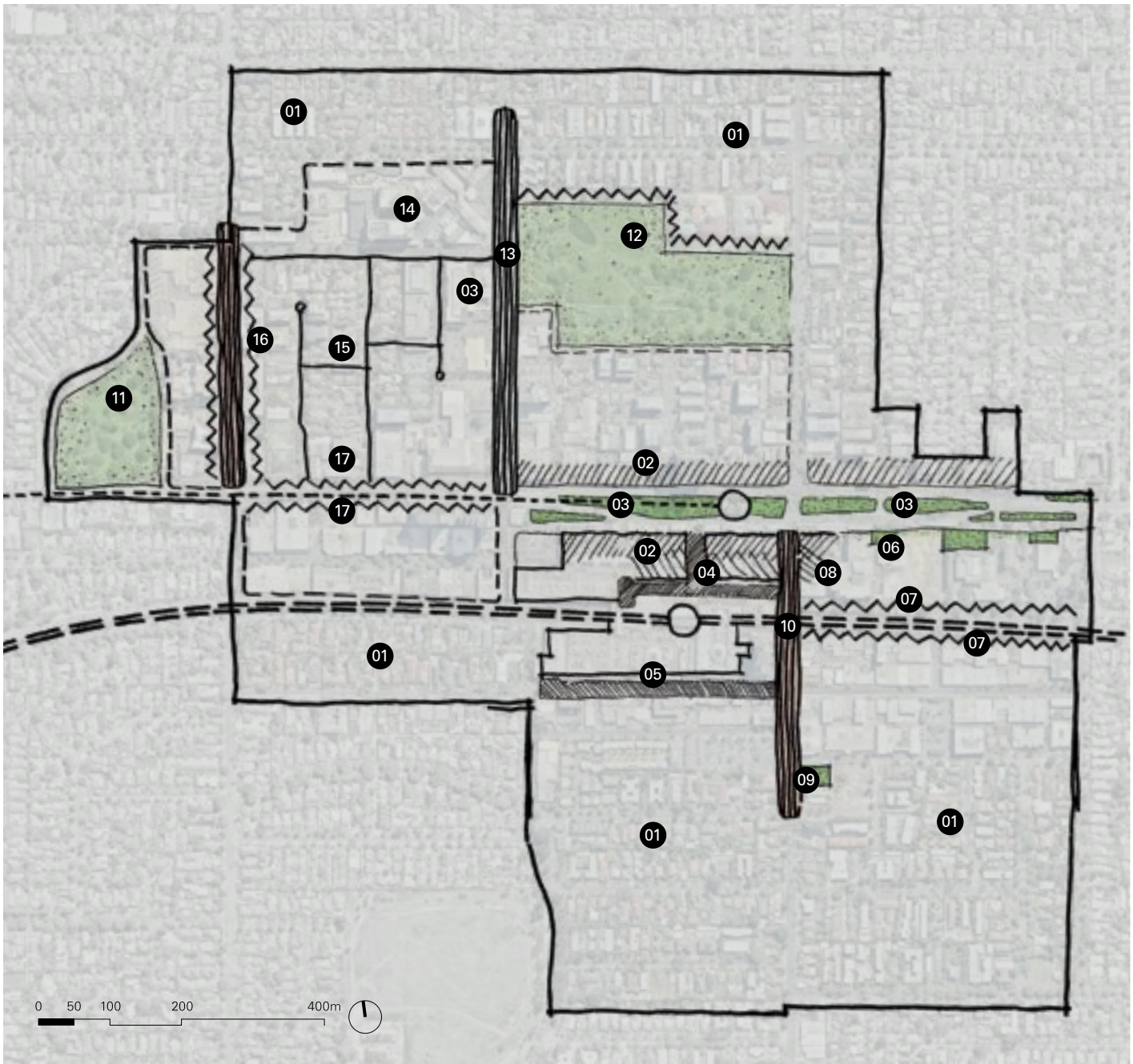


Figure 3.14 Existing Public Realm



Future Options for Box Hill

4

4.1 Opportunities and Constraints for Future Development

The development trends and existing urban conditions examined in the previous section suggest a clear set of challenges to address as part of the strategic review of the Box Hill Metropolitan Activity Centre. The primary challenge is to address the issues of market-led development approaches focussed on the design of individual development sites, with relatively little consideration of the cumulative effect of this development. Higher quality design outcomes are necessary in order to support the significant future growth, which will deliver social, economic and community benefits at a local, regional and metropolitan scale.

There is clear and unambiguous policy support for development intensification in Box Hill based on its existing strategic context and recognition with Plan Melbourne and other metropolitan planning strategies. Its trajectory of change and ongoing metropolitan role for services, employment and housing is supported by the accessibility afforded by the major transport hub. This will potentially increase in time with the addition of the proposed Suburban Rail Loop. This presents constraints and opportunities for strategic planning to coordinate and guide the process of delivering preferred built form outcomes and community dividends that will make Box Hill a great place that is open and welcoming to all.

Constraints

- Inadequate guidance for preferred outcomes from the planning scheme.
- Adverse amenity impacts on the public realm, leading to diminished access and cohesiveness
- Risk of residential development crowding out of employment floorspace.
- Increased pressure on capacity of pedestrian and transport networks and managing car parking.
- Housing affordability and increasing competition for space as result of population and job growth
- The challenges of providing a cohesive public realm that is accessible and enriches the identity of Box Hill MAC.

Opportunities

- Creating a network of distinctive neighbourhoods (see Figure 4.1).
- Managing development density, built form and amenity.
- Creating an enriched and cohesive public realm that is accessible and welcoming to all
- Managing population and job growth through land use mix.
- Managing transport, traffic and car parking.
- Facilitating affordable housing and support delivery of public benefits.

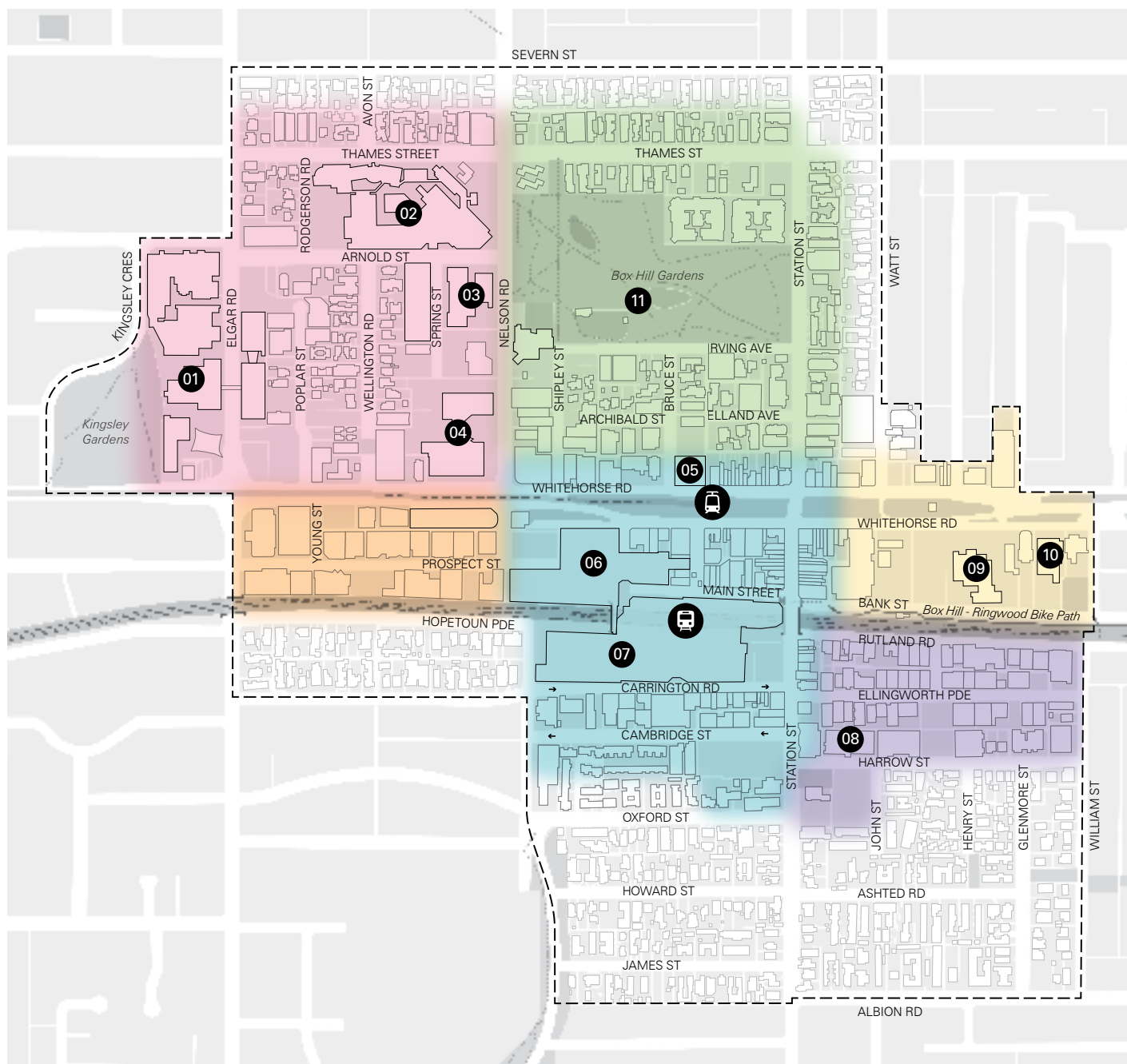


Figure 4.1 Creating a network of distinctive neighbourhoods

Legend

[---] Structure Plan boundary

DRAFT Neighbourhoods

Health & Education

Prospect

North

Central

Civic & Cultural

Enterprise

Residential Transition Areas

Key Places

01 Box Hill Institute | Elgar campus

02 Box Hill Hospital

03 Epworth Hospital

04 Box Hill Institute | Nelson campus

05 Australian Tax Office

06 Box Hill Central North

07 Box Hill Central South

08 Centrelink & Medicare

09 Box Hill Town Hall

10 Box Hill Library

11 Box Hill Gardens

4.2 Specific Opportunities for Intervention

This section outlines a range of specific opportunities for consideration that would deliver change responding to the issues detailed in Chapter 3. They would require a mix of statutory and non-statutory approaches to achieving change, and would require additional actions by Council or other agencies that sits outside the powers of the planning scheme to effect change. Many of these options will require direct capital investment or the coordinated involvement of multiple agencies. These options set out specific opportunities for intervention that Council can undertake towards the success of Box Hill's transformation over time.

4.2.1 Delivering Major Community Benefits

Box Hill is transitioning from a suburban centre to a metropolitan precinct, as Section 3 demonstrates, and the quality of places and infrastructure needs to match. The anticipated level of change in Box Hill would need to be supported by significant improvements to the public realm and community infrastructure.

There are many opportunities for interventions to deliver major community benefits. Some to consider include:

Whitehorse Road

An ambitious transformation of Whitehorse Road would help to create place for people rather than an arterial road with median landscape. Whitehorse Road could be reconfigured to reduce the number of lanes and provide a significantly enlarged public space along the southern side of the road reserve.

A similar idea was examined in the *2011 Boulevard Strategy*, but not implemented to date. This plan identified the opportunity for a major new public space extending from the Town Hall to Nelson Road which would nearly double the width of the existing median and significantly improve access between the existing interchange and the Tram Terminus. This would provide a place comparable in scale to Docklands Boulevard or North Terrace in Adelaide.

Station Street

A second major opportunity for transformation is the section of Station Street between Whitehorse Road and Harrow Street. The street could be transformed into a high quality place by significantly widening the footpath area available for pedestrians and improving

the connections available for cyclists at the core of the activity centre. It forms a logical extension of the pedestrianisation of Market Street and Main Street in the 1980s.

Box Hill Mall

Box Hill Mall is another key opportunity for future improvements. The existing mall at Market Street is a key open space at the core of the Central Neighbourhood, however it still has the same dimensions as it did when the road reserve was closed to traffic in the 1980s. The space is already the focus for community events during festivals and major events. This space would benefit from widening and reconfiguration so that it is dimensioned more appropriately for a genuine public event square. This square would be activated by new development engaging directly with the space.

In addition, there is an opportunity to link together these key public spaces (Whitehorse Road, Station Street and Box Hill Mall) with neighbourhoods across the activity centre and to surrounding areas with a network of high quality links — a primary pedestrian network — extending across all the neighbourhoods of the centre (refer to Section 4.3.6 of this report). This network would in turn link up smaller pocket spaces and smaller urban squares distributed across the whole centre.

These propositions for change are consistent with change that have occurred in other comparable centres across Melbourne. Major upgrades have been delivered in places like Dandenong and Ringwood MACs, where significant reconfigurations of major roads have calmed traffic speeds and delivered significantly improved landscape treatments. Both centres have also received new community infrastructure such as town squares and new community library facilities. The Cato Square redevelopment currently underway within Chapel Street, Prahran will also significantly improve the amount and quality of open space available within this densifying activity centre context.

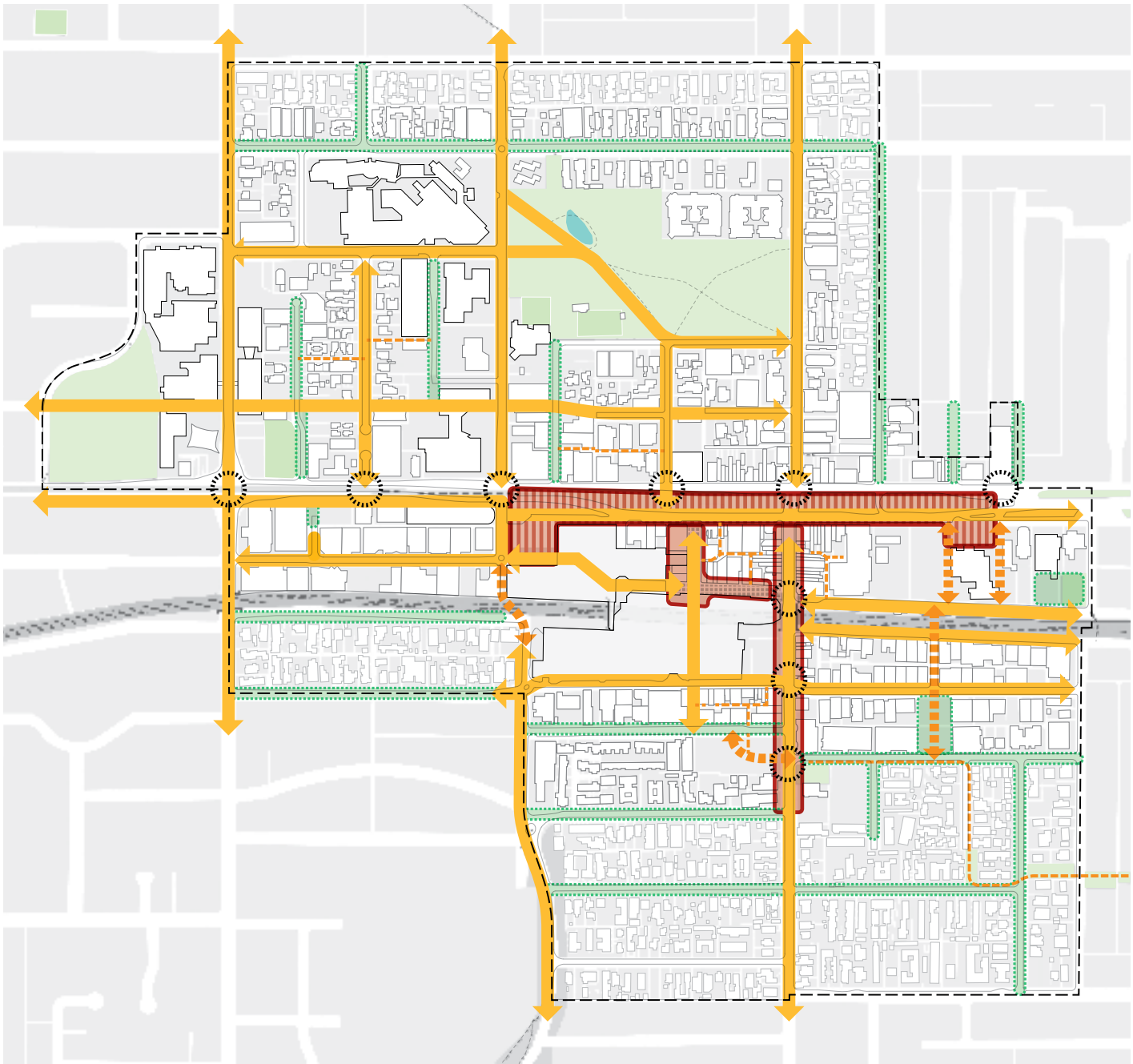


Figure 4.2 High-level overview of opportunities to create a primary pedestrian network, provide new and improved public spaces and green infrastructure.

- Legend**
- [] Structure Plan boundary
 - Potential interventions*
 - ↔ Primary pedestrian network
 - - - Potential links
 - - - Potential green infrastructure
 - ▨ Potential key urban spaces
 - Upgraded pedestrian priority crossing

4.2.2 Major Transport Interventions

Box Hill is a distinctly regional destination and is more similar to Melbourne's Central Business District (CBD) than it is to other suburban activity centres. For instance, more than half the people in Box Hill on a given day have come from beyond 10km away. Box Hill has historically held this role as a central node in the eastern metropolitan region.

With Box Hill anticipated to nearly double in population and commercial floorspace over the next 20 years the pressure on the transit network will significantly increase. This presents a clear need for coordinated action across all levels of government, including statutory authorities such as VicRoads and Vic Track, to ensure the future prosperity, liveability and functionality of Box Hill (and Melbourne's east) is protected and enhanced.

The network could be reimagined to reflect key aspects of the Melbourne CBD transit network. In this example, routes are not directed to a single interchange, nor does the network rely on all routes terminating within the CBD and the provision of vehicle lay-over bays for each route. There is an opportunity to build on the successes of the train line and bus route 903 (the two routes that do not terminate in Box Hill) and create a grid-like network of routes that have high frequency on arterial corridors and provide seamless connections from one side of Box Hill to the other.

The recently announced Suburban Rail Loop (SRL) is a major government project that will support Box Hill's growth. However, it will take ten years to bring SRL into service and the project as announced will only link to suburbs south of Box Hill in its first stage.

Other possible major transport interventions to consider in addition to above might include:

- Preparing for a full rebuild of the train station and transit interchange.
- Implementing a 40km/h speed limit in the whole of Box Hill.
- Simplifying the bus network to provide more through connections.
- Extending the tram to Middleborough Road would provide enhanced accessibility to schools and existing recreation facilities.

- Extending the tram to Mitcham would support intensification and local connectivity along the entire Whitehorse Road / Maroondah Highway corridor.

It should be noted that trams typically serve a different catchment area and distance trip than rail. They are important for commuting shorter distances than rail i.e. between neighbouring suburbs. In this respect, they serve a complementary role to the rail line.

4.2.3 Rebalancing Transport Modes in Favour of Pedestrians and Cyclists

It is noted that a separate review of the Integrated Transport Strategy (ITS) is occurring concurrently with this Structure Plan review. The significant implications of transport on the urban form and the strategic vision for Box Hill mean that it critical that this transport review to consider options towards rebalance transport modes and manage car parking.

Over the past decade, studies have recognised the need to allocate more space to pedestrians in the core of Box Hill. However, little change has occurred with the allocation of space being nearly identical to 1983. This is likely to have contributed to increasing difficulties for businesses as footfall past their business is not what it should be. Observers have stated that on several occasions during peak commercial periods such as lunch and dinner time, several businesses on major roads close to the centre do not experience much foot traffic. These include businesses along Whitehorse Road on the North side, particularly in the Civic district and also those along streets such as Rutland, Ellingworth, and Harrow Streets. This underscores the need for a rebalancing of transport modes to release the potential economic activity that Box Hill has to offer and to cope with the additional residential population in Box Hill and keep pedestrians safe.

An example of such a change is a "road diet", which would see the capacity of arterial roads through the centre reduced to match the capacities of those roads as they approach the centre. For example, Whitehorse Road has only one lane in each direction as it passes tram stops near High Street, Mont Albert. It has only two lanes at 40km/h in each direction as it passes the schools to the east of Box Hill. Yet it currently has nine lanes in total, and a

60km/h speed limit between the Box Hill Town Hall and Clisby Court.

A four lane road that transitions into a nine lane road and rapidly constricts into to a two lane road over a distance of 1.5km is going to experience safety and congestion issues as drivers accelerate, decelerate, change lanes and merge again. As a result, there is a specific opportunity to address this distinct issue on Whitehorse Road by reconfiguring the road space to reduce the overall width of the road, improve pedestrian safety and modulate the traffic flow through the area (which is chaotic as a result of having too many lanes).

4.2.4 Managing Car Parking

Car parking in Box Hill is managed by a wide range of organisations and as a result, it is difficult to count how many car parking spaces there are in Box Hill and determine how they are used. Furthermore, the distribution of small parking areas and the access arrangements mean that often cars are being dragged into and through the activity centre just in order to get to the specific space that each particular driver has access to. There are opportunities to improve the management of car parking in Box Hill, they include the following:

A key option for Council to consider is the consolidation of car parking supply to reduce the number of car movements entering Box Hill in order to access car parking. A key element of this consolidation would be new parking facilities provided on the edge of the current core area. An example of this is the Council's new car park in Harrow Street. Additional parking nodes would be required in the Health and Education Neighbourhood (providing a logical gateway from the north) and within the Civic and Community Neighbourhood (providing for people entering from the east).

Council's parking supply should be managed with regard to core principles that Council is trying to achieve for the centre:

- Adequate supply of parking that suits all visitor's needs.
- Differentiation between car storage (> 4 hours) and parking (< 4 hours).

- Recognising that everybody "pays" for parking (for instance, through rates/general taxation regardless of whether they require car parking).
- Providing certainty about parking availability and clarity about pricing.

To support this outcome, Council could implement a planning requirement to restrict the construction of car parking areas with fewer than 100 car spaces within neighbourhoods where there will be significant intensification. This would seek to encourage consolidated parking nodes rather than the provision of parking on individual sites. This would result in improved pedestrian amenity as there would be fewer driveways to smaller car parking facilities, and the cumulative impact on traffic congestion and safety from such facilities would be improved. In addition, Council should ensure that these car parking areas are available for public use 24 hours per day.

Clauses such as 52.06 - Car Parking and 52.34 - Bicycle Facilities in the Planning Scheme discuss State averages and are not helpful in areas like Box Hill. Areas of intensity like Box Hill have:

- Lower demands for parking relative to the State average
- Higher requirements for bicycle storage relative to the average
- Demand for motorcycle parking also occurs in commercial centres that also have congestion on arterial roads or paid parking (the VPP does not include any motorcycle parking requirement)

To this end Council could consider a mix of the following options:

- In the immediate future, work with the State and Vicinity Centres to install smart gates at the Box Hill commuter car park so that only people using public transport can access free spaces.
- Over the longer-term, work with the State government to move the 500 commuter car parking bays at Box Hill Station to an alternative location such as Nunawading, Mitcham or Laburnum.
- Install parking sensors in all on-street car parking spaces within the activity centre to gather an accurate record of how the spaces are being used and to facilitate more appropriate time and fee-based restrictions.

- Establish an internal position at Council which is responsible for parking provisions in Box Hill CBD with full control over restrictions and pricing of all parking including cars, motorcycles and bicycles with clear objectives related to increasing visitation (regardless of mode) and length of stay (regardless of mode).
- Review the actions in the Parking Strategy and continue implementation in light of the current ITS review and this document.
- Develop a new overarching parking strategy that covers all car parking, freight loading, bus layovers, bicycle and motorcycle parking needs for the CBD.
- No crossovers should be permitted on key road links (even local roads) – in order to preserve the amenity of the public realm and safety of footpaths.
- Appropriate use on the lower floors of all buildings is particularly important – to ensure there is adequate passive surveillance of the public realm. This will require all new parking to be located underground or completely sleeved on all sides by habitable uses at all public interfaces.
- Reduce the parking required per apartment to zero. There is public parking available in many locations throughout the centre, and each of these facilities will be safer if they are utilised 24 hours per day by a wider range of people.

A key way to make housing more affordable in Box Hill and reduce traffic congestion is to reduce the parking requirement for new apartment buildings to zero. Currently, more than 24% of households in Box Hill do not own a car. A further 47% of households in Box Hill own only one car. Only 25% of dwellings in Box Hill need more than one car space.

Owning a car space (as part of a dwelling) is known to be a key determinant of car ownership. Car ownership directly causes local congestion. Any new apartments within 400 metres of the Box Hill Train Station do not need a car space. It is considered appropriate for people to walk 400m from their house to access to a bus stop, tram stop or train station. A private vehicle provides a much better journey time and quality to those public

transport modes, so people can easily be expected to walk 400 metres to get to their car. There are over 3,000 car spaces right around the train station mostly unused at night. That is ample parking supply for the new apartments expected to be built within 400m of the station. There are already 13,000 car spaces within that area, many of which are vacant overnight.

Every car space that is required as part of an apartment adds between \$60-90,000 to the cost of the apartment (depending on how it is constructed and financing costs). Removing the requirement to provide any parking is a key way to improve housing affordability in Box Hill. Not requiring parking for every apartment does not mean that none will be provided just that only those occupiers who really need a car space will have to pay for one.

4.2.5 Improving Amenity within the Public Realm

Increasing the provision of public space and the quality of all public spaces should be a priority for Box Hill in order to help deliver the amenity benefits sought by the community and needed by the future residents, workers and visitors to the centre.

There is a need to identify new or expanded open space opportunities within each neighbourhood, as well as linear vegetated links back to other existing open space resources in the area surrounding the activity centre. In this way the open space within the centre forms part of a wider network, providing habitat opportunities and accessibility links for the wider community.

The provision of additional public space might take different forms for each neighbourhood. For example, within the North Neighbourhood the Box Hill Gardens already provides a significant open space resource that has been improved through investment by Council in implementing the Box Hill Gardens Masterplan. There is a limit to how intensively this space can be programmed within its existing boundaries.

Improvements to the quality and amenity of existing public space will help support more intensive future use. Protecting solar access to major open spaces through key times of the day would support the amenity of the space for users and ensure that the

vegetation is verdant and reaches its full potential. For critically important spaces such as Market Street, Main Street and Box Hill Gardens this should include using the winter solstice as the benchmark day for measuring solar amenity. It might more appropriate to use an equinox control for protecting less sensitive public spaces, such as the southern footpath of priority pedestrian links and alfresco dining areas.

Increasing the amount of green infrastructure within the centre will help mitigate community concerns, improve local microclimates and heat island effects. Targets for canopy coverage have been implemented through planning scheme policy in the City of Melbourne and City of Moonee Ponds amongst other local government areas. The current Council urban forest strategy, *City of Whitehorse Urban Forest Strategy* sets tree planting and replacement targets for residential properties. The relatively limited space available within Box Hill means that an urban forest strategy would need to encourage green walls and vertical planting integrated into new development regardless of land use, in addition to street canopy trees as a key approach for increasing canopy provision within the centre.

There is potentially a role for the provision of Water Sensitive Urban Design (WSUD) in appropriate locations in Box Hill subject to suitability of local drainage requirements. Where suitable, WSUD measures would be a secondary and complimentary streetscape improvement consistent with BHURT Type F typology for transitional residential areas where there is less pedestrian traffic and competition for space.

Improvements to the public realm are essential to achieving an efficient transport network. This is because the public realm dictates how far people are willing to walk, explore and linger in the environment. The quality of the public realm influences how safe people feel and how far they are willing to walk through the CBD or from their mode of transport (parking or transit stop).

Key actions that Council could take to improve the public realm include rebalancing mode priorities in the core (improve pedestrian and cycle access) and simply providing wider footpaths on almost every street. Planting additional street trees is a

simple but potentially transformative initiative that will benefit the entire centre. A more ambitious approach would be to remove on-street parking in appropriate locations to provide additional planting opportunities. Within the core it would be beneficial to reconfigure key laneways (Birds Lane and Bamford Lane, for example) to prioritise pedestrian activation while managing service access at times with low utilisation. Across the majority of the other neighbourhoods it is important to maximise the use of rear laneways for access and services rather than main street crossings through the progressive increase in capacity of these networks in width and role.

4.2.6 Improved Pedestrian Connections

The neighbourhoods in Box Hill are relatively disconnected and it is difficult to move between due to major barriers including Elgar Road, Whitehorse Road, Station Street and the railway line. There is a variety of mechanisms that can be employed to reduce the scale and impact of these barriers or remove them altogether.

North-south pedestrian access is severely constrained, as there is only two pedestrian paths crossing the railway line in the core of the centre (Market Street and Station Street). The other two pedestrian connections across the railway line are at each edge of the activity centre (Elgar Road and Linsley Street). This concentrates pedestrian movements into Market Street and Station Street. Footpaths on Station Street would need to be widened to accommodate current pedestrian volumes. In the absence of widening Station Street greater emphasis is placed (by pedestrians) on Market Street. This results in greater emphasis (by pedestrians) on the crossing of Whitehorse Road at Market Street and the east-west movement along Whitehorse Road (particularly in the direction of Station Street).

It is reasonable to expect that the SRL project will increase the need to rethink how pedestrian access into the existing station could work in the future. The SRL planning team should be encouraged to examine rebuilding Box Hill Station (making it DDA compliant and facilitating the redevelopment of the Vicinity Shopping Centre).

As part the redevelopment of the existing shopping centre it would be highly beneficial to introduce several new direct pedestrian links between Station Street, Carrington Road and Whitehorse Road. These laneways would provide further opportunities for pedestrian flow, economic interaction and exploration in the Box Hill activity centre.

The development of a primary walking network throughout the centre would encourage a transition for Box Hill from a car-focussed to a pedestrian-focussed activity centre. This would establish a legible network of pedestrian accessibility across the centre. This should include appropriately scaled footpaths for these walks (nominally 5-6m) and new and improved green infrastructure alongside treatments specified in BHURT guidelines.

Development abutting the primary walking network could contribute their open space contributions as part of meeting these objectives, instead of allowing contribution by cash-in-lieu. In these locations, the contribution would be non-transferable.

In addition to linking neighbourhoods together, it should be a priority for the primary walking network to increase the overall permeability within each neighbourhood. This is particularly important in neighbourhoods that are dominated by roads aligned in one direction. For example, where the existing roads are aligned predominately north-south (as in the Health and Education Neighbourhood) it is critical that high quality, legible and direct east-west links are delivered. Similarly, where existing roads are predominately east-west (as in the Enterprise Neighbourhood) it will be important to deliver north-south links. These networks should be achieved through a combination of linking up land already in Council ownership with links delivered through negotiation or through the rearrangement of development potential within the site to provide for the links. Direct acquisition of is another possible option.

There are a variety of smaller scale links to surrounding parkland, however, in each case the link is disjointed or difficult to navigate. For example,

links to the following green spaces should be improved:

- Whitehorse Reserve
- Box Hill City Oval
- Kingsley Gardens
- Hagenauer Reserve
- Bushy Creek
- Gardiners Creek
- Surrey Park

Several of these links can be improved with amenity and priority treatments along specific road corridors including Avon Street, Nelson Road, Saxton Street, Surrey Drive and Thurston Street (providing a north-south corridor from Bushy Creek to Gardiners Creek).

Specific pedestrian priority improvements include:

- An additional crossing for pedestrians across Whitehorse Road is necessary between Elgar Road and Nelson Road. Logically this should be located at either Wellington Road or Poplar Street as development intensifies.
- Rutland Road should be enhanced as a key cycle and pedestrian link, with the pedestrian role of Ellingworth Parade and Harrow Street enhanced. No vehicle crossovers to private car parks should be permitted on any of these streets.
- A new path across Kingsley Gardens from George Street to Box Hill Institute.
- A pedestrian operated signal across Station Street at Harrow Street.
- A shared zone on the Vicinity car park ramp from Hopetoun Parade to Main Street.
- A new pedestrian path on the east side of Thurston Street.
- A “wombat crossing” of Rutland Road at the Linsley Street – William Street railway crossing.
- A new “wombat crossing” across Bank Street at the western end of the Ringwood-Box Hill Shared Trail near Station Street.

There are a large number of signalised pedestrian crossings in Box Hill with the majority devised and operated to separate pedestrians from through traffic. Within the core of Box Hill, the priority given

to through traffic is not reflecting the priorities of road users or the strategic intent espoused by VicRoads.

To appropriately reflect the VicRoads intent for pedestrian priority in the core of Box Hill and the dominant road user desires, the pedestrian crossings within Box Hill should be set to shorter cycle times (no greater than 60 seconds long). In particular this applies to the crossing of Whitehorse Road at Market Street which should be set to always provide swift movement for pedestrians rather than trying to work in with downstream traffic signals to benefit through traffic. This should be a key consideration for the current study of the ITS for Box Hill.

4.2.7 Creating a more inclusive centre

The importance of creating a more open, inclusive and accessible centre has been repeatedly raised during stakeholder conversations. This is consistent with the current vision for the activity centre expressed in the *2007 Structure Plan*.

Creating an inclusive centre involves supporting and facilitating diversity in housing and employment outcomes. The application of affordable housing strategies and inclusionary zoning principles including transferable obligations or cash-in-lieu contributions has already been discussed.

Separately, the development of a community infrastructure strategy and associated contributions scheme with an initial focus on investment in developing the existing civic and community precinct will help provide the infrastructure necessary for a growing community to develop as a cohesive and integrated one.

Genuine and on-going community engagement and participation in Box Hill is an important factor towards a more inclusive centre. This should include place management and community engagement strategies to ensure the community is actively, and broadly represented and involved in placemaking, curation and events. This would further enrich the community life in Box Hill and facilitate a positive and cohesive sense of community ownership and identity of place in Box Hill.

An area of particular sensitivity for stakeholders is ensuring that Box Hill remain welcoming for all cultures and celebrates Box Hill's particular opportunities to support cultural diversity. This is a challenging area for a planning strategy to address, since many of the issues of cultural identity and expression of dominant cultures are not controlled by the planning system. One aspect raised by stakeholder and community respondents was the use of languages other than English in shop signage. Currently there are no statutory requirements or policy guidance on the use of languages in signage within the City of Whitehorse, nor in equivalent local government areas in Melbourne. Some local authorities in Sydney (such as Ryde and Strathmore) have attempted to regulate the use of English in public signage but received significant negative feedback from their communities and relevant experts in multicultural policy and multilingualism. This is not an approach that should be investigated for Box Hill.

The centre should be very accessible for a diverse range of people. This includes cultural diversity and people with disabilities. There are significant gaps in the accessible network and wayfinding. Some of these must be addressed in order to become compliant with Commonwealth legislation. A full accessibility audit of Box Hill will be required to determine the exact deficiencies and how to rectify them. Examples of improvements that Council could make include:

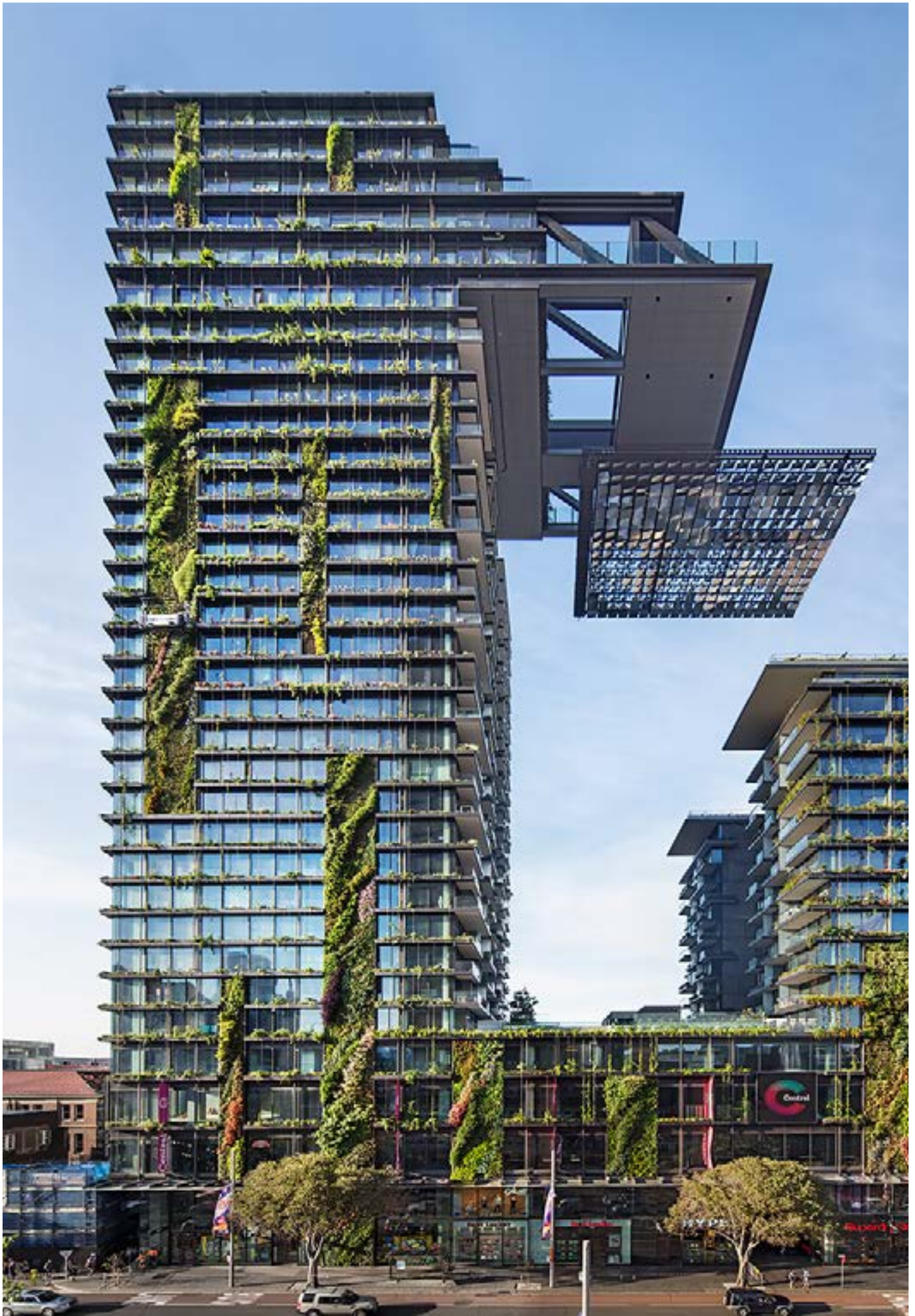
- Strict enforcement of clear footpath regulations (local laws) related to maintaining a clear building line for people with vision impairments.
- Clear guidance for building designers to improve the orientation of each new building to the street from a disability access perspective.
- Improved lighting and activation particularly within the central area and around the hospital and Box Hill Institute to create a greater perception of safety in the public realm.
- Use of CCTV may be considered as a complementary part of a broader strategy to improve safety and perceptions of safety, in consultation with key stakeholders such as Victoria Police.

4.2.8 Encouraging design excellence

Whitehorse City Council regularly and repeatedly engages with developers and land owners to advocate for higher quality design outcomes in planning permit applications. *The Urban Design Guidelines for Victoria* and the provisions of the Whitehorse Planning Scheme allow for a level of discussion and enforcement that prevents poorly resolved development proposals from proceeding. At the moment, however like many Victorian councils, Council does not have an explicit design excellence policy or framework for formally reviewing design proposals that would promote more positive outcomes.

This is a common challenge for many local governments both in Victoria and interstate. There are precedents that could help inform the City of Whitehorse in creating a design excellence policy. For example, the City of Sydney and City of Parramatta have both implemented policies that require architectural design reviews and support the important role of design competitions in ensuring the most prominent and substantial buildings receive an appropriate level of design scrutiny and best practice. The City of Melbourne has long supported similar approaches, and is currently investigating improved design requirements and processes through the C308 Planning Scheme Amendment to implement the “Central City Design Guide” policy.

An important aspect of each of these policies (and similar ones from other jurisdictions) is that design excellence cannot be reduced to a checklist approach towards meeting individual standards. It requires processes that incentivise the use of experienced design teams and involve expert design review at key stages during the design process. This ensures that planning applications for substantial buildings receive detailed scrutiny long prior to lodgement of planning applications. This benefits all participants in the process through reducing contestation and ensuring that the design response more closely reflects the preferred strategic outcomes from the structure plan.



4.3 Benchmarking: Renewal Precincts and Activity Hubs

These precedents demonstrate best practices in urban renewal in activity centres and provide examples of possible intervention outcomes for Box Hill across different scales.

4.3.1 Urban Block Redevelopment



QV

The QV development in Melbourne delivered a full city block (2 hectares) of renewal incorporating a very wide mix of uses, typologies and spaces within a highly permeable urban form. The single site was divided into multiple parts with laneways providing 24-hour access between the major streets. Retail uses and hospitality opportunities activate the laneways and provide multiple fine grain frontages, with bulkier retail anchors such as supermarkets or department stores located below ground level or at first floor. A significant heritage building was retained and a public square provided at the core of the site. The towers provide a notably diverse range of uses, including a 30 storey commercial office tower, medium rise large floorplate offices, prestige residential, denser residential and community uses such as childcare and a women's health centre. The design of the precinct contains the work of multiple architects, providing visual and typological diversity within a masterplanned development.

4.3.2 Contemporary Mixed Use Precincts



Cremorne

Early this decade, market speculation in the Cremorne area emerged around the potential rezoning of commercial 2 zoned land to residential zoned land with an absence of height limits seeing proposals for alternative high density proposals developed on a number of older industrial land holdings. Carparking analysis provided to VCAT hearings indicated that this development would very quickly undermine access to the precinct for remaining employment related enterprises and impact on the amenity of the Yarra River Corridor as an environmental and recreation zone. Representations to the new Planning Minister resulted in clear direction that rezoning amendments would not be supported whilst Yarra River protection provisions curtailed heights of towers. The result of this has been significant refocus on Cremorne as an employment hub for innovation enterprises with top 200 organisations committing to new headquarters and emerging as a key area of jobs growth for Melbourne.



Lyon

The Confluence in Lyon is located on the island peninsula between the old town of Lyon and the newer town. The redevelopment of a 150-hectare site will consist of 34% social housing out of 16,000 dwellings upon completion. The redevelopment is expected to support over 25,000 jobs with 860 enterprises already in place. Robust height controls are a key feature of the redevelopment with the aim of developing desired built form character while ensuring high levels of amenity and integration with surrounding districts.



Rive Gauche Paris

The Paris Rive Gauche project is a transit enriched urban regeneration project of a 130-hectare site located in the east of Paris, on the banks of the Seine including 10 hectares are open space. The aim is to create a mixed-use network of neighbourhoods around landmarks such as the national library and Paris Diderot University, through redevelopment of the industrial and rail located around the Austerlitz train station and with a high focus on employment and ensuring that Paris remained an accessible location for 21st jobs and workplace requirements.



This was achieved with the application of the concerted development zone, or ZAC (zone d'aménagement concertée), bought in 1991. This zone allows for a mix of uses (office, housing, local retail and services, green spaces). The project resulted in the accommodation of 15,000 residents, 30,000 students and staff along with 50,000 employees. This had exceeded both student and employment targets with over 40% of the development area providing diverse housing including affordable and key worker housing. Height controls established were consistent with Paris, typically set at 31 metres and scaling up to 100 metres at the freeway interface. The project includes Station F, the largest start-up facility in Europe containing 1800 micro and small enterprises.

4.4 Benchmarking: Public Open Space and Infrastructure

4.4.1 Squares



Dandenong Civic Centre Square, Melbourne by Rush Wright Associates

This space is located adjacent to the Dandenong Municipal Building and serves as an important link between Dandenong's main street and the railway station and bus interchange. The space supports both though movement and occupation by Council and library staff and visitors. Richly detailed forms and varied materials reflect the vibrancy and variety of the local community. A program of events has established the Square as an important space for civic activities.



The Plaza at Harvard University, by STOSS

This project creates a new gathering space and heart for the university – located above a busy vehicular underpass. As well as a delivering new meeting spaces and a programmable event venue, the project is an exemplar of high performing public realm and delivers both social and hard infrastructure. The design integrates temperature management within the furniture elements and collects storm water through the articulated ground plane.

4.4.2 Boulevards



North Terrace, Adelaide by TCL

Through the delivery of a generous pedestrian spine on the North side of the street, the project provides a unifying and singular space linking a series of civic buildings. Within this bold gesture, the detailing allows for specific responses to each institution and also provides a series of new urban spaces for the public. Planting, paving, furniture and lighting combine to create a durable and iconic environment for this important space within the City of Adelaide.

4.4.3 Malls



Passeig De St Joan Boulevard, Barcelona by Lola Domenech

This project provides valuable social spaces within one of Barcelona's established, historic boulevards. The wide street includes a separated cycle path within the centre median as well as a separated pedestrian path to the sides. Seating areas, children's play spaces and outdoor dining are accommodated in the generous buffer between traffic and footpath spaces. Double rows of deciduous trees provide shade in the summer and allow solar access during winter and understory planting breaks up the long, linear street edge.



Rundle Mall, Adelaide by Hassell and Arup

This project was a redevelopment of the existing pedestrian Mall designed to create a space that supports shared community experiences. The realised design encourages visitors to stay in the space longer, thereby contributing to the local economy. Event infrastructure supports a well-curated program of pop-up installations, festivals and events, performances and art installations - and will easily accommodate change, as the specific needs of the community change over time. The design includes re-profiling of the space to move away from its street-like character. A variety of bespoke seating types, the inclusion of canopy shade trees and the introduction of catenary lighting make it a comfortable place for lingering during the day as well as after dark.



Pitt Street Mall, Sydney by Tony Caro Architects

A restrained design featuring materials that are part of Sydney's established language and knit the space into its context. Generous amounts of seating, shade trees, and technology-enabled infrastructure make it a well-used space for incidental stopping by visitors, as well as a venue for planned events. The central drain, serves an obvious practical purpose and also artfully reveals the memory of Tank Stream which once ran under the space.

4.4.4 Streetscapes



Jellicoe Street, Auckland by TCL + Meghan Wraight and Associates

Part of the North Wharf revitalisation project, the design of Jellicoe Street establishes a new public realm language for this grand boulevard. Incorporating a centrally located tram-line, the design breaks down the vast scale of the space through the use of textured paving materials and the integration of 'fingers' of vegetation which visually break up the linearity of the street, creating comfortable and human-scaled circulation routes. The elimination of kerbs facilitates the integration of water sensitive urban design (WSUD) initiatives through the creation of rain gardens, which capture and filter storm water.



Greville Street, Melbourne by City of Stonnington

The de-prioritisation of vehicles through this well-known busy street, has aided its transition to a shared space and popular outdoor dining destination. Finely crafted, façade to façade paving unifies the space and signals its function as more than merely a street for vehicle movement. New furniture and planting are designed to guide traffic, while catenary lighting and artwork marks the street's junction with Grattan Gardens. When closed to vehicular traffic, street and garden combine to create a flexible space for programmed events.



Afghan Cultural Precinct, Melbourne by Hassell

This project delivers a distinctive place that is emblematic of the local community. The design is informed by deep consultation with the traders and the community to ensure broad support. Adopted seating configuration supports established modes of socialising and the selected colours, materials and patterns are familiar and much loved. 'The Lantern', an integrated art piece by Afghan-Australian Aslam Akram heralds arrival to the space both day and night.

Angel Place, Sydney by Aspect Studios

The redevelopment of Angel Place has revitalised this historic laneway and transformed it from service access to comfortable and intriguing pedestrian space. A restrained palette of high quality paving introduced few other elements, in order to maintain the functionality of laneway. Paving and steel inlays are used to subtly reveal the subterranean Tank Stream. Integrated lighting and public artwork, 'Forgotten Songs' by Michael Hill, Dr Richard Major, Richard Wong and David Towey, adds further interpretation of the sites history and adds visual interest to the pedestrian experience.



4.4.5 Small Open Spaces



Holland Street, Adelaide by JPE
Design Studio + City of West Torrens

This project features a re-prioritisation of street 'real estate' to favour pedestrians and cyclists and includes a part street closure. Defined as a key meeting place, the design provides space for congregation and celebrates the location of Holland Street's meeting with the River Torrens. Integrated water sensitive urban design (WSUD) initiatives harvest and treat stormwater, which is reused for irrigation. Bespoke streetscape elements celebrate newly created community space.



Richmond Terrace Park, Melbourne by Hansen Partnership

Formed by closing a section of road at the intersection of Docker Street and Richmond Terrace, this new park has become a well-used passive recreation space as well as a green connector through the neighbourhood. High quality paving materials and bespoke seating elements differentiate the space from the surrounding street environment. Integrated lanterns illuminate the park and provide a comfortably lit link for both pedestrians and cyclists.



Oxford Street, Melbourne by
Urban Initiatives City of Yarra and
Leanne O'Shea

The closure of a short length of road allowed the creation of a new urban park. Visually distinctive detailing has been employed to give this small space an attractive and vibrant personality. Seating is integrated into platform edges, which support different modes of occupation by visitors. Water sensitive urban design (WSUD) and flood control measures are integrated, as is low energy lighting for after dark security.



