



GLEN EIRA
CITY COUNCIL

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BENTLEIGH EAST
BRIGHTON EAST
CARNEGIE
CAULFIELD
ELSTERNWICK
GARDENVALE
GLEN HUNTLY
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MURRUMBEENA
ORMOND
ST KILDA EAST

GLEN EIRA CARNEGIE STRUCTURE PLAN 2022



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ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

Glen Eira City Council acknowledges the Boonwurrung/ Bunurong and Wurundjeri Woi Wurrung peoples of the Eastern Kulin Nation as Traditional Owners and Custodians, and pays respect to their Elders past, present and emerging. We acknowledge and uphold Traditional Owners continuing relationship to land and waterways. Council extends its respect to all Aboriginal and Torres Strait Islander peoples.

Council honours the rich histories and cultures of First Nations peoples and recognises and values the important contribution of Aboriginal and Torres Strait Islander peoples in enriching our community. We support the Uluru Statement from the Heart and are committed to a *Reconciliation Action Plan* which is underpinned by the principles of self-determination. We work towards improved outcomes and long-term generational change, and to consolidate Glen Eira as a culturally safe place for Aboriginal and Torres Strait Islander peoples. We are committed to achieving equality for Aboriginal and Torres Strait Islander people to live healthy and prosperous lives and to improve life outcomes for current and future generations.

Glen Eira resides on country that always was, and always will be, Aboriginal land.

EXECUTIVE SUMMARY

The Carnegie Major Activity Centre is a vibrant suburban centre that adjoins an established residential area that is undergoing change. It has a growing population, and it is a desirable area to live due to the services offered by the centre and its proximity to the CBD via the new elevated station. Completion of the Metro Tunnel in 2025 will improve access to the CBD as well as St Kilda Road and Parkville.

The centre provides an abundance of dining experiences as well as fresh food retailing, shops, services and supermarkets.

The Koornang Road retail precinct has a distinct and low-scale character, defined by the historical fine-grain pattern of single and double storey shops.

Areas of land to the north of the railway line are transitioning from industrial land uses to a mix of commercial and residential uses, being built at a higher scale.

Glen Eira's population is expected to increase by approximately 30,000 people by 2036, similarly demand for retail and commercial floorspace in the Carnegie Major Activity Centre is expected to grow by 2036.

The *Carnegie Structure Plan* is a 15-year plan to manage growth and improvement for the Carnegie Major Activity Centre. It enables us to plan for the population increase by accommodating new development with defined heights and setbacks while maintaining the historic character of the centre as its principal architectural feature.

The *Structure Plan* delivers on Council's response to the climate emergency. In land use terms, it provides for sustainable growth by enabling higher density growth closer to shops, services and public transport. The *Structure Plan* also supports additional office and retail spaces that allows people to live closer to where they work, or work in a location with good public transport access.

In terms of tree canopy and urban cooling, it proposes a streetscape masterplan that will look at all opportunities to increase the tree canopy and increase water sensitive urban design. The proposed Kokaribb Road park will also allow for more tree planting and rainwater collection.

In transport terms, increased development density close to good public transport reduces car dependence. The *Structure Plan* recognises the need for and supports improvements to the pedestrian environment to make walking a more attractive option. The *Structure Plan* will also improve cycling access to the centre.

The vision includes:

"Carnegie to be a safe, connected and welcoming centre that embraces its authentic urban character and cultural identity. The centre will be a destination for entertainment, shopping and employment, and support a range of businesses and interconnected community spaces that meet the needs of the local community, providing a socially, environmentally and economically sustainable future."

The *Structure Plan* considers the centre's future in relation to land use, sustainability, open space, heritage, transport and placemaking. It also delivers outcomes for Council in relation to other strategies, including *Our Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-Biik Parbin-Ata)*, the *Integrated Transport Strategy*, the *Parking Strategy*, the *Urban Forest Strategy* and the *Open Space Strategy*.



PART ONE: **INTRODUCTION**

INTRODUCTION

WHAT IS A STRUCTURE PLAN?

The *Carnegie Structure Plan* (the *Structure Plan*) outlines a 15-year plan for the growth and improvement for the Carnegie Major Activity Centre.

A structure plan provides a coordinated approach to the planning for an area to ensure that an area develops as a great place to live, work and visit and provides certainty for all stakeholders (government, community, businesses and the development industry) about what change is expected to occur. In doing so, it must respond to matters including but not limited to:

- > land use and economy
- > built form and urban design
- > local character and heritage
- > transport and parking
- > sustainability
- > open space

Analysis of these topics result in recommendations for policies, development controls and projects to realise the vision and objectives of the *Structure Plan*.

HOW TO USE THIS DOCUMENT

Part one: Introduction

Part two: Vision and objectives

Part three: Making it happen — the implementation plan

WHY DO WE NEED A NEW STRUCTURE PLAN?

Carnegie is an established centre with good access to amenities, public transport and employment opportunities. It is identified as a Major Activity Centre in *Plan Melbourne* and accordingly, Carnegie has become a desirable place to live.

To coordinate the sort of growth that comes with an increasingly popular area, a structure plan was developed for Carnegie in 2018 (with updates in February 2020).

A Planning Scheme Amendment was then prepared to implement the built form recommendations of the *2018 Structure Plan*. However, following exhibition and community submissions, Council abandoned the amendment on 16 March 2021 for various reasons, including that it required further strategic justification and would benefit from the strategic work of a municipal housing strategy.

To include permanent planning controls in the *Planning Scheme*, there needs to be a robust strategic logic to underpin the amendment.

The revised *Carnegie Structure Plan* is guided by the new draft *Glen Eira Housing Strategy*, which has been prepared in parallel, as well as by independent urban design and transport advice.

STRUCTURE PLAN OBJECTIVES

The four key objectives that underpin the preparation of the *Structure Plan* are, to:

- > establish a shared vision and framework for the long-term future growth, development and character of Carnegie;
- > ensure community infrastructure, streets, open space and transport provision better match the needs of a growing population;
- > provide more certainty to the community and decision makers; and
- > identify a set of actions to deliver the vision and framework for the future development of Carnegie.

HOW WILL THE STRUCTURE PLAN PROVIDE MORE CERTAINTY?

The *Structure Plan* provides decision makers, including Council, State Government and other agencies, with a platform to allocate resources towards capital works to improve the appeal and function of the centre. It helps guide the determination of planning applications and sets work programs across Council.

Importantly, the *Structure Plan* also provides certainty for the community, business owners, the development industry and planning applicants regarding the level of change and type of development that can be expected in Carnegie.

It provides the strategic basis to support the introduction of stronger planning and building design controls in the *Planning Scheme* that will provide greater clarity across the planning process, including at the Victorian Civil and Administrative Tribunal (VCAT).

WHAT IS THE STUDY AREA AND HOW WAS IT SELECTED?

To undertake the *Structure Plan* process, Council needed to identify a study area for the *Built Form Framework* and *Transport Report*. The *Carnegie Structure Plan* study area is shown in Figure 1.

The activity centre study area for the *Built Form Framework* is centred on the retail and commercial core of Koornang Road, as the *Glen Eira Housing Strategy* will address the residential areas of the Carnegie Major Activity Centre.

The study area for the *Transport Report* includes the *Built Form Framework* study area plus key adjacencies, focusing only on the commercial and mixed used areas of the centre, including the land owned by Council.

The *Transport Report* study area boundary consists of two sections, a northern section covering roughly 47 hectares of the Major Activity Centre along Koornang Road and Neerim Road, and a smaller southern section covering roughly 4 hectares of land along Koornang Road and Truganini Road close to Koornang Park.

STUDY AREA

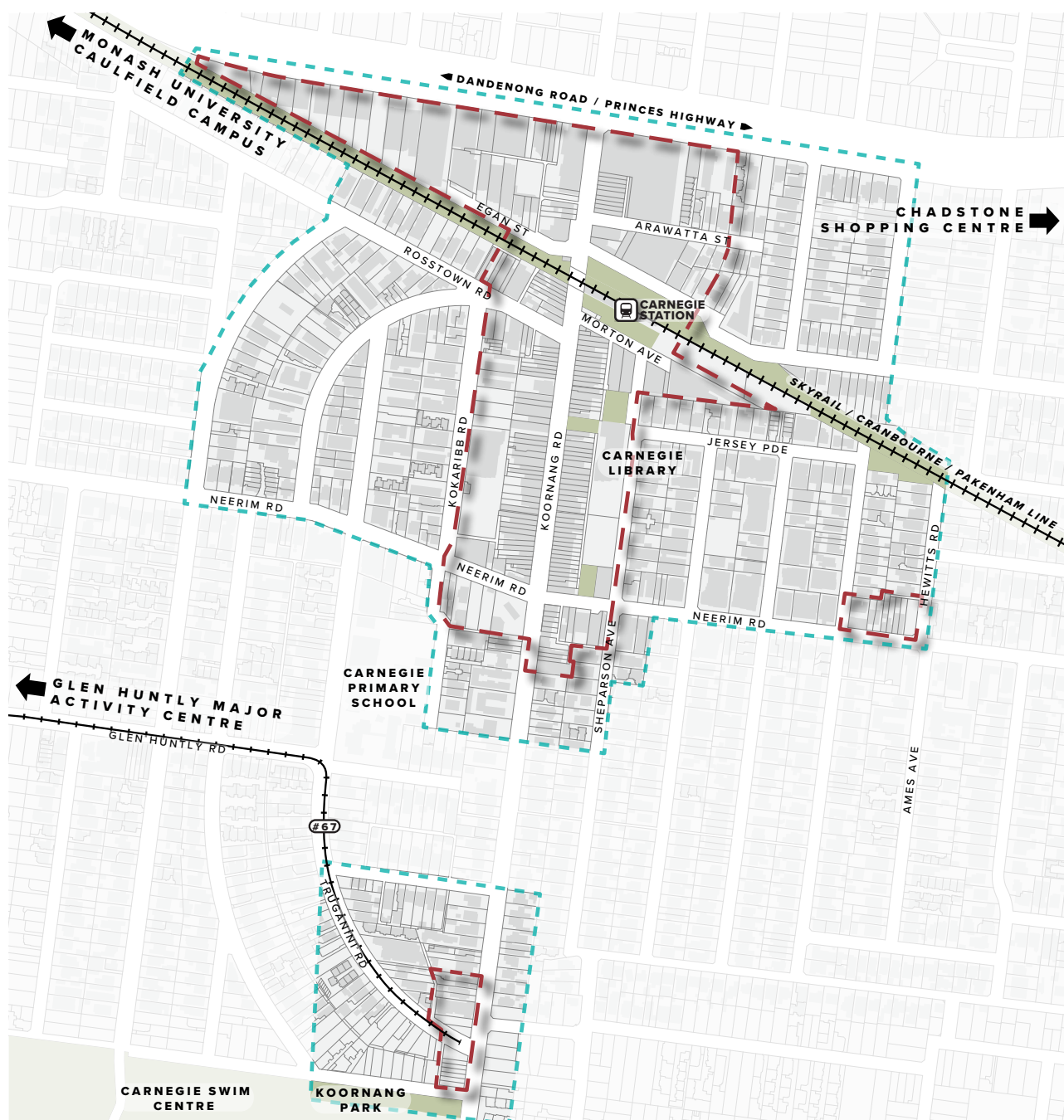


Figure 1: The activity study area for the Built Form Framework and Transport Report

KEY

- | | |
|---|----------------------------|
| --- Urban design study area boundary | Train line |
| --- Transport study area boundary | Tram line |
| | Existing public open space |

Major Activity Centre BOUNDARY

The Carnegie Major Activity Centre boundary includes both the residential and commercial areas within the activity centre.

Figure 2 identifies the activity centre boundary for the *Carnegie Structure Plan*.

The Major Activity Centre boundary has been defined using the activity centre boundary criteria included in the Department of Environment, Land, Water and Planning (DELWP's) *Planning Practice Note 58 Structure Planning for Activity Centres*.

Major activity centre BOUNDARY

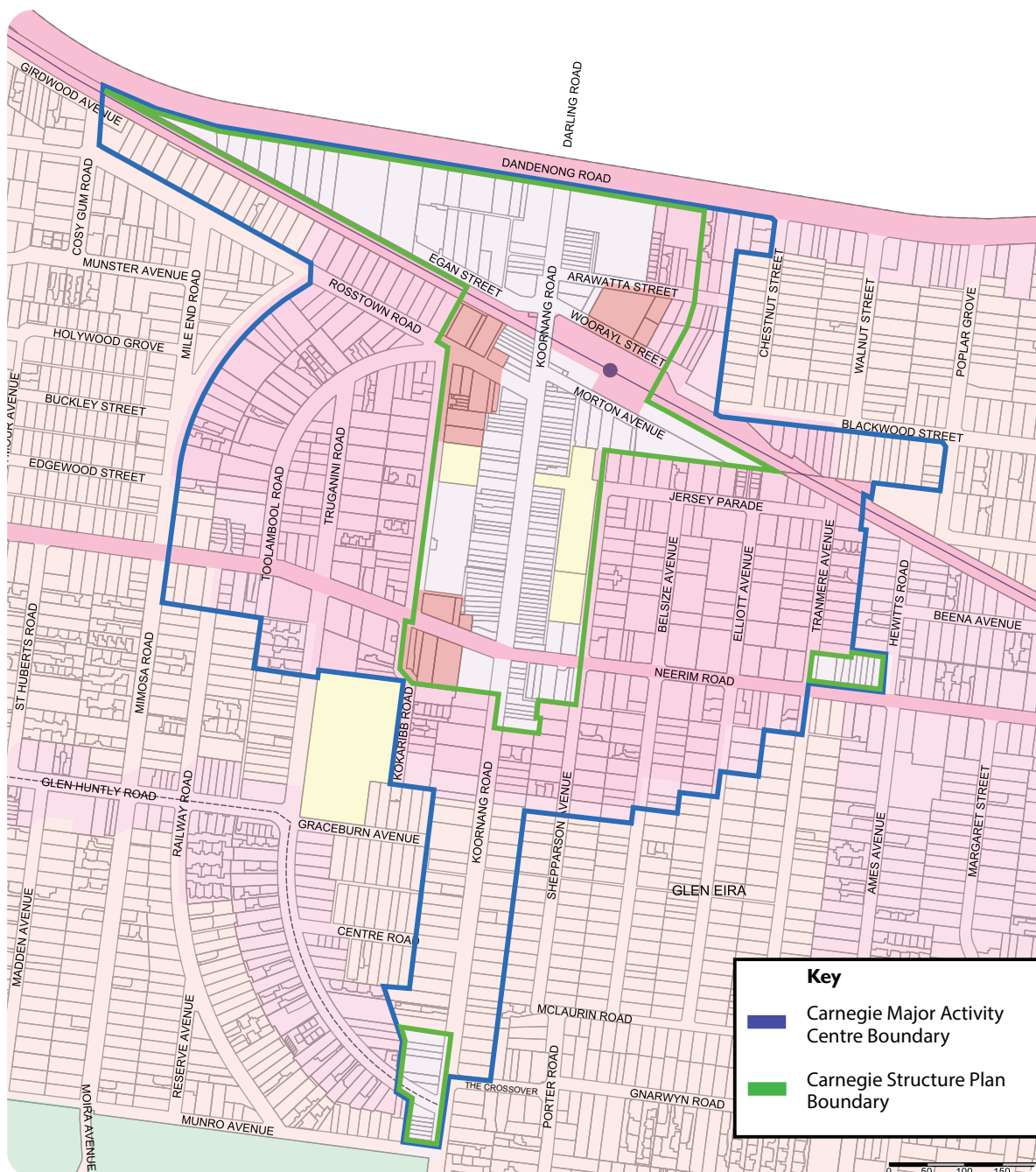


Figure 2: Carnegie Major Activity Centre boundary map.

Note: The Carnegie Structure Plan applies to the Commercial, Public Use and Mixed Use Zones within the major activity centre. The Plan focuses on commercial land of the Carnegie Major Activity Centre. The residential areas within the activity centre boundary will be reviewed as part of the new *Housing Strategy 2022* implementation. If the *Housing Strategy* recommends changes to the residential land within the activity centre boundary, then a separate planning scheme amendment process will need to be undertaken to include the recommended changes.

KEY

- Major major activity centre
- Tram line
- Train line
- Existing public open space

Major Activity Centre BOUNDARY

When deciding where to draw the boundary, the following were considered:

- > *Draft Housing Strategy* — the character and built form assessments conducted as part of the *Housing Strategy* have assisted to clarify suitable residential zoning at the edges of the centre and therefore, the Major Activity Centre boundary itself, by placing the boundary around the Substantial Change Areas in the *Housing Framework Plan*;
- > various land uses/zones both in public and private hands;
- > location of public transport;
- > location of open space;
- > environmental and heritage constraints;
- > location of strategic redevelopment sites;
- > location of or proximity to higher density residential areas;
- > opportunities to provide for and improve walkability within 400 to 800 metres from the centre;
- > consistency with state, regional and local planning policy; and
- > sufficient land to provide for the commercial activities for 15 to 20 years and looking ahead to 30 years.

The boundary needs to include:

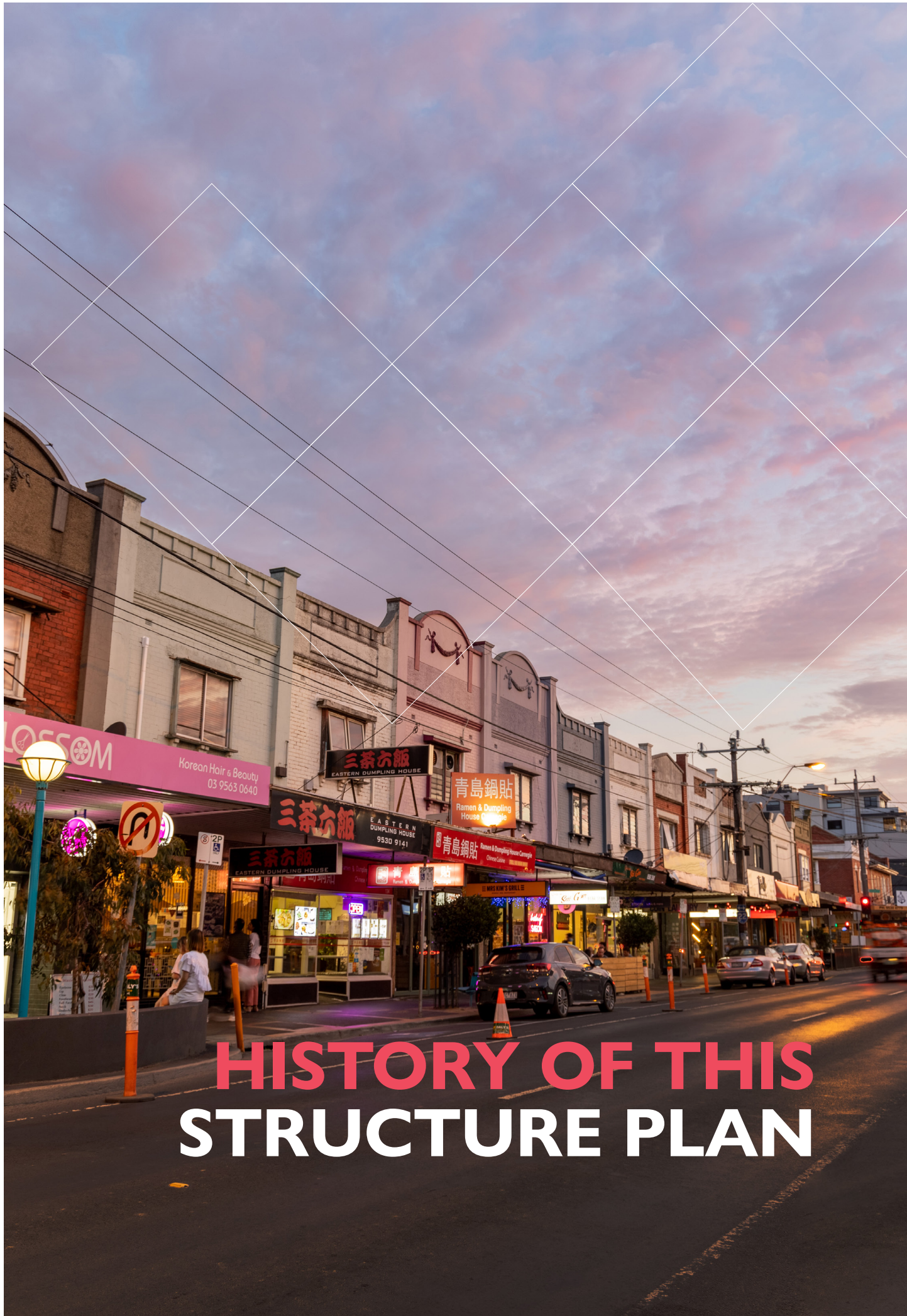
- > sufficient land to provide for commercial (retailing, office, fringe retailing and support activities such as entertainment) activities needed over a 15 to 20-year horizon;
- > residential areas that are integrated into and have a strong relationship with the Major Activity Centre;
- > key public land uses that will have a strong relationship with the Major Activity Centre; and
- > public open space areas that have a strong relationship with the Major Activity Centre.

The boundary of the Major Activity Centre should generally exclude:

- > residential land that is encumbered by significant constraints such as heritage overlays located at the edge of the Major Activity Centre.

The Major Activity Centre boundary has been delineated by analysing the proximity of each residential lot to the centre of the Major Activity Centre (400 metres), which includes shops, public transport and services. This analysis has been combined with constraints such as heritage and physical barriers.

It should be noted that not all areas within the Major Activity Centre Boundary will be treated the same. Some areas may experience limited change while other areas may experience greater transformation of land use, built form, access arrangements and the public realm.



HISTORY OF THIS STRUCTURE PLAN

CARNEGIE STRUCTURE PLAN 2018

Carnegie is a Major Activity Centre (MAC) with great access to amenities, public transport and employment opportunities. Its desirability and strategic significance within the context of Glen Eira is a strong driver of growth and will continue to be for years to come.

To coordinate this growth, a structure plan was developed in 2018 and updated in February 2020.

The *Carnegie Structure Plan 2018–2031* vision included:

“Carnegie will be a safe, connected and welcoming centre that embraces its authentic urban character and cultural identity.

The centre will be a destination for entertainment, shopping and employment, supporting a range of businesses and interconnected community spaces that meet the needs of the local community.”

Carnegie Structure Plan 2018–2031 vision

Key objectives

The key objectives for the *Carnegie Structure Plan 2018* were:

- > Place making
- > Housing
- > Economy
- > Transport



ENGAGING WITH THE COMMUNITY

Extensive community consultation informed the 2018 *Structure Plan* process, with a focus on engaging a variety of stakeholders, including residents, local business owners, workers and state agencies.

To inform the development of the 2018 *Carnegie Structure Plan*, we undertook a six-step consultation process with the Carnegie community between November 2016 and December 2017. Feedback, comments and submissions have contributed to the preparation of both the 2018 and 2022 *Structure Plan*.

The consultation process included:

- > letters to affected property owners;
- > promotion through Council's website and Have Your Say site;
- > Facebook advertising;
- > online surveys;
- > articles in the local newspapers;
- > *Glen Eira News* articles, lift-outs and features;
- > community forums;
- > discussions with a wide range of internal Council departments; and
- > drop-in sessions at our information booth at Carnegie Library and Community Centre.

ENGAGEMENT

NOVEMBER 2016–FEBRUARY 2017

Planning Scheme Review and Community Plan consultations

Tell us what you love about your shopping strip



367

Carnegie submissions

MARCH–APRIL 2017

Transforming our neighbourhoods together — our concepts based on your ideas



122

Carnegie submissions

MAY–JUNE 2017

Activity Centre Strategy and preliminary Structure Plan exploration



60

Carnegie submissions



35

Community forum attendees

JULY–SEPTEMBER 2017

Quality Design Principles and draft concept plans



115

Carnegie submissions



88

Community forum attendees

OCTOBER–DECEMBER 2017

Quality Design Guidelines and draft Structure Plans



139

Carnegie submissions



51

Community forum attendees



WHAT WE HEARD

A total of 780 submissions were received.

WHAT WE HEARD	HOW WE ARE RESPONDING
Concern about over development and loss of character in Carnegie.	A draft <i>Housing Strategy</i> is being undertaken which is reviewing the residential areas of the municipality.
Ensure development in the urban renewal area responds appropriately to the character area in Chestnut Street.	The <i>Carnegie Built Form Framework</i> has been prepared and recommends side and rear setbacks on new buildings to ensure appropriate interfaces in order to limit amenity impacts on adjoining properties.
More parking is needed.	A transport study has been prepared which has investigated the transport implications of the built form and future densities and provides an appropriate response to support future development associated with the revised <i>Carnegie Structure Plan</i> .
More green and open spaces are needed.	New public open space is proposed on the Council car park located on Kokaribb Road (2,146 square metres). Council will actively explore opportunities for additional open space and to improve existing open spaces as recommended in Council's <i>Open Space Strategy</i> .
Improve walkability.	Encourage the creation of pedestrian laneways with new developments and shared spaces and improving walkability and crossings.
More diversity in retail offerings.	The <i>Public Realm Review</i> and <i>Carnegie Built Form Framework</i> recommends that Council supports local businesses to provide more diverse retail offerings by protecting the fine-grain streetscape on Koornang Road and increasing opportunities for outdoor dining spaces. Council's City Economy and Placemaking team will continue to monitor the range of food retail offered within the Carnegie Major Activity Centre and work with the traders' association, property owners and potential new businesses to help ensure the centre maintains a variety to meet the needs of the Carnegie and broader Glen Eira community.
Provide more housing for families.	The draft <i>Housing Strategy</i> is exploring the type of housing needed in the future based on population projections and demographics. The <i>Housing Strategy</i> will make recommendations as to what type of housing will be needed in the future.
Carnegie needs vibrant community spaces and places for people to gather.	A number of recommendations have been made to improve and create public open spaces within the activity centre such as the Carnegie Community Space located on Neerim Road.
Preserve the heritage character of Koornang Road shopping strip.	The properties along Koornang Road are protected by the heritage overlay and mandatory height controls and upper level setbacks are recommended for these sites.

The consultation undertaken for the *Structure Plan* was extensive and there will be public exhibition of the Planning Scheme Amendment that seeks to implement the permanent planning controls. Members of the community have the opportunity to comment on the revised *Structure Plan* during the Planning Scheme Amendment process.

PLANNING SCHEME AMENDMENT C184 AND INTERIM PLANNING CONTROLS

In 2020, Amendment C184 proposed to translate land use zones and development controls from the 2018 *Bentleigh* and *Carnegie Structure Plans* into the *Glen Eira Planning Scheme*.

In August 2016, Council requested the Minister for Planning approve planning controls (relating to height and built form) on an interim basis in the form of a Design and Development Overlay (DDO9) in the *Glen Eira Planning Scheme*.

The request was made at a time when Council also sought authorisation for Amendment C184 which proposed the introduction of permanent controls on the centre. The centre was under some development pressure at that time.

The Minister for Planning approved the interim controls in April 2017 and they have been in place since then. In March 2022 the Minister extended the interim controls over the *Carnegie Structure Plan* area to 30 June 2023 but reduced the extent of them to land in the commercial cores only (Commercial 1 and Mixed Use zones). The interim controls have since been extended to December 2024.

ABANDONING OF AMENDMENT C184

Following public consultation for Planning Scheme Amendment C184, submissions were received by Council that highlighted key challenges with the amendment. These challenges included:

- > its size (covering two large centres with both their residential and commercial areas);
- > inconsistent changes made at different stages of the *Structure Plan's* approval to try to accommodate both community and Ministerial directions; and
- > the need for more detailed supporting work on housing needs and future strategy.

Council abandoned Amendment C184 in March 2021. It resolved not to proceed further with Planning Scheme Amendment C184 and to undertake a reset of the process.

REVIEW OF THE CARNEGIE STRUCTURE PLAN AND PREPARATION OF THE 2022 VERSION

Since March 2021, a review of the adopted *Structure Plan* has been undertaken, further research has been conducted and consultants have been engaged to review built form, car parking and traffic movement and employment within the Major Activity Centre.

As a result, the following reports have been developed:

- > **Carnegie Built Form Framework June 2022, Lat 37**, sets out the preferred built form outcomes for the Carnegie Major Activity Centre. These include building heights, setbacks and access/egress for the commercial zoned land and are further supported by design principles guiding detailed design outcomes. Building heights for the residential zoned land have been reviewed as part of the *Housing Strategy*;
- > **Carnegie Built Form Framework Background Report 21 December 2021, Lat 37**. The report establishes the context, describes the character and provides a summary of key strategic documents and recent studies undertaken;
- > **Carnegie Activity Centre Transport Study July 2022, ARUP**, investigates the transport implications of the *Carnegie Built Form Framework* and provides an appropriate response to support future development associated with the revised *Carnegie Structure Plan*;
- > **Carnegie Public Realm Review, Structure Plan Revision 2022, Glen Eira City Council**, provides updated public realm recommendations that informed the revised *Structure Plan*;
- > **Employment Land Needs Assessment for the Bentleigh, Carnegie, and Elsternwick Major Activity Centres, report prepared for the City of Glen Eira, 31 March 2022, SGS Australia**. In 2018, consultants were commissioned to review how the activity centre, *Housing and Local Economy Strategy* (now called *City Plan*) developed by the City of Glen Eira would align with

population and employment growth forecasts to the year 2036, and support implementation via a Planning Scheme Amendment process.

The *Employment Land Needs Assessment* has been prepared to support the preparation of three Major Activity Centre structure plans. The *Assessment* extends on previous employment analysis from 2018, based on more recent economic data and trends, including initial understanding of the impacts of COVID-19. It also draws on additional information identified from Council's draft *Housing Strategy 2022*.

The *Employment Needs Assessment* considers both retail and (non-retail) commercial needs. It applies recent economic data and trends to estimate Carnegie's future commercial and retail needs,

The findings of this report underpin the economic analysis needed for the *Structure Plan*. And

- > **Heritage**. GJM Heritage consultants and RBA Architects and Conservation Consultants were engaged to provide heritage advice on heights and setbacks for properties included in the Heritage Overlay area along Koornang Road.

INTEGRATION WITH THE DRAFT GLEN EIRA HOUSING STRATEGY

In March 2021, Council commenced work on the draft *Glen Eira Housing Strategy*. The purpose of the *Strategy* is to plan for the future population increase until 2036 and guide appropriate future residential development in the right locations. It will identify projected population and housing growth and will ensure sufficient housing land is available to accommodate projected growth over the next 15 years.

The draft *Glen Eira Housing Strategy* sets out a vision for the municipality and sets a framework plan that will guide the future of housing in Glen Eira.

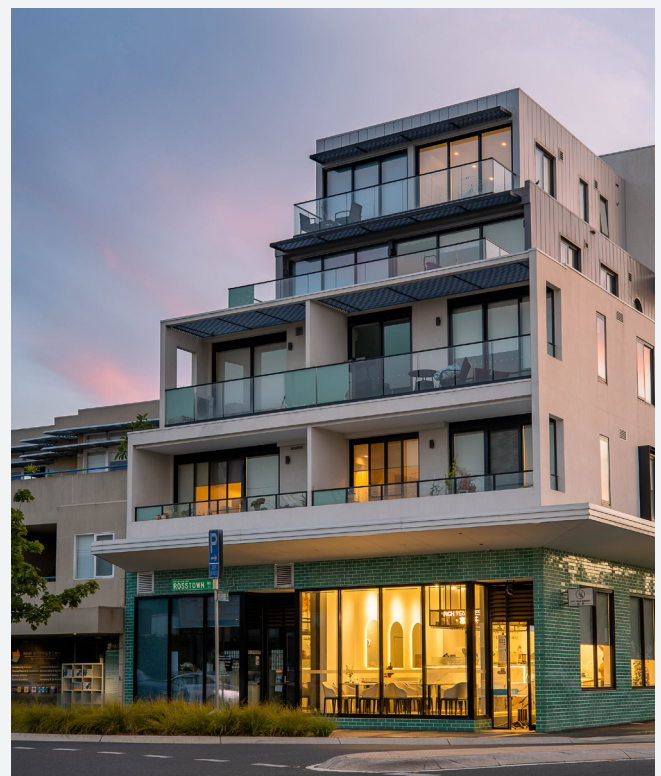
Subsequently the revised *Carnegie Structure Plan* will plan for development of commercial and mixed use land and the *Housing Strategy* will plan for the development of residential land. The review of the residential zones will be undertaken as part of the *Housing Strategy* implementation.

Overall, the draft *Housing Strategy* will:

- > identify the housing needs of Glen Eira and where and how these needs will be met across the municipality;
- > ensure adequate land for housing to meet population increase and to underpin new housing policy in the *Glen Eira Planning Scheme*;
- > define how Council is planning to respond to population growth and change;
- > undertake neighbourhood character analysis and visioning (preferred character) to strengthen neighbourhood character policy and controls;
- > provide greater choice and diversity of housing;
- > provide certainty for the community and stakeholders about where change is likely to occur;
- > identify suitable locations for housing growth, including those areas close to services, jobs, public transport and Major Activity Centres, and strategic development areas; and
- > determine the potential capacity of the suburbs to deliver new housing.

The links between the draft *Housing Strategy* work and this *Structure Plan* are:

- > the demographic and housing capacity and demand analysis conducted for the *Housing Strategy* assists to understand likely future local employment and retail needs for the Major Activity Centres;
- > the housing capacity and demand analysis conducted for the *Housing Strategy* helps to clarify the housing capacity within the Major Activity Centre boundaries; and
- > the character and built form assessments conducted as part of the *Housing Strategy* have assisted to clarify suitable residential zoning at the edges of the centre and therefore, the Major Activity Centre boundary itself.



While the intent may be to manage development in these key areas, it is important to note that any change of the *Planning Scheme* is required to align with State Government objectives. In particular, *Plan Melbourne* is very clear around expectations to focus new housing in inner-city Major Activity Centres, with the clear objective to:

“support new housing in activity centres and in other places that offer good access to jobs, services and transport.”

Plan Melbourne

Currently, there are no permanent height limits on the commercial or mixed-use zones in Carnegie, just interim height controls that protect these centres while detailed permanent controls are prepared.

The *Carnegie Built Form Framework* has been prepared and supported by the background report which summarises relevant policies and projects that impact on the future of Carnegie. It is also informed by:

- > a review of the existing analysis, physical and policy context of the Major Activity Centre;
- > the proposal of appropriate updates to the centre's vision and objectives based on new and emerging policies;
- > the heritage overlay along Koornang Road;
- > the development of a set of design principles to achieve the objectives and realise the vision;
- > the need to fill new and emerging gaps in analysis and testing of built form scenarios that align with the design principles to assess their impact on the centre and surrounding area;
- > the development of preferred building heights, setbacks, solar access protections, vehicle access and frontage requirements.

WHAT MAKES CARNEGIE UNIQUE?

The suburb of Carnegie is bounded by Dandenong Road in the north, Murrumbeena Road, Leila Road and Boake Street in the east, North Road, Koornang Road and Leila Road in the south, and Grange Road in the west.

Carnegie is an established residential area with commercial areas along Koornang and Neerim Roads.

Carnegie is well located on the Cranbourne and Pakenham train lines. It is approximately 12 kilometres from Melbourne's city centre, one stop south east from Monash University's Caulfield campus and the Caulfield Racecourse, and two kilometres west of Chadstone Shopping Centre.

Major features of the area include Carnegie Shopping Centre, Carnegie Swim Centre, Koornang Park, Lord Reserve, Packer Park and a number of schools.

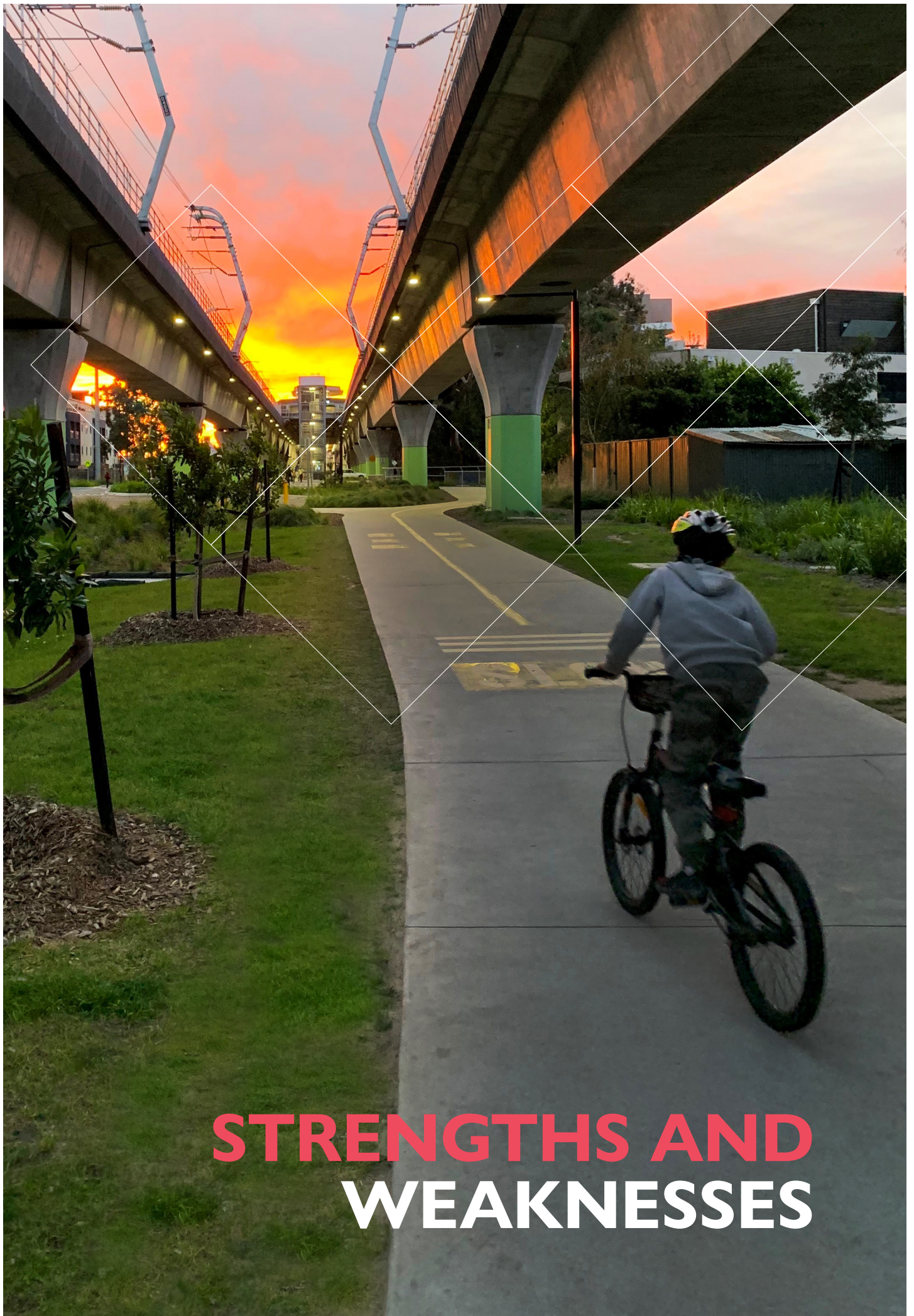
The Carnegie Major Activity Centre is one of six major Major Activity Centres in the City of Glen Eira along with Bentleigh, Caulfield, Elsternwick, Glen Huntly and Moorabbin Junction. The activity centre benefits from its proximity to Dandenong Road and the accessibility this provides for visitors living to the east and west of the centre.

The recent removal of the level crossing at Carnegie has had substantial benefits for the local community, including increased permeability under the elevated rail and the provision of new public open space along Woorayl Street. The Djerring Trail, which runs along the rail corridor connecting Caulfield to Dandenong, provides a safe, dedicated walking and cycling path linking Carnegie to other Major Activity Centres.

Carnegie is a culinary destination in the City of Glen Eira. The *Carnegie Structure Plan* study area is focused around the commercial strip that runs north to south along Koornang Road. This Koornang Road shopping strip has a distinct and low-scale character that makes Carnegie unique.

Carnegie has accommodated residential growth due to its public transport connections and proximity to Monash University's Caulfield campus. There is an opportunity for urban renewal in a large pocket of commercial land. This is located to north of the centre, adjacent to the major transport corridor along Dandenong Road as well as in proximity to the train station.





STRENGTHS AND WEAKNESSES

CARNEGIE'S CURRENT STRENGTHS



Carnegie has strong public transport connections with the station providing a connection to the CBD as well as south-east towards Cranbourne and Pakenham. The 67 tram service connects to Melbourne University and buses provide a connection through to Chadstone Shopping Centre, St Kilda, McKinnon, Middle Brighton and Elsternwick.



The Koornang Road retail core has a distinct and low-scale village character defined by the historical fine-grain subdivision pattern.



A number of private and public owned sites east and west of the Koornang Road retail core have been identified as strategic sites that can accommodate taller buildings.



Land north of the railway line and along Dandenong Road is well located for urban renewal development. The existing commercial building stock is ageing and the location is ideal for redevelopment due to its proximity to services and transport infrastructure.

CARNEGIE'S CURRENT STRENGTHS

(CONTINUED)



Carnegie provides three full-line supermarkets, a smaller supermarket, fresh food retailing, bulky goods and non-food retailing and a significant number of cafes and restaurants.



Car parking in the major activity centre includes two at-grade car parks either side of Koornang Road, basement car parking at Carnegie Central and time restricted on-street car parking on most streets throughout the major activity centre.

CARNEGIE'S CURRENT WEAKNESSES



There is community concern regarding the rate of development in residential areas between Neerim Road and the railway line.

CARNEGIE'S CURRENT WEAKNESSES

(CONTINUED)



Local streets to the south of Neerim Road include multiple residential zones within a single streetscape. This has resulted in apartments and low-density housing being developed collectively within a single streetscape, leading to transitional issues.



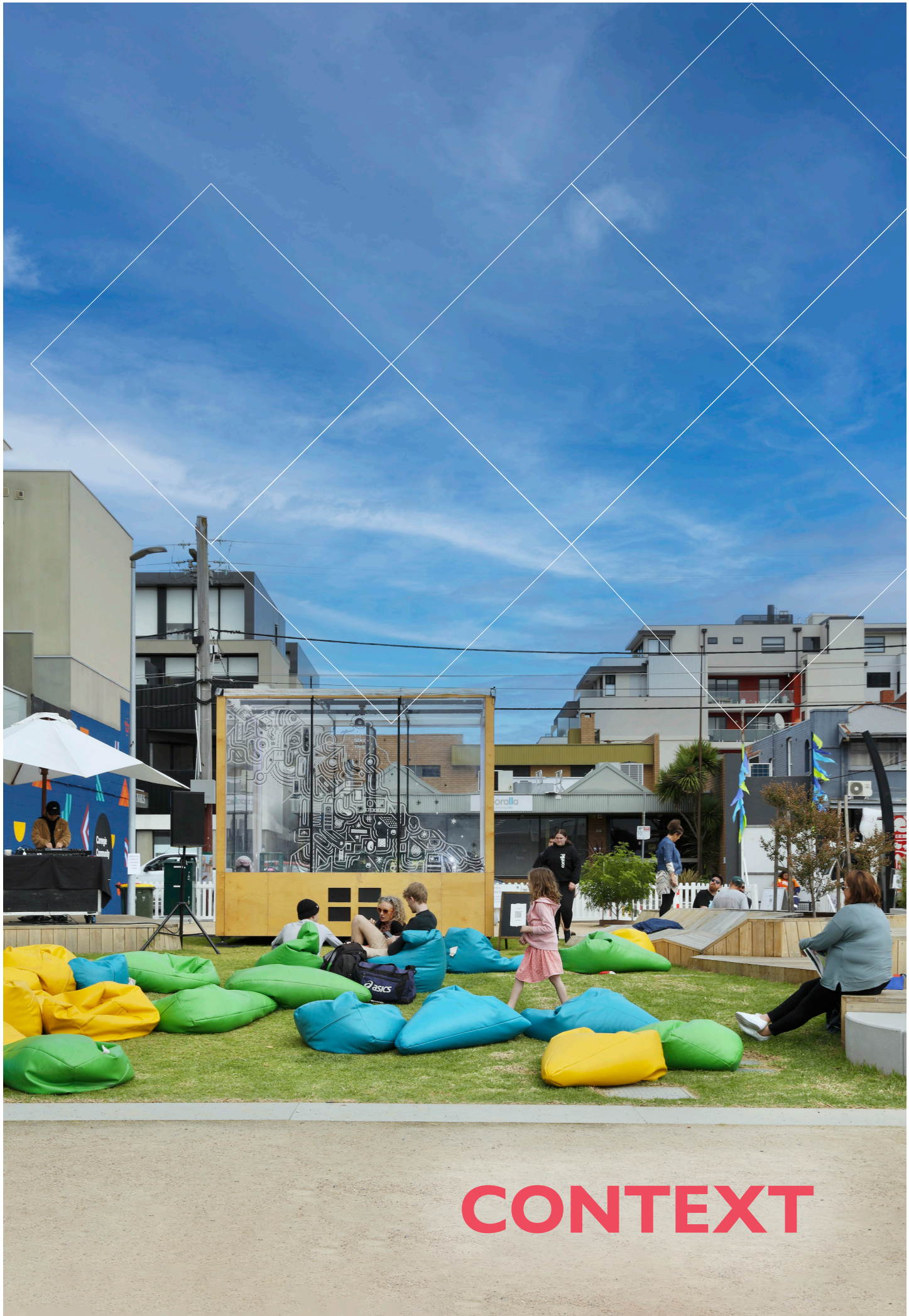
Carnegie has the inability to significantly increase the road networks capacity. We have an existing fixed road network with few opportunities to significantly increase capacity.



Dandenong Road retailers are not well connected to the Koornang Road shopping strip.



The Carnegie Library and Community Centre forecourt provide a small community space, but the major activity centre has little open space. The nearby open spaces are Packer Park, Koornang Park and Lord Reserve.



CONTEXT

CONTEXT

How many people will live in Glen Eira in the future?

Demographics help us understand the housing types required to meet the needs of our growing community.

The population of our community is set to increase by approximately 30,000 people between 2021 and 2036*.

This will correlate to approximately 12-13,000 dwellings needed to support this increase between 2021 and 2036.

In 2016, Glen Eira was home to approximately 60,000 dwellings, however as of 2021, this had increased to nearly 66,000^.

POPULATION



The population of our community is set to increase by
30,000*
between 2021 and 2036



Projected Glen Eira population in 2036
188,000~

HOUSEHOLDS



Glen Eira dwellings in 2016
60,000^
Glen Eira dwellings in 2021, nearly
66,000^



From 2021–2036, Glen Eira requires approximately
12,000–13,000~
new dwellings

* Source: *Victoria in Future 2019*

^ Source: Glen Eira City Council *Our Community Profile*. Council rates data 30 June 2021.

~Source: Glen Eira City Council *Glen Eira draft Housing Strategy 2022*

CONTEXT

Population and housing in Glen Eira

Analysis prepared for the draft *Glen Eira Housing Strategy* in 2021 shows that there is capacity for 49,960 additional dwellings in Glen Eira under current policy. The housing demand modelling results indicate that around 12,230 additional dwellings will be needed between 2021-2036. However, planning must allow for capacity beyond this time.

There will be significant demand for both medium and high density dwellings in Glen Eira. The pace of development for different dwelling types is also important to consider in planning for growth.

The *Housing Capacity and Demand Analysis* conducted in 2021 comments that:

“There is a long-term trend across Australia for average household sizes to decrease as living arrangements become more diverse. However, the average household size in Glen Eira has been increasing since 1996, from 2.35 people per household in 1996 to 2.47 in 2016. SGS forecasts this increase is likely to continue until 2036, reaching 2.55. The increase reflects a decreasing proportion of lone person households and increasing proportion of couples with children in the community, and more people sharing housing with others they are unrelated to. In part this is likely to be driven by housing unaffordability, with people putting off forming a separate household or moving elsewhere.”

“Despite Glen Eira’s increasing average household size, there is a trend towards households living in medium sized or small dwellings which are well-located rather than separate houses (which are less affordable).”

Glen Eira Housing Capacity and Demand Analysis, SGS Economics and Planning, 2021

“These results show that there is capacity for between 48,960 additional dwellings in the LGA under current planning controls, increasing to 50,611 under base case 2, and 55,524 under the proposed framework. This capacity is split between attached dwellings and apartments, although most capacity for attached dwellings is located in the Neighbourhood Residential Zone (NRZ). This is partly a result of the large amount of NRZ zoned land in the LGA, and partly a result of most new dwellings built in the General Residential Zone (the other zone in which attached dwellings are commonly built) being apartments.”

In regards to capacity we need to consider that not every property will be redeveloped.

CONTEXT

A *Housing Framework Plan* has been prepared to guide housing policy to 2036. It aims to allow for areas where medium density (units and townhouses) can be developed, and to help to confirm suitable zoning for the residential zones close to the Major Activity Centres based on:

- > the abovementioned capacity and demand analysis;
- > assessments of neighbourhood character and built form in the residential zones; and
- > the principle of sustainable land use.

The activity centre boundary has been determined by including the Substantial Change Areas (from the *Housing Framework Plan*) that are closest to the retail and commercial zones within the Major Activity centre.

Glen Eira has adopted the term Substantial Change Areas in line with the State Government's Practice Note *Using the Residential Zones* (Planning Practice Note 91) to define where the Residential Growth Zone and General Residential Zone will be located.

Population and housing in Carnegie Major Activity Centre

Within the Carnegie Major Activity Centre (as defined in Figure 2: Carnegie Major Activity Centre boundary map), there are currently approximately 2000 apartments, 280 units/townhouses and 160 separate houses. The area includes Commercial 1 Zone, Mixed Use Zone, Residential Growth Zone and General Residential Zone land (which are considered Substantial Change Areas in the *Housing Framework Plan*), where housing can occur. There are also some areas of Public Use Zone within this area, where housing cannot or is unlikely to occur.

Based on the assessment conducted for the draft *Housing Strategy* under the proposed *Housing Framework Plan*,

there would be theoretical capacity for approximately 3,900 additional apartments and 100 additional units/townhouses in the area identified in Figure 2. However, based on recent trends, it is expected that the net increase in dwellings will be around 2,400 by 2036.

While the housing capacity analysis indicates there will be more capacity for new apartments than required in Glen Eira to 2036, it is important to remember that:

- > Planning does not stop at 2036. In order to ensure we can continue to use land sustainably beyond the timeframe for this structure plan, we will still require capacity in the Major Activity Centres.
- > Theoretical capacity is only based on a model that uses site area, building height, building envelope assumptions and assumptions to identify availability for development. Additionally, "over-capacity" for floor area in major activity centres could accommodate office use which will be needed in the future. It is therefore not considered to be appropriate to reduce the amount of identified capacity in the major activity centres.

CONTEXT

Why do we need to increase office and retail?

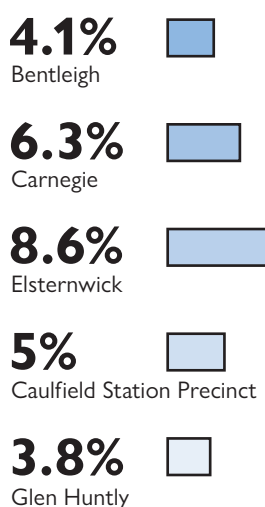
Only 18 per cent* of working residents are employed within the municipality, making Glen Eira the fifth-lowest council across Melbourne for local employment. Glen Eira residents are mainly employed in white collar jobs and the majority travel outside the area to work.

To allow more people to work near where they live, we must provide the space needed for more office and retail development.

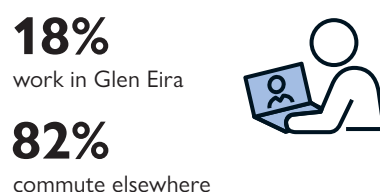
An analysis of the jobs held by the resident population in the Carnegie area in 2016 shows there are 2333 jobs in the Carnegie Major Activity Centre*.

OFFICE AND RETAIL

Proportion of Glen Eira's jobs*



Working Glen Eira residents*



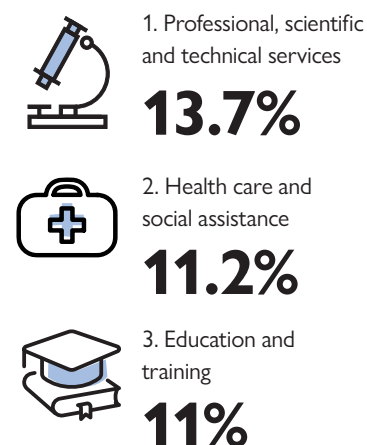
People who work in Glen Eira*



Top industries within Carnegie Major Activity Centre*



An analysis of the jobs held by the resident population in the Carnegie area in 2016* shows the three most popular industry sectors were:



[^] Source: Melbourne, Industrial and Commercial Land Use Plan 2020.

^{*} Source: Australian Bureau of Statistics, Census of Population and Housing 2016. Compiled and presented in profile.id by .id (informed decisions).

CONTEXT

What do we know about retail and commercial floor space for Carnegie?

Glen Eira is estimated to need 113,000 square metres additional commercial floorspace between 2016 and 2031[^].

The SGS Report found that *"Carnegie has a demand for an additional 10,100 square metres of retail floorspace and 2,000 square metres of retail services floorspace to 2036.*

The Carnegie Major Activity Centre does not have additional ground floor retail floorspace capacity, but this can be met with potential floorspace on the first floor of buildings across the activity centre. Considered together with commercial floorspace, there is a surplus of 5,600 square metres.

There is demand for additional 4,600 square metres of commercial (office) floorspace to 2036[#]. There is capacity to meet this demand via additional employment floorspace above the ground floor."

Providing increased office and other employment opportunities will allow more Glen Eira residents to work locally. This has a number of benefits for the community and the centre.

The *Carnegie Structure Plan* will enable development of offices within the activity centre. These could be traditional workspaces or more flexible options such as co-working spaces.



[#] Source: *Employment Land Needs Assessment for the Bentleigh, Carnegie and Elsternwick Major Activity Centres*, SGS, March 2022

CONTEXT

What are the retail and services in the centre?

The Carnegie Major Activity Centre is well serviced by full-line supermarkets with a smaller, older format Woolworths supermarket at the rear of the Koornang Road shopping precinct, as well as a larger Woolworths and an Aldi supermarket within Carnegie Central.

Fresh produce retailing is primarily located within the Koornang Road shopping strip where there are four retailers, compared to only two within Carnegie Central. Comparably, in other Glen Eira activity centres, there are three fresh produce retailers within Elsternwick and seven within Bentleigh. Therefore, despite the strong competition from the three full-line supermarkets, there is a strong presence of fresh produce retailers within the centre. In total, the centre has 23 food retailers according to a survey conducted by Glen Eira City Council in 2021.



EXISTING FLOOR SPACE 2021

LOCATION	GROUND FLOOR	ABOVE GROUND FLOOR	TOTAL
Floor area (sqm)	59,400	13,500	73,000

EXISTING EMPLOYMENT FLOORSFAC 2021

TYPE	RETAIL	RETAIL SERVICES	COMMERCIAL	TOTAL
Floor area (sqm)	30,000	22,400	20,500	73,000

Source: SGS Economics and Planning 2022

CONTEXT

How do people travel?

It is expected the Carnegie Major Activity Centre will grow with future development, leading to changes in transport demands for all modes. This generates a need to understand the extent of change and any challenges in managing the existing transport network to support this growth. It also presents an opportunity to improve the transport network by creating positive change and align the future of Carnegie with local, state and national government policy ambitions and community expectations.

A shopping strip survey completed by Glen Eira City Council in 2017 shows that 47 per cent of people arrived on foot to the centre, while more than 36 per cent arrived by car and 17 per cent arrived by public transport or bicycle.

TRANSPORT

How people travel to the Carnegie Major Activity Centre~



47%
arrived on foot



More than
36%
arrived by car



17%
arrived by public
transport or bicycle

* Source: Australian Bureau of Statistics, *Census of Population and Housing 2016*. Compiled and presented in profile.id by .id (informed decisions).

~ Glen Eira City Council *Shopping Strip Survey*, 2017

CONTEXT

Analysis of ABS car ownership data has been carried out by dwelling structure and dwelling size (number of bedrooms) (see Figure 3 below), to provide an understanding of current demands relative to the prevailing planning policy requirements of the *Planning Scheme*. The analysis has considered townhouses, flats and apartment dwelling types and excludes detached dwellings. This data set is expected to be more representative of the type of urban infill growth that could be facilitated through the *Built Form Framework*.

Figure 3 shows that Carnegie car ownership levels are lower than Greater Melbourne, which is to be expected based on the urban context and its accessibility. On average, existing ownership rates suggests that requiring all developments to comply with statutory requirements of the *Planning Scheme* would result in an over-provision of car parking.

The Carnegie Major Activity Centre is highly accessible by public transport with a variety of options to reach local and surrounding destinations. With numerous local bus services along the main shopping strip, high access to tram and train and high-quality provisions for transfer and multi-modal trips, the Carnegie Major Activity Centre has high potential for transit-oriented development and justification for policies targeted at mode shift.

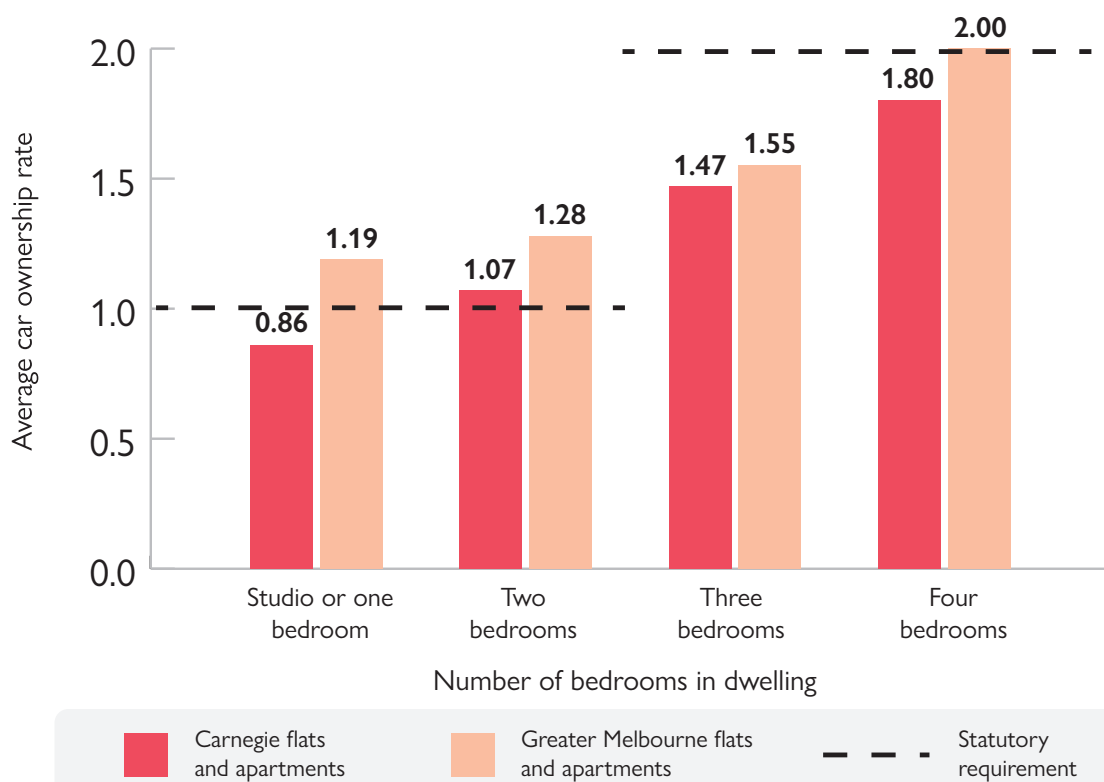


Figure 3: Average car ownership rates in Carnegie.



INPUTS

WHAT RESEARCH WAS UNDERTAKEN?

As well as consultation with the community and other stakeholders and reviewing demographic data, preparation of the Carnegie Structure Plan has been informed by various analyses from different disciplines, including:

- > economic/employment — analysis;
- > urban design — *Built Form Framework* for the retail/commercial area;
- > transport analysis;
- > *Public Realm Review*; and
- > heritage advice from GJM Heritage consultants and RBA Architects and Conservation Consultants 2022.

HOW DOES THIS STRUCTURE PLAN LINK WITH OTHER POLICIES?

Policy context

Local strategies

The development of the *Carnegie Structure Plan* is linked to the following Council strategies and plans:

- > *Glen Eira Council and Community Plan 2021–2025*
- > *Glen Eira City Plan 2020*
- > *Glen Eira Local Economy and Place Making Action Plan 2020–2025*
- > *Glen Eira Community Wellbeing Plan 2021–2025*
- > *Our Climate Emergency Response Strategy 2021–2025* (Dhumbali Wurrungi-Biik Parbin-Ata)
- > *Glen Eira Open Space Strategy Refresh 2020*
- > *Integrated Transport Strategy 2018–2031*
- > *Glen Eira Social and Affordable Housing Strategy 2019–2023*
- > *Glen Eira Urban Forest Strategy 2021*
- > *Biodiversity in Glen Eira Report 2018*
- > *Draft Integrated Water Management Plan* (Dhumbali W'urneet Gadhaba)
- > *Glen Eira Parking Policy 2020*
- > *Planning Scheme Review 2016 Report*
- > *Glen Eira Youth Strategy 2019–2023*
- > *The Positive Ageing in Glen Eira Strategy 2015–2020*
- > *Glen Eira Active Recreation Action Plan July 2021*

LOCAL STRATEGIES

Glen Eira Council Plan 2021–2025

The *Glen Eira Council Plan 2021–2025 (Council Plan)* is our overarching strategic Plan outlining the outcomes we seek to achieve over the next four years. It shapes how we will plan for the future, deliver highly valued services and infrastructure, and work collaboratively with and for the community over the next four years.

Glen Eira City Plan 2020

In January 2020, Council adopted a new policy direction for Glen Eira's activity centres. The *Glen Eira City Plan* establishes Glen Eira's long-term strategic framework for activity centres, housing and the local economy. It seeks to direct the majority of new growth into a network of vibrant activity centres in a balanced and sustainable manner, guided by an understanding of local character, context and the capacity for change of all our activity centres and residential neighbourhoods.

Carnegie is identified in the *City Plan* as a Major Activity Centre. This means it provides access to a wide range of goods, services and activities, including commercial, retail, entertainment and community facilities, with suitable residential development opportunity that responds to the urban context in and around the centre.

Carnegie is a well-integrated part of Glen Eira's activity-centre network.

A key action of the *Glen Eira City Plan* is to undertake structure plans for Glen Eira's activity centres. *Plan Melbourne* supports this approach — recognising that local strategic planning is required to identify planning controls that support and manage planned growth for Major Activity Centres.

Glen Eira Local Economy and Place Making Action Plan 2020–2025

The *Glen Eira Local Economy and Place Making Action Plan 2020–2025* builds on the overall economic objectives outlined in the *Glen Eira City Plan* to further refine Council's actions and priorities to support economic growth and the creation of local jobs in Glen Eira. The *Plan* identifies Koornang Road as a culinary destination which attracts visitors to the activity centre.

Glen Eira Community Wellbeing Plan 2021–2025

This document outlines the ways in which Council will work to improve the health and wellbeing of all people in Glen Eira, across all ages, genders, backgrounds and abilities. The *Glen Eira Community Wellbeing Plan 2021–2025* takes a life stage approach. This considers an individual's or group's lifelong experiences for insight into aspects of their health across all ages and stages. Priorities of the *Plan* include:

- > improve public health protection;
- > strengthen mental health and social connection;
- > enhance active living;
- > create healthier environments;
- > embrace creativity, learning and diversity; and
- > promote, respect, care and equity.

Our Climate Emergency Response Strategy 2021–2025 ***(Dhumbali Wurrungi-Biik Parbin-Ata)***

In Glen Eira, we are experiencing the direct and indirect impacts of climate change. This is particularly evident with changes in temperature that include average annual temperature increases, more hot days and warm spells, less rainfall in winter, but more intense downpours and flooding.

In May 2020, Council passed a motion to declare a climate emergency, signalling its commitment to address the local impacts of climate change within the community.

Our *Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-biik Parbin-ata)* was developed in response to Council's climate emergency declaration and endorsed by Council on 29 June 2021, to guide Council's approach to reducing carbon emissions.

Council and the community have committed to stronger, more challenging climate and sustainability targets, including net zero emissions targets for Council operations and the community.

Greater emphasis is placed on community education and collaborative efforts across councils, states and federal government.

The new *Strategy* focuses on mitigating and adapting to the impacts of climate change to provide a holistic approach, while acknowledging future challenges.

Through this *Strategy*, Council commits to the following goals presented to the right.

GOAL 1

We embed climate change action in everything that we do

GOAL 2

Our community is active and mobilised on climate action

GOAL 3

Council-owned buildings and infrastructure are resilient and safe for our staff and community

GOAL 4

Our community is protected from the worst impacts of climate change

GOAL 5

Net zero Council emissions by 2025

GOAL 6

Net zero community emissions by 2030.

Glen Eira Open Space Strategy Refresh 2020

The *Open Space Strategy* guides the future planning, provision, design and management of public open space in Glen Eira for the next 15 years. This includes understanding and addressing the open space needs of the existing community and planning ahead to meet the open space needs of the forecast population of the municipality.

- > Gaps in the provision of open space mean some people are not within reasonable walking distance of open space.
- > Population growth has an impact on liveability and access to open space.
- > Open space needs to adapt to changing needs.
- > Access to open space needs to be improved for people with a variety of ages, cultures and levels of mobility.

Based on the benefits of sunlight access to open space during winter, the following guidelines for sunlight access in winter are:

- > In higher density areas, such as the commercial zones of the Carnegie, Bentleigh and Elsternwick Structure Plan areas, the designated urban renewal areas and large redevelopment sites, development should not increase the overshadowing of any existing or proposed public open space from 11am to 2pm on 21 June (winter solstice) beyond the shadow cast by a nine metre high built form on an adjoining property.
- > In all other areas, development should not increase overshadowing of any existing or proposed public open space from 10am to 3pm on 21 June (winter solstice) beyond the shadow cast by a nine metre high built form on an adjoining property.

The *Open Space Strategy Refresh 2020* identifies that there is a need for more public open space in the Carnegie Major Activity Centre to support its growing population. Additionally, it identifies that there is a need to provide unencumbered public open space with a sense of naturalness including green open spaces that contribute to mitigating urban heat and provide natural green spaces in close proximity to residents and workers in the centre.

Integrated Transport Strategy 2018–2031

On 12 June 2018, Council adopted the *Integrated Transport Strategy 2018–2031*. The *Strategy* acts as a high-level strategic document to provide a cohesive transport framework for Glen Eira. The adopted *Strategy* strives for a 50:50 mode share of car and non-car trips by 2031 to be achieved by:

- > increase in walking, cycling and public transport trips; and
- > increase in efficiency on key driving routes.

Glen Eira Social and Affordable Housing Strategy 2019–2023

The purpose of the *Glen Eira Social and Affordable Housing Strategy 2019–2023* is to assess the need for social and affordable housing in Glen Eira and to identify Council's role in developing solutions that will see an increase in the provision of social and affordable housing.

- > Rising house prices and rents and limited investment in social and affordable housing has led to an increase in the number of households experiencing housing stress.
- > Housing affordability is an issue in Glen Eira, with 13 per cent of all households in Glen Eira experiencing housing stress.
- > Social and affordable housing is vital to supporting a more diverse and inclusive community.
- > Council's role is to partner, plan, provide and advocate for more affordable housing.

Glen Eira Urban Forest Strategy 2021

The *Glen Eira Urban Forest Strategy 2021* outlines our vision to create a resilient and sustainable urban forest that supports our liveable city and contributes to the wellbeing of the community in a changing climate. An urban forest comprises all trees and other vegetation within the municipality and the soil and water that supports it.

The *Glen Eira Urban Forest Strategy* presents a clear and pragmatic implementation plan aimed at achieving a turnaround in the current trajectory of canopy loss. Our challenge is to reconcile our growing population and development with urban greening and canopy cover. The *Urban Forest Strategy* sets out the following five action areas:

- > Maintain and protect Glen Eira's public and private land urban forest.
- > Grow the future urban forest through designed solutions for trees and innovative green infrastructure on public and private land.
- > Adapt to climate change and reduce urban heat impacts through embedding leading practice urban forest management into Council's decision-making, investment and processes.
- > Engage and collaborate across sectors with the community, developers and other agencies.
- > Monitor and evaluate the progress of the urban forest, including progress towards targets.

The *Urban Forest Strategy* identifies areas with low tree canopy cover and loss. The Carnegie Major Activity Centre is identified as an area with low levels of canopy cover and high levels of tree canopy loss. Therefore, additional tree canopy planting in the Carnegie Major Activity Centre is vital to establishing Glen Eira's urban forest.

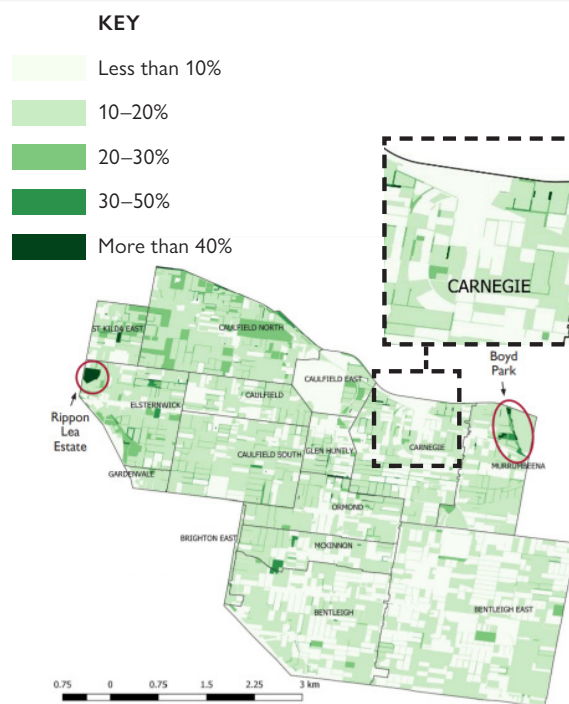


Figure 4: Tree canopy cover.

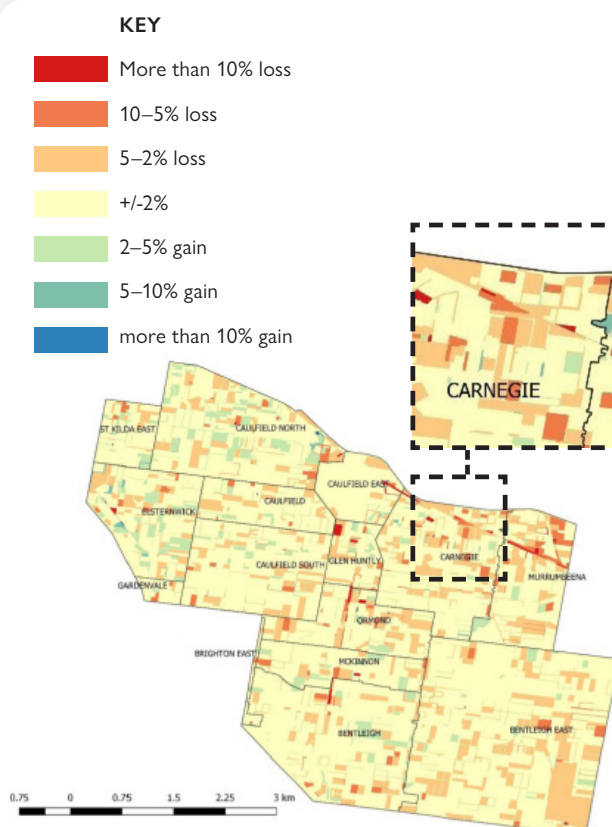


Figure 5: Tree canopy cover change 2014–2018.

Biodiversity in Glen Eira

The Carnegie Railway Station Reserve is an area that has been identified by the *Biodiversity in Glen Eira Report 2018* as being a biodiversity hotspot, notable for the substantial River Red Gums that are located to the north of railway station. These trees have been identified because of their values for habitat and natural heritage value. This area is under an existing Heritage Overlay (HO123) that provides planning protection for these trees. The trees provide food, nest sites and roost sites for many of the remaining indigenous birds, including the nationally endangered Swift Parrot, and for insects and possibly microbats.

Draft Integrated Water Management Plan (Dhumbali W'urneet Gadhaba)

The *Integrated Water Management Plan* is a collaborative approach to water planning and management, encompassing water supply, wastewater, stormwater and groundwater that supports sustainable developments and healthy communities.

Glen Eira Parking Policy 2020

Council has developed a *Parking Policy* to respond to challenges from a growing community with more cars on the road. The *Policy* aims to provide a balanced response to the challenge of meeting the needs of car owners/drivers while striving to make sure our public spaces are people-friendly.

Planning Scheme Review 2016 Report

Council undertook a comprehensive review of the *Planning Scheme* in 2016. The *Planning Scheme Review 2016 Report* sought to address the key issues and opportunities raised by the community by adopting a comprehensive four year *Work Plan*. The *Work Plan* included a number of projects, one of which was structure plans.

Glen Eira Youth Strategy 2019–2023

The *Strategy* sets out Council's role to support young people living and studying in the city. The *Strategy* sets key priorities and actions that have been developed in partnership with young people through a comprehensive community engagement process that was undertaken across primary schools, secondary schools and out in the community in youth friendly spaces.

The Positive Ageing in Glen Eira Strategy 2015–2020

Glen Eira City Council has developed a *Strategy* focused on positive ageing to support our growing older adult population aged 60 and beyond. The *Positive Ageing Strategy 2015–2020* aims to build a community that values, includes and responds to the diverse needs of our older adults.

Glen Eira Active Recreation Action Plan July 2021

The *Plan* is a partnership project between Council and the Victorian Government and aims to improve health and wellbeing by increasing opportunities for active recreation in parks and reserves across the City.

STATE-WIDE STRATEGIES

Development of the *Carnegie Structure Plan* aligns with the objectives set out in the Victorian Government's metropolitan planning strategy — *Plan Melbourne 2017–2050*. *Plan Melbourne* sets a vision and policy direction for growth, with a focus on ensuring a better distribution of business activity, jobs, housing, services, infrastructure and transport connections within activity centres. It also seeks to embed the 20 minute neighbourhood concept which is all about 'living locally' — giving people the ability to meet most of their daily needs within a 20 minute return walk from home, with access to safe cycling and local transport options.

Plan Melbourne provides direction for each municipality and seeks to increase density and activity in established areas currently serviced by existing public transport networks, employment opportunities and infrastructure, with a focus on discouraging urban sprawl.

Carnegie is in an established area with excellent public transport and good access to facilities. *Plan Melbourne* identifies Carnegie as a Major Activity Centre that can accommodate increased housing and employment growth. It also recognises that each Major Activity Centre has a unique context and encourages local councils to set their own vision and policy objectives to plan for growth.

The *Structure Plan* supports the State Government's *Movement and Place Framework* by recommending a number of strategies that balance the needs of transport users and place users, and design a mix of transport modes that are appropriate to how the road and places are used by communities.



A photograph of the Connegie Library and Community Centre at dusk. The building features a large glass facade and a prominent yellow entrance structure. A large tree is on the left, and a paved plaza is in the foreground. The text "PART TWO: VISION AND OBJECTIVES" is overlaid in the bottom right corner.

PART TWO: **VISION AND** **OBJECTIVES**

WHY IS CARNEGIE CHANGING?

Like many areas across Melbourne and Glen Eira, Carnegie is changing and growing. Melbourne is expected to grow by 940,000 households between 2016 and 2036, reaching 2.5 million households (*ABS Census 2016*). For Glen Eira, the population is forecast to grow from 160,852 in 2022 to 180,626 by 2036.

The 2022 population for the whole suburb of Carnegie is expected to be 20,304, and is forecast to grow to 23,266 by 2036 (*Population and household forecasts, 2016 to 2036*, prepared by .id (informed decisions), October 2017).

To keep Melbourne liveable and sustainable, State government policy directs population growth both to outer growth areas and inner city centres that are close to shops, services and public transport. Glen Eira has a range of these centres, including Carnegie (which is classed as a Major Activity Centre under the State government's metropolitan planning strategy, *Plan Melbourne*).

Planning for Carnegie's future

With its diverse community, distinctive character and high-quality infrastructure, Carnegie is an attractive place to work, live and play and people are drawn to it. It will continue to grow and diversify in the future. By creating a robust long-term plan for Carnegie, we can ensure that it will continue to be a successful, vibrant and liveable centre with future growth while also maintaining its local identity.

What is the Carnegie Structure Plan?

The *Carnegie Structure Plan* sets out the long-term vision for the commercial, mixed use and public use land in the Carnegie Major Activity Centre. It includes strategic direction on development and future land use, transport, parking, heights of buildings, housing, employment, open spaces and infrastructure.

Structure plans provide guidance on developments, investments and infrastructure improvements. They also

inform the community and developers about changes that are expected and allowed in certain areas. We completed six stages of consultation with the Carnegie community to inform the development of the *Carnegie Structure Plan* and feedback has helped shape our goals.

What do we want to achieve?

We want to:

- > establish a long-term vision for the Carnegie Major Activity Centre that reflects Council's policy positions, including *Our Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-biik Parbin-ata)*, the *Urban Forest Strategy*, the *Integrated Transport Strategy*, the *Parking Strategy* and the *Open Space Strategy*;
- > promote sustainability as a guiding principle when considering new buildings and public spaces as well as transport options;
- > ensure development respects the architectural form and qualities of heritage buildings and streetscapes along Koornang and Neerim Roads;
- > ensure the urban renewal precinct and strategic sites provide local employment and diverse housing opportunities;
- > support the housing, economic and placemaking role and function of the Major Activity Centre;
- > minimise the amenity impacts on existing dwellings of overlooking, visual bulk and overshadowing;
- > enhance the public realm through the development of well-designed buildings and spaces that prioritise pedestrian movement and retain sunlight to public spaces;
- > improve pedestrian and cycling connectivity throughout the centre; and
- > create safe and attractive streets and public spaces that are a focal points for the community to meet and gather.

WHY IS CARNEGIE CHANGING?

How will we achieve it?

To deliver the land use and development outcomes in the *Carnegie Structure Plan*, the objectives and controls need to be expressed in the *Glen Eira Planning Scheme*.

The *Glen Eira Planning Scheme* guides decision-making on planning permit applications and governs issues such as design, development, land use, heritage, neighbourhood character and amenity. Adding these objectives and controls is achieved through a Planning Scheme Amendment.

The Planning Scheme Amendment process will commence following Council's adoption of the *Structure Plan*. As part of this translation process, the specific statutory planning tools and mechanisms have been developed to best translate the relevant objectives of the *Structure Plan*. Potential planning implementation measures are listed in the relevant sections of this *Plan*.

A detailed *Implementation Plan* accompanies the *Structure Plan* which includes actions beyond the Planning Scheme Amendment.



VISION AND OBJECTIVES

The following vision and objectives were informed with input from community engagement carried out before development of the 2018 *Structure Plan*. The vision and objectives have been updated since then to reflect additional urban design and traffic analyses and new and emerging policies and changes, such as the recently approved heritage amendment for the centre and Council's Climate Emergency Response declaration.

VISION

The vision is for Carnegie to be a safe, connected and welcoming centre that embraces its authentic urban character and cultural identity. The centre will be a destination for entertainment, shopping and employment, and support a range of businesses and interconnected community spaces that meet the needs of the local community, providing a socially, environmentally and economically sustainable future.



OBJECTIVES

The key objectives for the Carnegie Major Activity Centre can be categorised under the following themes:

Sustainability

- > Improve and promote active transport options.
- > Promote Traditional Custodian knowledge.
- > Reduce urban heat.
- > Plan for adaptable community facilities.
- > Assess climate risk.
- > Incorporate Water Sensitive Urban Design (WSUD).
- > Grow the urban forest.
- > Incorporate sustainability into public realm works.
- > Improve waste management.

Heritage

- > Encourage the retention, preservation and restoration of all significant and contributory places within the precinct.
- > Ensure additions and alterations to a heritage building respect its significance.
- > Ensure the design of new development respects, complements and responds to the heritage significance of the precinct.
- > Promote design excellence that supports the ongoing significance of heritage places.

Place making

- > Position Carnegie as a welcoming and diverse destination with unique commercial and entertainment offerings.
- > Enhance the distinctive character of the Koornang Road retail strip and heritage buildings.
- > Support a network of urban laneways, streets and shared zones that easily connect the community to facilities and each other.
- > Create a network of open spaces that allow people to meet, connect and enjoy nature with space for landscape and canopy trees.

- > Deliver high-quality urban design and architecture.
- > Support safe, accessible and friendly streets.
- > Deliver on Council's commitment of net zero carbon emissions by 2030.

Development

- > Manage the transition between housing densities.
- > Recognise Carnegie's role in accommodating a growing population.
- > Ensure new development meets high environmental standards.
- > Provide a range of housing typologies to cater for a diverse population.
- > Ensure new development contributes to and enhances the character of Carnegie.

Economy

- > Support evening activity and quality local shopping, dining and entertainment options.
- > Support development that includes office space, co-working space and employment opportunities.
- > Support a diverse range of uses within the Major Activity Centre.

Transport

- > Encourage walking, cycling and use of public transport.
- > Provide parking that recognises the central location of the station and supports sustainable transport options.
- > Provide a clear street hierarchy that will support a 50:50 transport mode shift and safe streets for all.
- > Support reduced parking provision in new residential development.

SUSTAINABILITY



Glen Eira is committed to climate action. Council declared a climate emergency in 2020 and prepared *Our Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-biik Parbin-ata)* that aims to consider climate in everything we do and reduce carbon emissions among other things.

Plan Melbourne aims to make Melbourne more sustainable.

It states that urban areas will be designed to encourage:

- > more active modes of transport and less car dependency;
- > buildings that improve energy efficiency, collect and reuse water and generate energy from local renewable sources and distributed energy technologies;
- > cooler, greener and more livable spaces;
- > improved access to open space and nature with enhanced biodiversity and ecological processes that will be safeguarded for future generations; and
- > integrated management of the urban water cycle to make the best use of all water sources and transform Melbourne into a water sensitive city — protecting the health of the city's waterways and bays, reducing the risk of flooding and keeping parks, gardens and street trees thriving.

SUSTAINABILITY



For Carnegie, this means encouraging new developments to address and adopt both mitigation and adaptation strategies to reduce impact and carbon emissions in line with Council policies.

Focus areas in Carnegie include climate change, liveability, urban greening, biodiversity, urban heat island, water sensitive urban design and environmentally sustainable design.

Carnegie will have a role to play in ensuring these targets are met with guidance from *Our Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-biik Parbin-ata)* and the *Urban Forest Strategy*.

It is critical we protect our open spaces and trees, and seek opportunities for more urban greening, including innovative opportunities such as green walls and roofs.

SUSTAINABILITY RECOMMENDATIONS

To ensure Carnegie is growing sustainably, we will implement these strategies to align with *Our Climate Emergency Response Strategy 2021–2025 (Dhumbali Wurrungi-biik Parbin-ata)* and targets for reducing carbon emissions.

1. Improve and promote transport options

- > Active and public transport routes are promoted as an important alternative to private vehicles with environmental, health and wellbeing benefits.
- > Improve pedestrian and cycling amenity, encouraging people to choose to walk and cycle.
- > Investigate the application of 'cool routes' through the planting of canopy trees, use of light-coloured surfaces and water in the landscape.
- > Investigate and identify locations for public electric vehicle charging stations.

2. Promote Traditional Custodian knowledge

- > Pursue opportunities such as interpretive signage, with cultural values embedded in design to help communicate and share Traditional Owner knowledge.

3. Reduce urban heat

- > Support urban greening in the private and public realm, including in new residential developments.
- > Consider design, material selection and increasing urban canopy to reduce urban heat in the precinct.
- > Encourage buildings to be orientated to make appropriate use of solar energy, reduce reliance on artificial heating and cooling and not unreasonably impact on the energy efficiency of existing dwellings.
- > Encourage developments to embed environmentally sustainable design principles, early in the design, including energy efficiency, water and carbon reduction.
- > Prepare a *Streetscape Masterplan* to increase public greening along main streets.
- > Encourage green walls and green roofs in new development.

SUSTAINABILITY



Heat Vulnerability

Vulnerability ratings are scaled from 1 to 5
(1 = low vulnerability, 5 = high vulnerability).

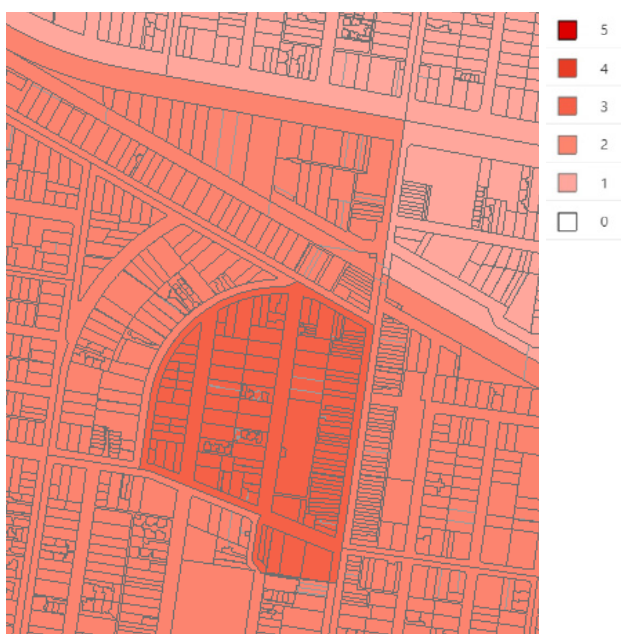


Figure 6: High levels of urban heat in the Carnegie Major Activity Centre, *Heat Vulnerability Index (2018): Cooling and Greening Melbourne Map*, Victorian Department of Environment, Land, Water and Planning. The *Heat Vulnerability Index (HVI)* shows the HVI rating assigned to the urban parts of each boundary area. This rating indicates how vulnerable specific populations are to extreme heat events. The HVI consists of three indicators: heat exposure, sensitivity to heat and adaptive capability. The map is based on 2018 data.

4. Adaptable community facilities

- > Investigate ways that any future community facilities may be multipurpose and adaptable.

5. Climate risk assessment

- > Ensure a climate risk assessment is undertaken for assets proposed to be refurbished/delivered as part of the *Structure Plan*, including infrastructure (eg. non-arterial roads and drainage).

6. Water management

- > Consider water management and drainage in line

with the draft *Integrated Water Management Plan*.

- > Identify opportunities for water sensitive urban design in all new development and public realm, including permeable paving, rain gardens and bioretention pits.

7. Grow the urban forest

- > Increase canopy tree planting and protect existing canopy trees in Carnegie, including ground, roof tops, podiums and green walls.
- > Reclaim space for improved greening outcomes over the long term as well as opportunistic temporary/permanent reclamation of spaces as they transition over time.
- > Consider future development impacts on large trees in Woorayl Street Reserve and on Kokaribb Road.
- > Where appropriate, consider planting of indigenous and native species in the public realm to improve the biodiversity of the area.

8. Sustainable public realm works

- > Infrastructure works should consider the circular economy. A circular economy is a system in which all resources are highly valued and remain in the system through reuse, re-pouring and recycling.
- > Ensure Council's *Sustainable Building and Infrastructure Policy* is consistently applied throughout the asset lifecycle.

9. Interpretive signage

- > Consider interpretive signage in public spaces, including messaging relating to climate-related action and the importance of any sustainability initiatives incorporated into the precinct (eg. canopy trees, stormwater harvesting, biodiversity protection or enhancement).

10. Improve waste management

- > Investigate a precinct approach to improve waste management.
- > Consider site locations for a container deposit scheme.

HERITAGE

The character of the centre's late federation and inter-war heritage shops is a key feature of the Major Activity Centre.

Maintaining that character as the dominant feature of Koornang Road is important as the area grows and changes.

Development must protect the integrity of recognised historical streetscapes and enhance the heritage character. This includes respecting the architectural form, style, rhythm and materiality and considering how new development can complement these elements. Mandatory heights and upper level setbacks are recommended in heritage areas to protect the streetscape and architectural form.



HERITAGE



Planning Scheme Amendment C190 — Heritage Review of Bentleigh and Carnegie Structure Plan areas.

In 2018 and 2019, Council engaged heritage consultants to identify potential heritage places in Bentleigh and Carnegie. The respective studies focused separately on the commercial and residential areas of that land within the Bentleigh and Carnegie designated activity centre boundaries.

In response to the findings and recommendations of these studies, Council adopted the studies, and prepared a Planning Scheme Amendment to protect these identified heritage places.

The heritage amendment resulted in the majority of Koornang Road within the study area being protected. The review found the intact elevations, materials, architectural details, canopies, chamfered corners and recessed entries are significant to the contributory buildings.

In January 2022, the Minister for Planning approved Amendment C190, a heritage amendment that applies to Bentleigh and Carnegie. The Amendment applies the Heritage Overlay to the following properties in the Carnegie Major Activity Centre:



Figure 7: The Built Form Framework heritage overlay.

HERITAGE



New built form must respond to the recognised value of the contributory buildings and in particular their interface to Koornang Road including the street wall heights, zero setbacks to the retail street, small lots sizes, and materials.

The *Carnegie Built Form Framework* assessed how new development can occur within the Major Activity Centre whilst protecting and enhancing the heritage and character of Koornang Road. The *Built Form Framework Plan* makes the following recommendations:

- > All new built form street walls must be built to the boundary on Koornang Road to retain the 'main street' character.
- > Ensure the street wall for new developments along Koornang Road be no higher than the highest abutting neighbour and no lower than the lowest abutting neighbour (the street wall height for new developments includes architectural details such as parapets, railings and balustrades).
- > Setbacks above the street wall are to be a minimum of 5 metres to retain the strong visual prominence of the low rise heritage streetscape. Smaller setbacks risk blurring the desired strong distinction between the low rise heritage and the new built form.
- > Heights can impact heritage and character. Where streets have a defined heritage and character that is to be protected, such as the openness and low-rise nature of Koornang Road, the streetscape ratio, defined by the street wall and upper level setbacks are crucial in measuring the impact of new development on this character. The *Carnegie Built Form Framework* has assessed building heights and setbacks and their combined impact on visual bulk, solar access, sky views and view cones. The resulting height that achieves the required outcomes is recommended to be mandatory within the heritage overlay to ensure retention of heritage and character values.

- > Outside the proposed heritage boundaries, new development should be able to accommodate greater heights, consistent with the role of a major activity centre. Street wall and overall heights in these areas will be based on the desired character and surrounding context.

Design requirements

- > New development should respect the visual rhythms and key levels set by heritage buildings and their architectural elements, including the scale, solid-to-void ratio and patterning of fenestration and doors, ridgelines, window sills and visually prominent load-bearing elements.
- > The contemporary architecture of new developments could re-interpret design elements of heritage buildings that reinforce the precinct's character.
- > The reproduction of heritage features, particularly ornaments, must be avoided.
- > Infill buildings should not visually dominate adjoining heritage built form or block views to their main elevations.

Mandatory controls

Council engaged GJM Heritage consultants to provide heritage advice to inform the *Structure Plan*, specifically relating to heritage and built form within the major activity centre that is subject to the Heritage Overlay.

The advice considers whether mandatory heights and upper level setbacks can be supported over the heritage buildings in the Carnegie Major Activity Centre and includes the following:

"The commercial centre of the Major Activity Centre is a highly intact commercial 'high street' dating from the early to mid-twentieth century. The Statement of Significance for HO158 — Carnegie Retail Precinct and HO159 — Glenhuntly Tram Terminus Estate Shops both note the aesthetic significance of these largely intact precincts; HO159 specifically as a 'continuous row' of 'consistent two storey form.'"

HERITAGE



The advice concludes that:

“A mandatory minimum upper-level setback above the heritage street wall on Koornang Road is necessary to retain the visual prominence of the consistent heritage street wall. Lesser upper level setbacks would likely erode the legibility of the Precinct’s heritage values. Further, the application of a discretionary control would invite variation of the secondary, upper-level street wall that would diminish the consistency of the heritage streetscape.”

The proposed planning controls include mandatory heights and mandatory upper-level front setbacks for the heritage properties on Koornang Road.

SIGNIFICANT HERITAGE BUILDINGS

Rosstown Hotel 1084 Dandenong Road, Carnegie — HO157

The Rosstown Hotel is located at the corner of Dandenong Road and Koornang Road in the Carnegie Major Activity Centre. Part of the site is covered by a Heritage Overlay (HO157). The extent of the Heritage Overlay relates to the extent of the original building (including the roof overhang with rainwater goods and balconies to the street facades of Dandenong Road and Koornang Road) and 5 metres to the west and south from the terracotta tile clad roof sections (refer to aerial view).

The remainder of the hotel site contains contemporary additions and the hotel car park is not subject to the Heritage Overlay.

The original extent of the Rosstown Hotel when viewed along Koornang Road includes the two storey part (to the north) and a smaller single storey portion to the south, identifiable by the terracotta roofs and dado tiling.



Figure 8: The significant heritage building on the Rosstown Hotel site is the building covered by the terracotta roof (both double and single storey sections). A 5 metre wide buffer (yellow line) to the south and west of the terracotta roof completes the mapped extent of the Heritage Overlay.



Figure 9: Rosstown Hotel viewed from Koornang Road.

HERITAGE



The extent of the original Rosstown Hotel when viewed along Dandenong Road includes only the two storey portion of the building. The single-storey addition to the west is not original.

As part of developing the *Structure Plan*, Council engaged RBA Architects and Conservation Consultants to provide recommendations for heritage design guidelines for the Rosstown Hotel. Specifically they were engaged to recommend appropriate building heights and setbacks for the part of this site that is subject to the Heritage Overlay to ensure that inappropriate development did not detrimentally affect the cultural heritage significance of this place. These recommended building heights and setbacks will be implemented through the planning controls. Any development proposed to occur within the mapped extent of the Heritage Overlay will also be subject to the requirements of the Heritage Overlay and Council's *Heritage Policy*.

Recommendations

The RBA analysis has resulted in a number of recommendations made in order to retain the in-the-round views of the original building and maintain the heritage significance of the place. These recommendations provide some mandatory requirements (to the existing original fabric and a 2 metre buffer zone to the south and west of the original building) and some preferred requirements (to the remainder of the site).

The preferred requirements would allow development on the site to respond to the immediate context of both the urban renewal precinct and the main retail precinct.

The recommendations are detailed in the chapter titled *Built Form* in this *Structure Plan*.



Figure 10: Rosstown Hotel viewed from Dandenong Road.

ACTIVITY AND LAND USE



The Carnegie Major Activity Centre provides the community with access to a wide range of goods, services and activities, including commercial, retail, entertainment and community facilities. With excellent access to public transport and services, Carnegie has been identified as a Major Activity Centre.

The *Structure Plan* identifies two distinct precincts in Carnegie: Main Retail precinct (including strategic sites) and the Urban Renewal precinct.

Main retail precinct

The precinct is centred around the Koornang Road retail core and its surroundings between Dandenong and Neerim Roads. The *Structure Plan* also includes two smaller centres on Hewitts and Truganini Roads. The centre is characterised by its retail offering, pedestrian activity and traditional single and double storey shops, many of which are included in the Heritage Overlay.

The centre supports a variety of land uses, including restaurants, fruit shops, various small retailers and services along the shopping strip. Larger destination retail (Aldi, Spotlight, Officeworks) is located along Dandenong Road with access from a slip lane.

The removal of the level crossing at Carnegie has had substantial benefits for the local community, including increased permeability under the elevated rail and the provision of new public open space along Woorayl Street. The Djerring Trail, which runs along the rail corridor connecting Caulfield to Dandenong, provides a safe, dedicated walking and cycling path linking Carnegie to other activity centres.

ACTIVITY AND LAND USE

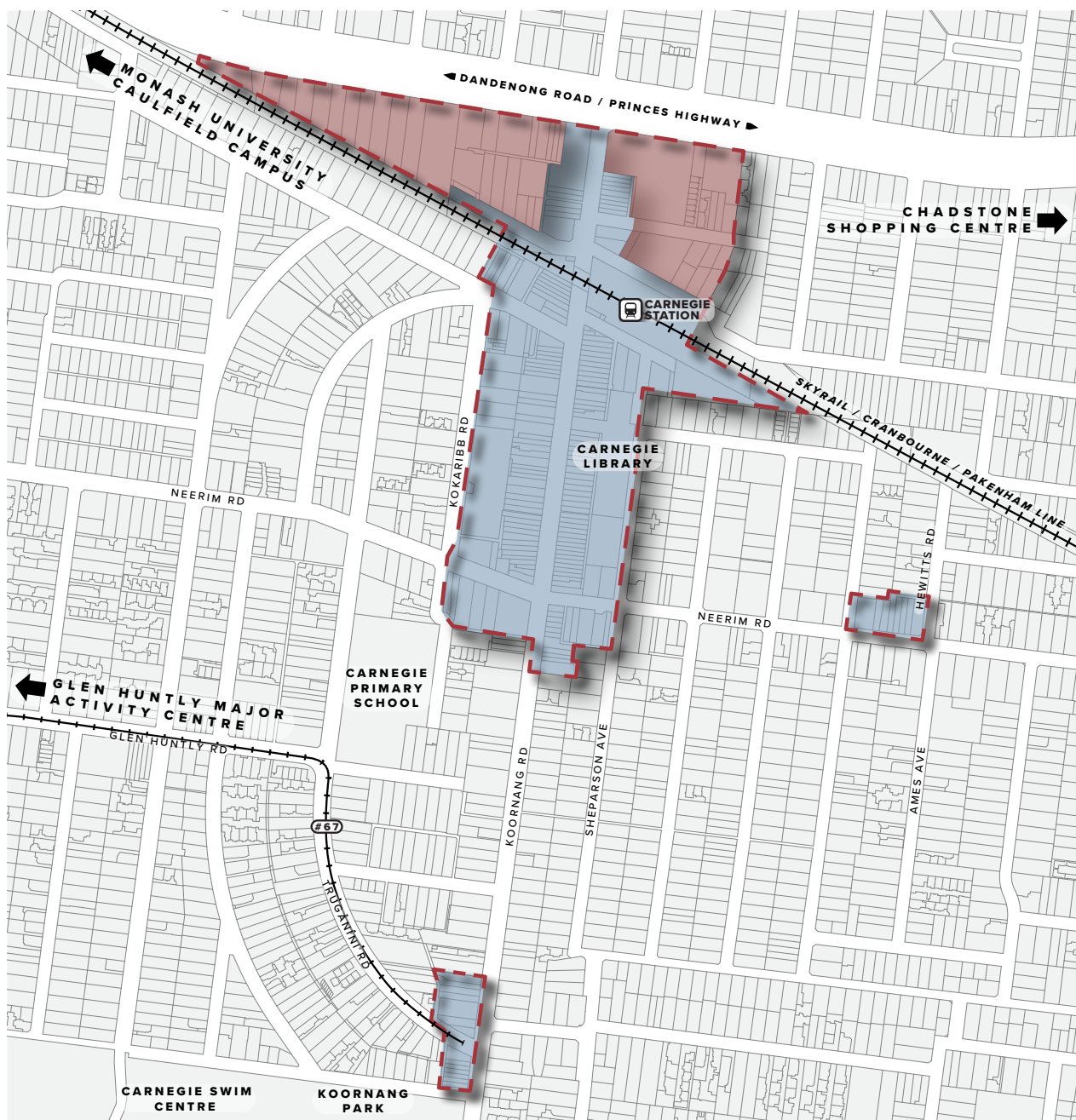


Figure 11: Carnegie centre precincts

KEY



Study Area
Boundary



Train line



Tram line

Urban renewal
precinct

Main retail precinct

ACTIVITY AND LAND USE



The following strategies are recommended for the main retail precinct:

- > encourage offices and employment growth opportunities to provide the community with a variety of local employment options;
- > support a diverse range of uses within the centre;
- > explore opportunities to create new street networks to offer a high level of accessibility for pedestrians;
- > focus on retail/speciality shopping;
- > facilitate a connection between the urban renewal precinct and the heart of the Carnegie Major Activity Centre;
- > new development along Koornang Road will protect and enhance the heritage and character;
- > improve the streetscape of Koornang Road by providing landscaping/trees, increasing pedestrian amenity with street lighting, pedestrian crossings and seating;
- > strategic sites in this precinct will allow for taller built form to accommodate the activity centre's higher density;
- > ensure there is passive surveillance over the streets during the day and night;
- > an improved transport hub with pedestrian and cycling connections;
- > increase the provision of open space in Carnegie;
- > encourage provision of dining cafes, bars and office spaces; and
- > provide housing opportunities above retail and commercial activity.



ACTIVITY AND LAND USE



PROPOSED REZONINGS

The 2018 *Structure Plan* identified the following properties to be rezoned from their current Residential Growth Zone to a Mixed Use Zone, to recognise the proposed development that can occur on this land:

- > 1100–1106 Dandenong Road
- > 12–22 Arawatta Street
- > 19–21 Arawatta Street
- > 26–28 Woorayl Street

The 2022 *Structure Plan* has reviewed these sites and supports this recommendation due to their location within the urban renewal precinct and the type of development that is envisaged within this precinct.

STRATEGIC SITES

A number of sites east and west of the Koornang Road retail core, south of the railway, have been identified as strategic sites with a mix of land uses. These sites offer an opportunity for taller buildings up to eight storeys in height that complement but do not prejudice the low-scale character of Koornang Road and surrounding residential areas.

Buildings of this scale will balance the need for growth without overwhelming the low-scale main street character or residential surrounds and identified open spaces through upper level setbacks. Strategic sites also provide an opportunity to establish a preferred contemporary character outside of the historic retail core where a consistent streetscape character is currently lacking. While the urban renewal area can be viewed as a precinct-wide redevelopment opportunity, the individual constraints of each of the strategic sites require a site specific approach.

The strategic sites are included below.

ACTIVITY AND LAND USE



STRATEGIC SITES

Library car park and Neerim Road community space

The library car park is a Council-owned car park with 121 public parking spaces and Council acquired land fronting Neerim Road currently utilised as temporary public open space. The library car park fronts Shepparson Avenue with a service access for Koornang Road shops running along the rear of the site linking Neerim Road and Morton Avenue. Carnegie Library and Community Centre lies to the north of the site with a retail premises to the south east of the site fronting Neerim Road.

Objective: Investigate future options for the redevelopment of the library car park and Neerim Road community space.

Considerations for future development on the library car park site and Neerim Road community space site include:

- > consider how the spaces will connect and function as one site;
- > investigate the potential for community and commercial uses;
- > incorporate environmentally sensitive design;
- > ensure good pedestrian connections through to Koornang Road;
- > activate ground floor frontages to Neerim Road, Shepparson Avenue and the existing laneway;
- > provision of public car parking within any future development of the site;
- > interim car park during the construction phase;
- > appropriate vehicular, cycling and pedestrian access to any future building on the site;
- > service access to the rear of Koornang Road shops;
- > minimise visual impact of any future development when viewed from Koornang Road, respecting the heritage significance of the Koornang Road streetscape;
- > identify areas that meet the requirements of 'public open space' as defined in Council's *Open Space Strategy Refresh 2020*;
- > consider the relocation and potential integration of the childcare facility into a future development on the car park site, to create a public plaza on the northern side of the library; and
- > consider future needs of the library, including expansion, community facilities, new access points etc.

ACTIVITY AND LAND USE



STRATEGIC SITES

Kokaribb Road car park

The Kokaribb Road car park is a Council-owned public car park that provides car parking to the activity centre. It is located at the rear of the Koornang road shops to the north of the existing supermarket.

Objective: Create a new open space on the Council-owned car park site, located on Kokaribb Road, subject to access arrangements.

Redevelopment of the car park should consider:

- > partnership with the landowner of the supermarket to facilitate the following:
 - ensure efficient access to the supermarket and loading dock;
 - maintain vehicle access to the rear of Koornang Road shops;
 - investigate relocating publicly accessible car parking or offset loss in alternative locations within the centre; and
 - enhance the pedestrian connections between Kokaribb Road and Koornang Road. This can include working with the landowners to provide high quality pedestrian access from Koornang Road to the new open space.
- > ensuring the new open space is a safe, functional and welcoming public place for everyone;
- > access to winter sunlight to the public open space;
- > managing interim car parking requirements during the construction phase;
- > introducing additional landscaping and appropriate locations for water sensitive urban design that addresses flood risk, improves water quality and reduces potable water use;
- > tree selection that maximises tree canopy to align with the *Glen Eira Urban Forest Strategy*;
- > active frontages on the ground floor of neighbouring buildings encouraging outdoor dining to spill out onto the edge of the open space;
- > passive surveillance over the open space during the day and at night;
- > incorporating public toilet facilities on the ground floor to replace the existing toilets on Kokaribb Road. These should be designed with Crime Prevention Through Environmental Design (CPTED) principles;
- > adequate public lighting to the open space and consider opportunities for creative lighting installations that improve the look and feel of the open space in the evening;
- > opportunities to enhance and activate the space with place making activities and place-specific public art;
- > aligning the new open space design with the *Glen Eira Open Space Strategy Refresh 2020*; and
- > in the short term, activate the car park site with temporary community events, spaces or markets.

ACTIVITY AND LAND USE



STRATEGIC SITES

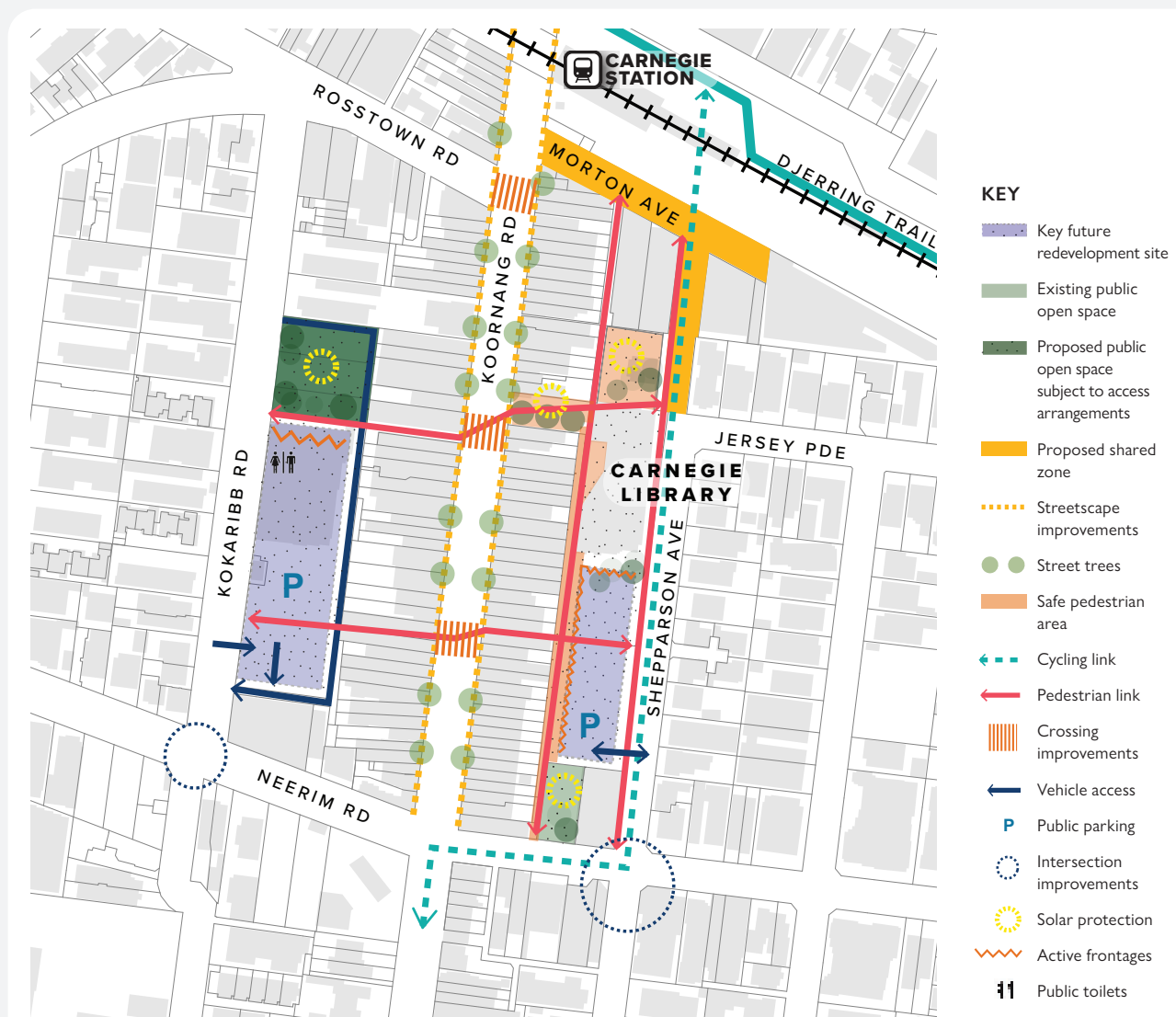


Figure 12: Public spaces: key sites for Shepparson Avenue and Kokaribb Road.

Statutory implementation

Statutory implementation measures relating to land use may include:

- > developing planning controls that incorporate design principles for the Urban Renewal precinct; and
- > developing planning controls that encourage commercial and retail uses on ground and first floor within the commercial zoned land.

ACTIVITY AND LAND USE



Urban renewal precinct

The urban renewal precinct encompasses most of the land north of the railway. It will rejuvenate underused land and accommodate growth close to jobs, services and public infrastructure. There will be a major focus on new and diverse housing and employment opportunities. Development in the urban renewal precinct will facilitate an appropriate transition to existing residential and commercial areas.

The generally larger properties will allow the tallest built form in the activity centre. A contemporary urban character will be established with particular consideration of the public realm. Building design will contribute positively to the amenity and be of a high-quality design when viewed from all angles. As the precinct that will experience the most change, it presents a significant opportunity to deliver environmentally sustainable design.

ACTIVITY AND LAND USE



URBAN RENEWAL PRINCIPLES

Future development within the urban renewal area must be consistent with the following preferred strategic direction and built form principles.

Preferred strategic direction

1. Prioritise employment generation

- > Significant developments within the urban renewal precinct must include employment generation land uses.
- > Encourage retail and commercial uses at ground and first floor within new developments to allow for employment opportunities and land availability for these uses.

2. Encourage a mix of uses, including retail, commercial and housing

- > Encourage diverse housing options for a range of household types.
- > Facilitate appropriate transitions to existing and residential and commercial areas.
- > Incorporate affordable housing where possible and seek a minimum of 5 per cent of affordable housing.

3. Create high-quality open spaces and streetscapes

- > Actively explore opportunities for additional open space and improve existing open spaces as recommended in Council's *Open Space Strategy Refresh 2020*.
- > Enhance the streetscape with active frontages, ground floor retail, outdoor dining opportunities, continuous awnings and street trees where appropriate.

4. Minimise the impact from motor vehicles by introducing traffic treatments at key locations and investigating off-street parking reductions in new developments.

BUILT FORM PRINCIPLES

- > Minimise overlooking to existing residential sites.
- > Minimise overshadowing to public open space.
- > Development should contribute to sustainable transport and parking outcomes across the urban renewal area.
- > Appropriate transitions to existing residential areas.
- > Develop high quality, well articulated buildings.
- > Create a high quality public realm.
- > Incorporate environmentally sustainable design.
- > Respond to the adjoining neighbourhood character area.

BUILT FORM



The Carnegie Major Activity Centre has a distinct and diverse urban character in its residential and commercial areas.

Major Activity Centres vary considerably in scale, function and attributes.

Carnegie has a distinct, fine-grain commercial core of small buildings and a diversity of residential areas that support everything from detached dwellings to townhouses and apartment buildings.

A *Built Form Framework* has been developed that is underpinned by strong urban design principles that will achieve the objective of maintaining Carnegie's unique character as it changes.

Nine design principles have been developed to guide the delivery of built form outcomes in Carnegie, as identified below.

BUILT FORM



DESIGN PRINCIPLES

Street wall

Retaining the street wall height as the dominant architectural feature of the street is the key to being able to successfully integrate new development without it feeling dominant and overwhelming. The other important distinguishing feature of the street wall is that it is built to the front boundary.

The street wall helps to define Carnegie as a suburban interwar shopping centre.

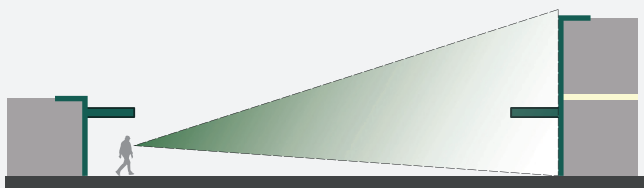


Figure 13: Street wall as seen from across the street.

Visually recessive upper levels

Visually recessive upper levels reinforce the character of the area, ensuring new built form respects heritage and is not overwhelming. The distance of upper level setbacks and their materiality helps to reduce the impact of taller building forms.

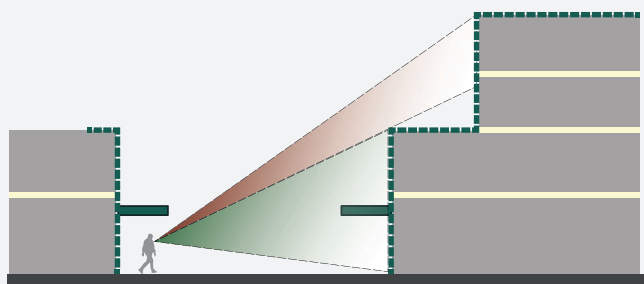


Figure 14: Upper levels as secondary to street wall.

Solar access

Appropriate solar access to the public realm is key to fostering activity and support healthy growth of vegetation. Different activities require different amounts of sunlight and shade. The purpose of the open space will dictate the required access to sunlight.

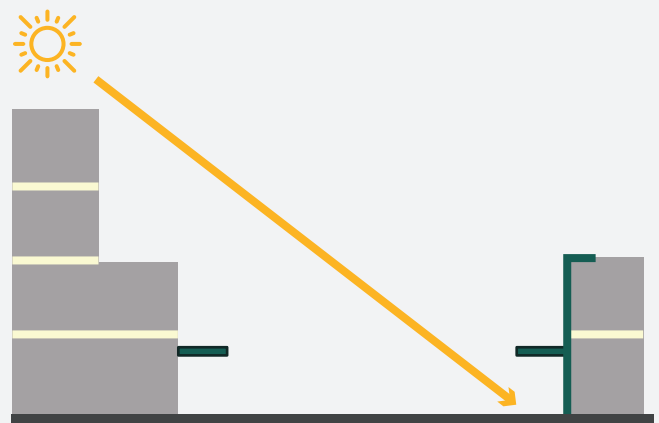


Figure 15: Solar access to footpaths.

Heritage and character

Protecting and enhancing existing character in Koornang Road and developing the desired preferred character in urban renewal areas are key to ensuring a sense of place and identity.



Figure 16: Heritage street wall forms.

BUILT FORM



Interfaces and transitions

Transitioning appropriately to sensitive uses and heritage is important to protect amenity and character. Visual bulk, solar access and overlooking must all be considered. Interfaces can be directly abutting a property, street, laneway or public open space, and include the front, side and rear of the building.

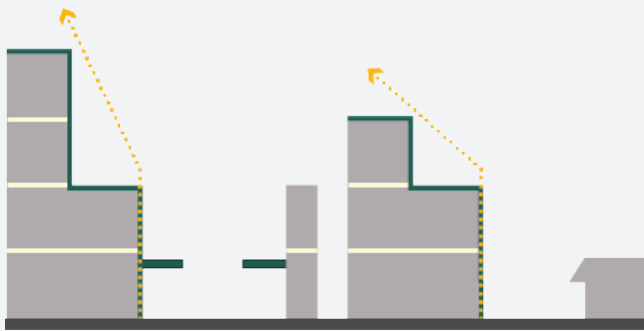


Figure 17: Transitions to lower scale depending on sensitivity of uses.

Environmentally sustainable design

Encourage new development to address and adopt mitigation and adaptation strategies to reduce their impact and carbon emissions.

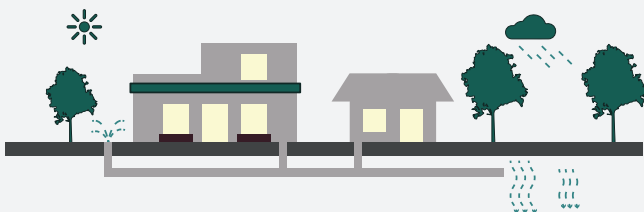


Figure 18: Environmentally sustainable design.

Equitable development

All new built form must avoid unreasonable impacts on existing and potential future neighbouring developments and allow for the equitable development of neighbouring properties. The appropriate separation between buildings will help protect internal amenity, provide access to light and air flow between buildings and create the desired character along the street.

Walkability

Ensuring a walkable Carnegie is key to sustaining a connected, active and healthy community and to ensure its economic and environmental sustainability. This will allow Carnegie to perform its role as an activity centre. The fine-grain nature of the shopfronts and the extensive glazing of buildings adds to the pedestrian experience.

New development will respond to human scale and the existing heritage streetscape, providing visual and physical connections to streets and laneways. A walkable centre will enhance street life and the pedestrian experience. An active and safe ground level encourages pedestrian movement and supports diverse retail offerings to maintain the commercial focus of the area. New development will need to ensure public places are accessible to people with disabilities and to be compliant with the *Disability Discrimination Act*.

Servicing

A building's services are essential for its safety and function. Their appropriate design and location will also ensure minimal impact to street activation, character and traffic.

BUILT FORM



Greening

Buildings should incorporate opportunities for integrating landscape at all levels, including ground, roof tops, podiums and green walls. This landscape should include opportunities for increased flora diversity, species that support pollinating insects and birds and increased canopy coverage. Buildings should incorporate opportunities for planting mature trees and integrating landscape at all levels.

Managing car parking

Car parking should not dominate or determine the built form outcome or adversely affect the public realm.

Ensure parking is managed and designed to support a public realm with vibrant street life and comfortable pedestrian experiences. Additional vehicle crossovers should be minimised on streets with active frontages.

Car parking should be provided in basement levels fully below the finished street level. Where it can be proven that underground car parking is not possible, car parking must be fully wrapped by active frontages.

Access to parking should be via rear laneways.



BUILT FORM



PARAMETERS AND INFLUENCES

A number of key factors have determined the preferred building envelopes. Building envelopes set design parameters for development on a lot that only allows you to build/construct within designated parts of the land. These design parameters can be described by diagrams, plans or written descriptions, or a combination of both. These respond directly to the design principles and include the analysis and testing of different scenarios.

The results from this analysis provide the recommended building envelope requirements for the Carnegie Major Activity Centre to accommodate reasonable increased growth while retaining the valued character.

The key factors influencing the built form controls include:

- > heritage and character;
- > streetscape ratio (sense of enclosure/openness of a street, partly contributed to the width of the road reserve compared to the height of the surrounding buildings);
- > visual bulk along Koornang Road (refers to building height and scale not dominating the streetscape);
- > solar access along Koornang Road;
- > view cone along Koornang Road (this measures the amount of street wall, upper levels and sky visible from the opposite side of the street from a pedestrian view point);
- > sky view factor on Koornang Road (this analysis considers the proposed heights and setbacks and uses modelling to calculate the amount of sky visible from the middle of the street in all directions above ground);
- > solar access on open spaces;
- > transitions to sensitive interfaces (refers to transitioning in height between taller built form and existing low density buildings); and
- > active frontages, safety and preferred access.

BUILT FORM



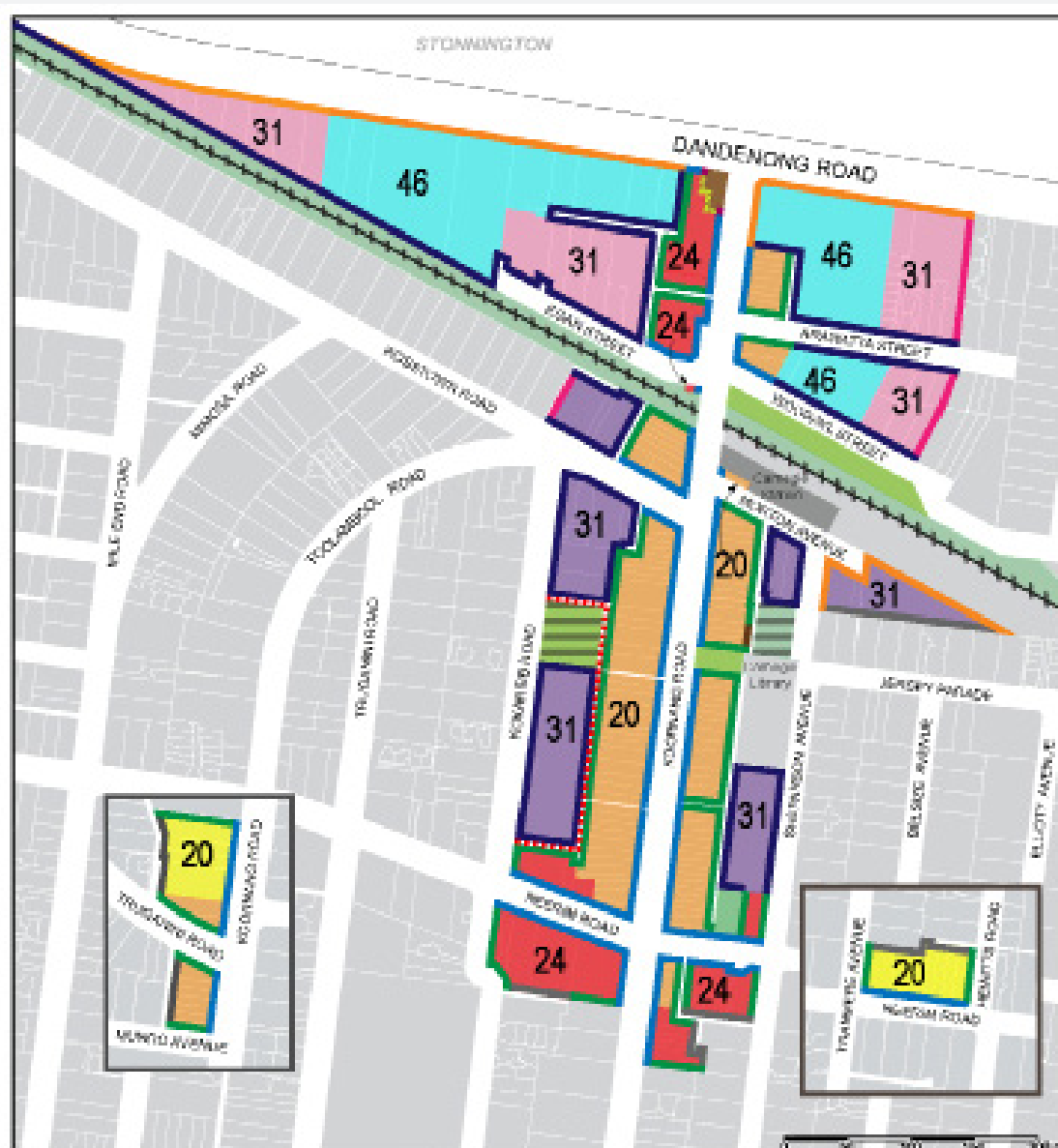
BUILT FORM REQUIREMENTS

The objectives and corresponding actions in this section aim to support growth for new residential and commercial development while responding positively to Carnegie's valued heritage, diversity and mix of uses. This growth will help deliver the vision for Carnegie by providing alternative, highly sustainable forms of development that will continue to support a diverse community and thriving economy.

1. Building heights

Figure 19 on the next page shows the building heights and interfaces recommended in the *Built Form Framework* for the main retail precinct and urban renewal precinct.

BUILT FORM



KEY

- Retail precinct 1–20m, up to 5 storeys*
- Retail precinct 2–20m, up to 5 storeys
- Retail precinct 3–24m, up to 6 storeys
- Retail precinct 4–31m, up to 8 storeys
- Urban renewal precinct 1–31m, up to 8 storeys
- Urban renewal precinct 2–46m, up to 12 storeys

*Mandatory

20 Building height in metre

- Interface Type 1
- Interface Type 1B
- Interface Type 2
- Interface Type 3
- Interface Type 3B
- Interface Type 4
- Interface Type 5
- Interface Type 6
- Railway line

Open space winter solstice shadow controls

Open space equinox shadow controls

Proposed open space
(Subject to resolution of access and parking)

Heritage building
(Land in HO157 Rosstown Hotel and its curtilage)

Rear laneway
(Location and dimensions of accessway, including access to the rear of the Koornang Road properties and the loading dock to be determined at detailed design stage in the future)

2 metre buffer from Rosstown heritage building

Figure 19: Overall building heights and setbacks.

BUILT FORM



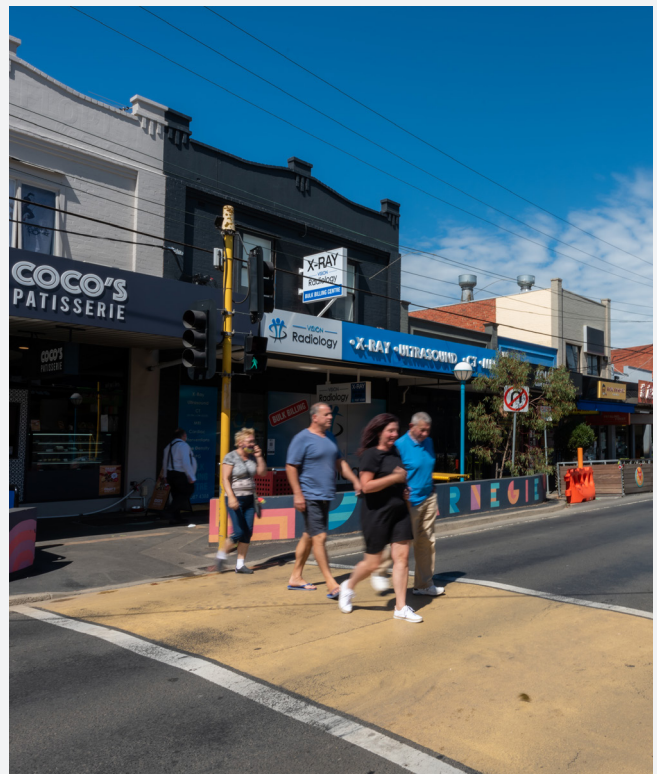
Main retail precinct

This precinct is centred around the Koornang Road retail core and its surroundings. It includes Glenhuntly Tram Terminus Estate shops and the Hewitts Road commercial zone. It is characterised by its retail offering, pedestrian activity and its traditional single and double storey shops, many of which are included in the Heritage Overlay. New development will protect and enhance the heritage and character of the area, allowing for setback upper levels above the one to two storey street wall. Strategic sites in this precinct will allow for taller built form to accommodate the activity centre's higher density.

Urban renewal precinct

This precinct encompasses most of the land north of the railway. The larger properties enable it to accommodate the tallest built form in the activity centre. This precinct will establish a contemporary urban character with an improved public realm.

Building design will contribute positively to the amenity of the street and be of a high-quality design when viewed from all angles.



BUILT FORM



2. Building envelopes

Building envelopes set the design parameters for new developments.

It is important to provide an appropriate transition between taller built form and the existing low-density residential surrounding the area to balance the role of the activity centre to provide higher densities with the potential amenity impacts on neighbouring dwellings. Therefore, the transition from the higher density (urban renewal areas and strategic sites) will be slightly different to that of all other areas. Potential adverse amenity impacts to be managed include overshadowing and overlooking of private open space, and excessive visual bulk.

The *Carnegie Built Form Framework* recommends specific heights, setbacks and solar access requirements which have undergone testing and analysis to respond to the existing context of the activity centre.

These recommendations are designed to limit amenity impacts on the streetscape and surrounding properties by:

- > reducing visual bulk of new development when viewed from the street and neighbouring properties;
- > ensuring adequate distance between habitable rooms to prevent overlooking;
- > reducing opportunities for overshadowing;
- > allowing natural light and air circulation; and
- > providing opportunities for a significant landscape buffer.

The following maps and diagrams identify the maximum building heights, interfaces types and solar access requirements for open spaces and streetscape as identified by the *Built Form Framework*.

Floor to floor heights

For new development, commercial ground floors should be a minimum of 4.2 metres floor to floor. For commercial uses on all other levels there should be a minimum of 3.8 metres floor to floor. For residential uses, all levels should be a minimum of 3.2 metres floor to floor.

BUILT FORM



Type 1

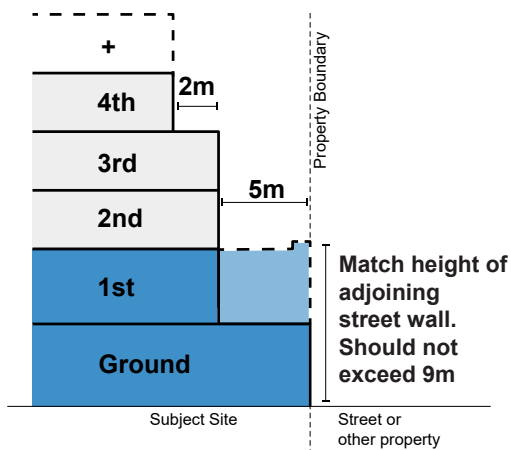


Figure 20: Type 1 Building Interface

Type 1B

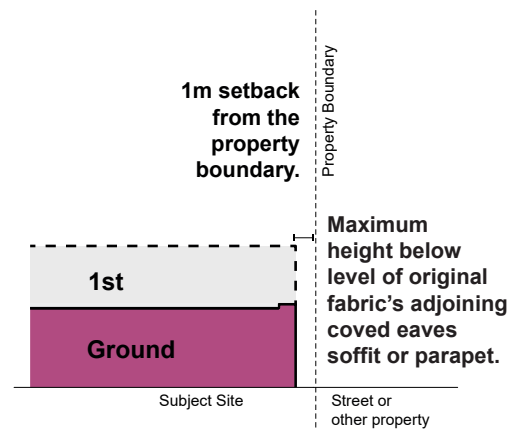


Figure 21: Type 1B Building Interface

Type 2

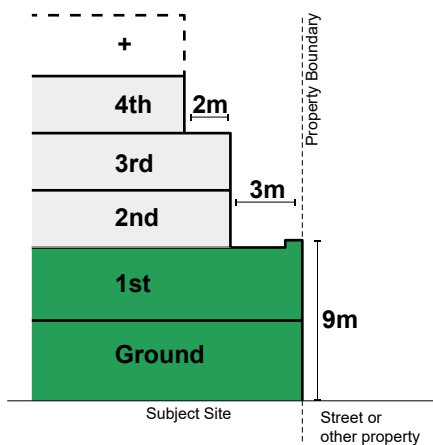


Figure 22: Type 2 Building Interface

Type 3

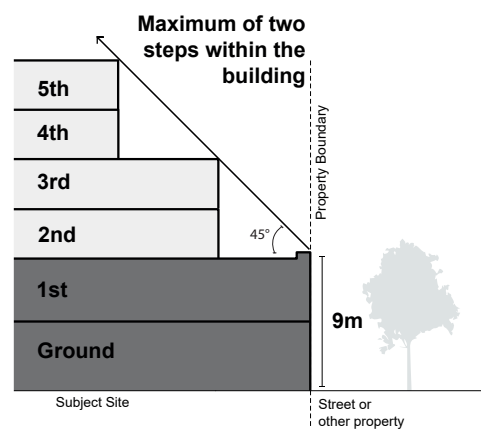


Figure 23: Type 3 Building Interface

BUILT FORM



Type 3B

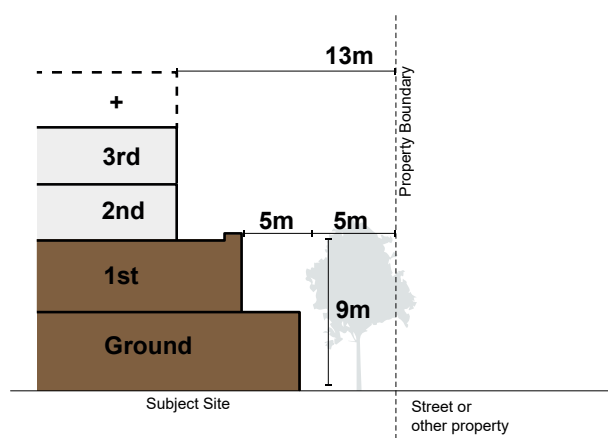


Figure 24: Type 3B Building Interface

Type 4

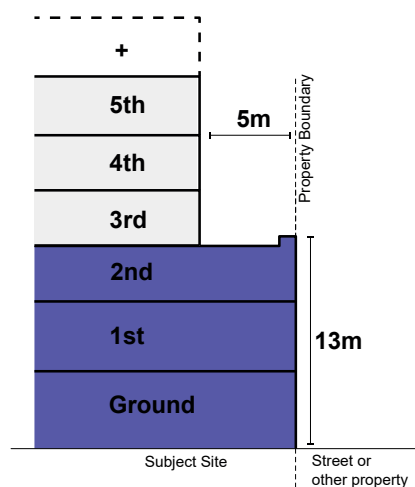


Figure 25: Type 4 Building Interface

Type 5

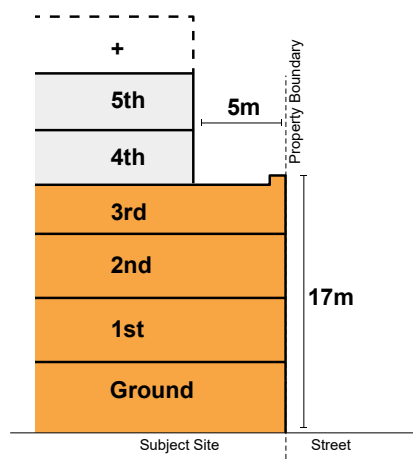


Figure 26: Type 5 Building Interface

Type 6

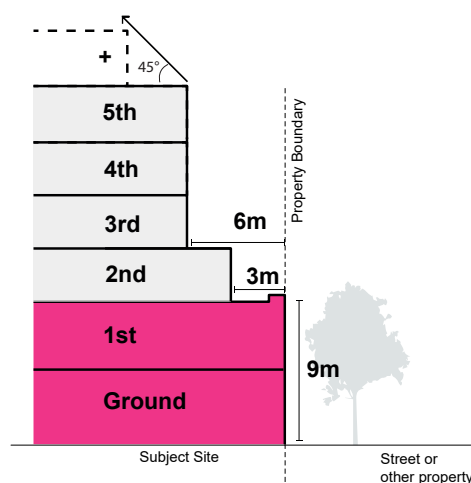


Figure 27: Type 6 Building Interface

BUILT FORM



BUILDING HEIGHTS AND SETBACKS FOR ROSSTOWN HOTEL

A Heritage Overlay (HO157) applies to the Rosstown Hotel at 1084 Dandenong Road, Carnegie as the building is a significant heritage building.

Due to its heritage significance, RBA architects were engaged to evaluate appropriate building heights and setbacks for the building.

In summary the consultants recommend that no building should occur above the original terracotta roof of the building and where buildings can be built they must provide limited streets setbacks and appropriate heights which will retain the in-the-round views of the original building and maintain the heritage significance of the place.

The recommendations are detailed below and have been developed into planning controls in conjunction with the recommendations of the *Built Form Framework*:

Above the original terracotta roofs (identified in red on Figure 28)

- > No additions are to be permitted through, to or above the original terracotta roofs (mandatory).

Within the Heritage Overlay curtilage, and within 2 metres of the terracotta roofs (buffer zone, identified in orange on Figure 28)

- > New buildings must be below the level of the coved eaves soffit, or the parapet of the building (mandatory).
- > New buildings must be set back from the street by 1 metre (mandatory).

Within the Heritage Overlay curtilage, and between 2 and 5 metres from the terracotta roofs (identified in blue on Figure 28)

- > The maximum preferred building height is six storeys.

- > The preferred street interface is two storeys high on the street boundary, stepping back to 5 metres from the street boundary for the second and third storey, and 7 metres from the street boundary for the fourth and fifth storeys.

Outside the Heritage Overlay curtilage (identified in green on Figure 28):

- > Continue the adjacent proposed preferred height limits and interface types identified in the *Draft Carnegie Built Form Framework*.



KEY

- Existing terracotta roof
- Within 2 metres of terracotta roof
- Between 2-5 metres from terracotta roof
- Land outside HO157

Figure 28: Recommended Heritage Guidelines for Rosstown Hotel.

BUILT FORM



BUILDING SEPARATION REQUIREMENTS

Building separation achieves internal amenity, visual and acoustic privacy and appropriate daylight access. It also contributes to the amount of sunlight reaching the public realm. The following minimum building separation standards are recommended:

Building separation

Primary outlook refers to habitable windows including, windows of living and dining rooms. It also refers to the balcony, measured from the main balcony edge.

Secondary outlook refers to non habitable rooms including, bedroom windows, bathroom, non-living and commercial.

BUILDING SEPARATION

BUILDING SEPARATION FROM ADJACENT PROPERTIES	BUILDING HEIGHT	SETBACK FROM COMMON BOUNDARY
Where no outlook is proposed (built to the boundary)	Up to 28 metres	0 metres
	Above 28 metres	6 metres
From a secondary outlook to the boundary	Up to 28 metres	3 metres
	Above 28 metres	6 metres
From a primary outlook to the boundary	Up to 28 metres	4.5 metres
	Above 28 metres	6 metres

BUILT FORM



BUILDING SEPARATION REQUIREMENTS

BUILDING SEPARATION WITHIN A SITE	BUILDING HEIGHT	SETBACK FROM COMMON BOUNDARY
From a secondary outlook to no outlook (blank wall)	Up to 28 metres	3 metres
	Above 28 metres	6 metres
From a primary outlook to no outlook (blank wall)	Up to 28 metres	4.5 metres
	Above 28 metres	6 metres
Between secondary outlooks	Up to 28 metres	6 metres
	Above 28 metres	12 metres
From a primary outlook to a secondary outlook	Up to 28 metres	7.5 metres
	Above 28 metres	12 metres
Between primary outlooks	Up to 28 metres	9 metres
	Above 28 metres	12 metres

BUILT FORM



Frontages and access

The following plan identifies the active frontage, canopy and access requirements as identified by the *Built Form Framework*.

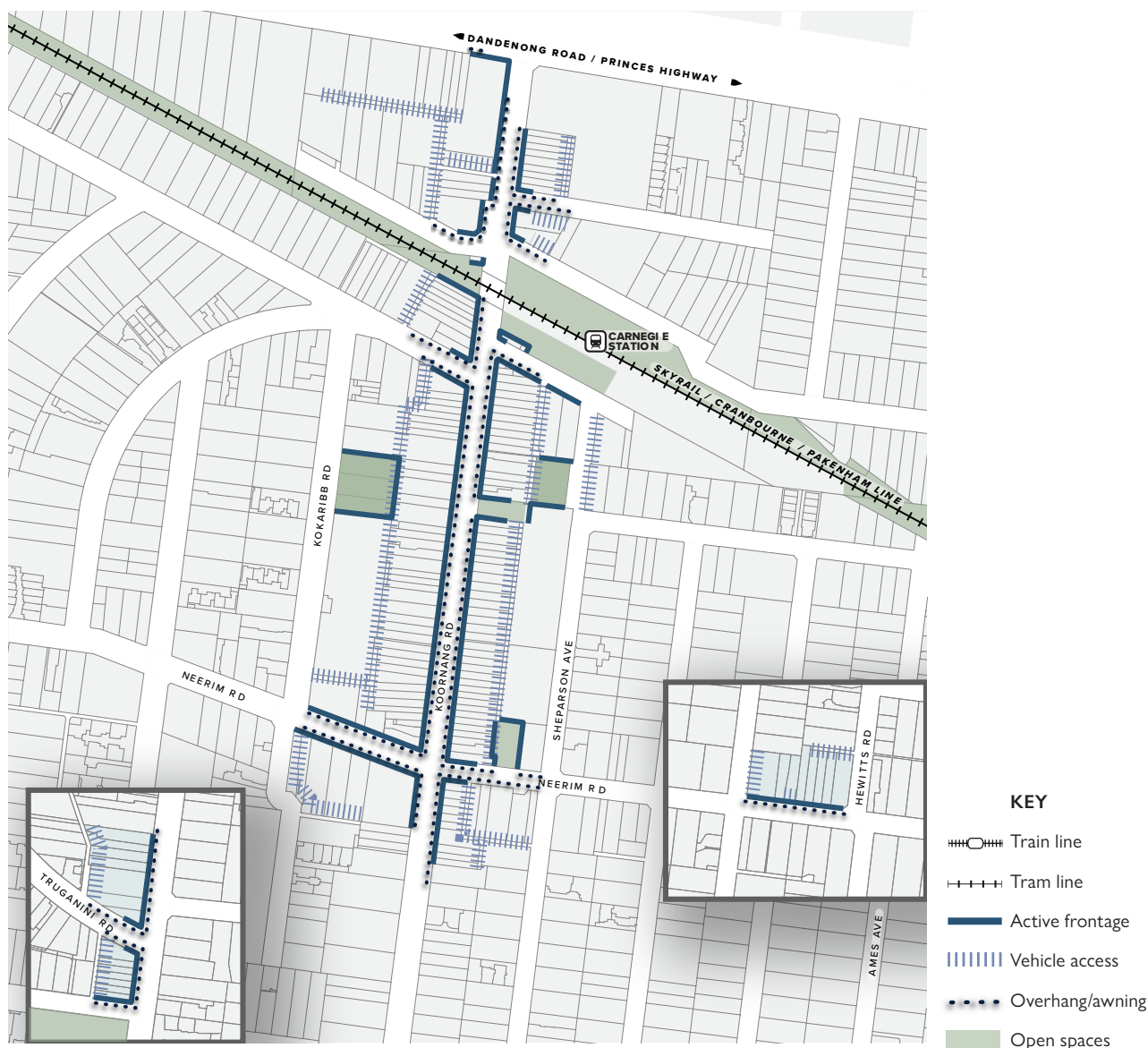


Figure 29: Main retail precinct frontages and access.

BUILT FORM



Frontage and access for urban renewal precinct

The following plan identifies the active frontage, canopy and access requirements for the urban renewal precinct.



Figure 30: Urban renewal precinct frontages and access.

BUILT FORM



Solar access to open spaces

Melbourne's population is increasing and Glen Eira is planning ahead to accommodate a larger population. With higher density living, people rely on public open space to meet a range of their open space needs. The combination of more people living and working in the municipality, means the open space system will need to expand. The *Glen Eira Open Space Strategy Refresh 2020* states;

“that with the forecast increase in population to occur within the activity centre, there is a need to provide additional public open space to cater for the increased levels and intensity of use as well as addressing accessibility to open space”.

Given there are limited opportunities to create more larger open spaces in Glen Eira, the public open space we do provide will play a valuable role and be a high quality open space.

Public open space in the activity centre is separated as 'very high sunlight access priority' or 'high access priority'.

To achieve high-quality, functional public spaces, we will implement the following:

- > Stricter winter solstice 10am–2pm controls are applied to the 'very high sunlight access priority' open spaces, except in cases where a shadow analysis shows that the existing built form already overshadows the space during winter.
- > Equinox 10am–2pm controls should be applied to all other open spaces achieving a balance between open space and built form outcomes.
- > For each existing and proposed open space the shadows cast by existing built form and the proposed maximum street wall were modelled at 10am and 2pm on both the equinox and winter solstice.
- > The overshadowing analysis considered dimensions of the sites and whether the existing open space is currently fully overshadowed. It also acknowledged that different spaces may have different solar requirements driven by their size, location and orientation.
- Neerim Road open space
- Open space north of the library
- Active recreation space below Skyrail immediately west of Koornang Road
- Skyrail open space west of Egan Street

Solar Access along Koornang Road

- > Solar access to footpaths impacts the amenity of the footpaths and how they are likely to be used. Koornang Road is becoming a popular dining destination and solar access to the footpath plays an important role to its unique character, economic viability, resilience, and retaining and encouraging the spill of seating onto the footpath.
- > Due to the north-south orientation of Koornang Road and existing building heights, sunlight can currently reach the western footpath in the morning hours and the eastern footpath in the afternoon hours. Therefore the solar analysis tested the impact of height on sunlight reaching the footpath (under the canopy) at 10am on the western side of Koornang Road and 2pm on the eastern side during the spring equinox of September 22. The analysis found that a five storey building allows sunlight to the Koornang Road footpath.

Based on the overshadowing analysis the following recommendations are made:

- > Winter solstice controls between 10am–2pm for:
 - Kokaribb Road future open space
 - Woorayl Street Reserve to the north of Carnegie Station
 - Library forecourt — Jersey Parade Reserve
- > Equinox controls between 10am–2pm for:

BUILT FORM



The following map shows the proposed sunlight access priority of each existing and proposed open space.



Figure 31: Open space sunlight access priority.

BUILT FORM



Active frontages, safety and preferred access

The interfaces of buildings with the public realm help define the character of the streetscape and are often influenced by the use and detail design of the building at that interface. The defined hierarchy of the streets and open spaces will require different built form controls to make sure the character and safety of the streets is appropriately managed.

The following map shows the location of existing and proposed open spaces and the street hierarchy and the type of interface that is appropriate.

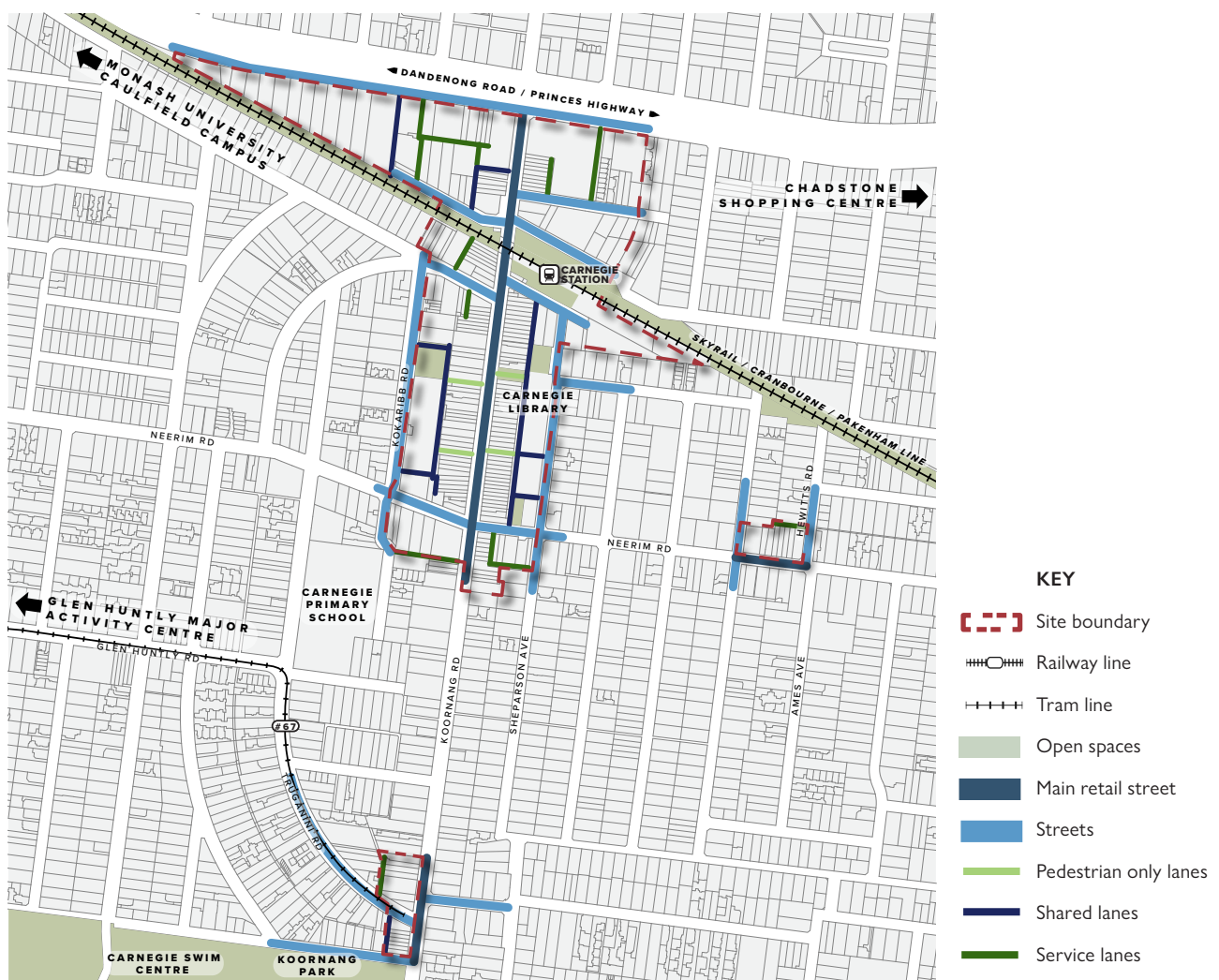


Figure 32: Street network hierarchy.



BUILT FORM

Main retail streets

These streets should provide active frontages at the ground level, balconies and windows at the upper levels to provide opportunities for passive surveillance and prohibit new vehicle crossovers over the pedestrian priority footpath. Balconies should not protrude into the setback.

Open spaces

Open spaces and pedestrian only lanes (with a width of 1.5 metres or more) should require active frontages at the ground level and balconies and windows at the upper levels to provide opportunities for passive surveillance.

Pedestrian only lanes

Pedestrian only lanes (with a width of less than 1.5 metres) should require balconies and windows at the upper levels to provide passive surveillance.

Shared lanes

Shared lanes should encourage active frontages and vehicle access, and windows and balconies at the upper levels to provide passive surveillance.

Service lanes

Service lanes should encourage vehicle access with windows and balconies at the upper levels to provide passive surveillance.

Statutory Implementation

Statutory implementation measures relating to buildings may include:

- > the implementation of design guidance that provides for a greater level of amenity; provides more areas planting of trees and landscaping; improved design detail; and adequate transition between building types.

PUBLIC SPACES



We will provide a range of opportunities for people to meet and gather through new spaces within the centre.

To achieve high-quality, functional public spaces, we will implement the following strategies:

- > ensure public spaces are accessible for all and remain a focal point for the community to meet and gather;
- > improve pedestrian amenity and introduce additional tree planting and landscaping;
- > provide public spaces that are universally accessible, inclusive and inviting by including public art and pedestrian oriented places;
- > protect and, where possible, increase the level of sunlight to public open spaces; and
- > improve pedestrian links within the Major Activity Centre and encourage new developments to provide connections within their development.



PUBLIC SPACES

PLACE MAKING, ADVOCACY AND PARTNERSHIP

Council will need to collaborate with a range of stakeholders, either through place making, advocacy or partnerships to deliver the identified projects. This will ensure the streetscape and public space improvements outlined in the *Carnegie Structure Plan* are carried out in an orderly, staged and financially responsible manner. Improvements to the public realm should address the needs of the community, including local residents, businesses and visitors. Stakeholders and project partners include the local community, local traders, landowners, VicRoads and Public Transport Victoria.

Statutory Implementation

Statutory implementation measures relating to public spaces may include:

- > implementing design guidance to provide greater protection to public spaces from adjoining development.

PUBLIC SPACES

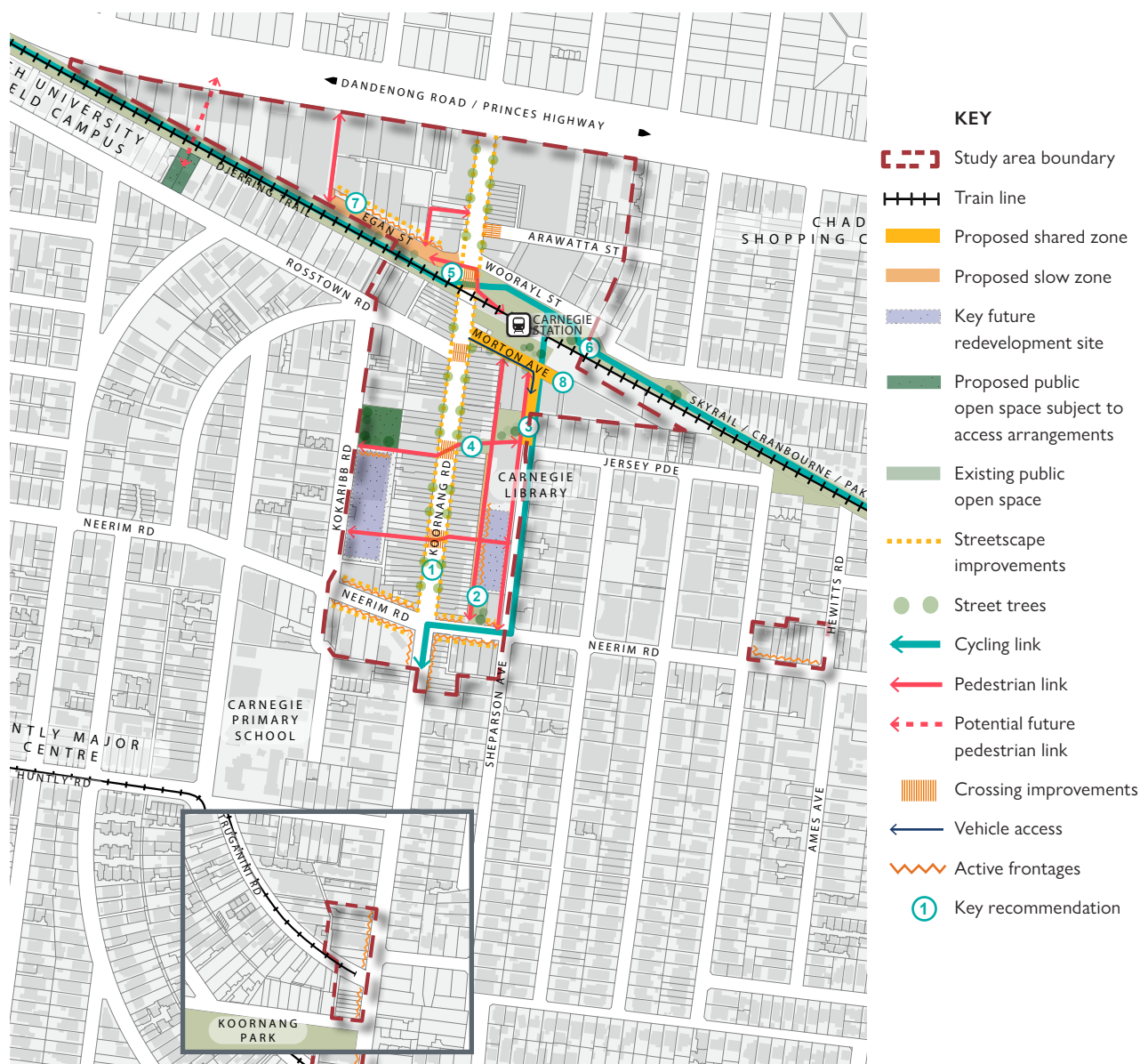


Figure 33: Key public spaces.

PUBLIC SPACES



Koornang Road

Ensure Koornang Road is a welcoming destination for people to live, work, visit and play.

Enhance Koornang Road as a walkable streetscape with diverse offerings and experiences in the day and at night through the following public realm recommendations:

- > in key sections of Koornang Road, widen or realign footpaths to improve pedestrian amenity and provide opportunities for additional outdoor dining;
- > introduce a consistent row of canopy trees in kerb outstands, widened footpaths or on-street tree bays. Ensure street tree outstands allow adequate soil volume to enable successful tree establishment;
- > introduce additional landscaping and consider appropriate locations for water sensitive urban design that addresses flood risk, improves water quality and reduces potable water use;
- > investigate ways to improve walkability in the centre through potential improvements to key pedestrian crossings points;
- > avoid additional vehicle crossovers;
- > investigate the feasibility of undergrounding or aerial bundling overhead cables in high pedestrian areas and areas identified for canopy tree planting (in conjunction with relevant authorities and landowners);
- > consider limiting traffic speed to 30 kms per hour at all times to improve safety for people walking and riding bikes during the day and at night;
- > provide appropriate off-street parking and clear wayfinding. Simplify and consolidate signage where possible;
- > improve street furniture, amenities, bicycle parking, street lighting and paving;
- > protect pedestrian amenity by maintaining or increasing solar access to footpaths from future developments. In key locations, introduce additional colour and creativity to the streetscape with place-specific public art and place making activations;
- > Maintain access to the rear of the Koornang Road shops and improve pedestrian links between Koornang Road, Shepparson Avenue and Kokaribb Road;
- > encourage new developments to provide internal/ external connections within their development from Koornang Road to the Kokaribb Road car park, improving connectivity within the centre and activating the rear laneway;
- > improve bus stop amenity with lighting, wayfinding and sufficient space for people to wait; and
- > protect and enhance the heritage character of the area.



PUBLIC SPACES



Koornang Road (continued)



Figure 34: Koornang Road existing streetscape.

KOORNANG ROAD (BETWEEN NEERIM ROAD AND ROSSTOWN ROAD) EXISTING STREETScape.

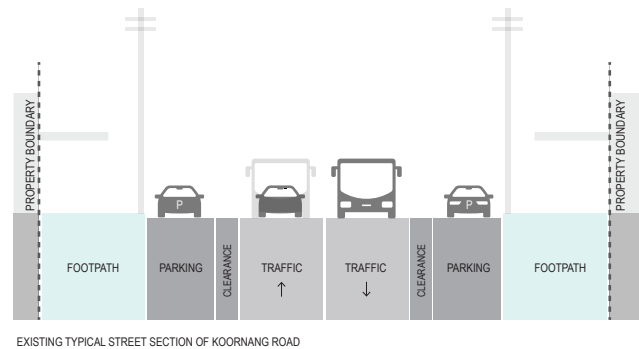


Figure 35: Koornang Road existing streetscape.



Figure 36: Koornang Road concept streetscape. Concept only, subject to further detailed investigation, design and approval.

STREETSCAPE CONCEPT.

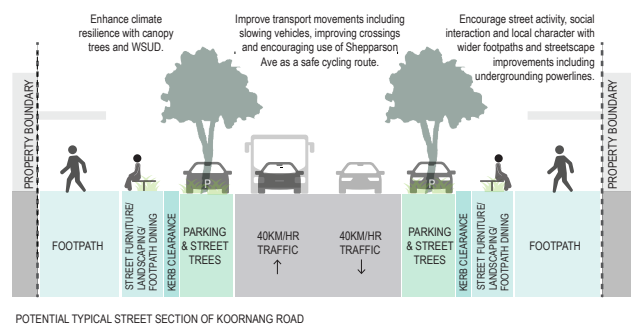


Figure 37: Koornang Road concept streetscape. Concept only, subject to further detailed investigation, design and approval.

PUBLIC SPACES



Library car park laneway and Neerim Road Community Space

Investigate future options for the redevelopment of the Library at-grade car park site. See Key public spaces (Figure 33) for key future redevelopment public spaces and future redevelopment design recommendations. The future redevelopment of these sites may include community and commercial uses. In the short term, consider the following public realm recommendations to improve the functionality and walkability of the Carnegie Major Activity Centre:

- > streetscape works to improve the pedestrian amenity of the laneway connecting Neerim Road, the library forecourt and Morton Avenue;
- > consider how pedestrian and vehicle conflicts could be better managed in this laneway to create a safe shared space for the Carnegie community;
- > consider how waste collection and screening of bins and services could be better managed in this laneway; and
- > look for opportunities to incorporate tree planting in line with the *Glen Eira Urban Forest Strategy*.

Shepparson Avenue

Shepparson Avenue is identified as a safe cycling street and provides a link between Carnegie Station, the Djerring Trail and the broader network. The following public realm improvements are recommended for this street:

- > investigate removal of some on-street parking on one side, to widen the footpath;
- > improve pedestrian amenity on the desired line to/from Carnegie Station; and
- > introduce cycling facilities and wayfinding to formalise the street as the main cycling connection to Djerring Trail.

Library forecourt (Jersey Parade Reserve)

Protect and enhance pedestrian amenity in this community space through the following public realm improvements:

- > protect solar access to the space to safeguard the survival of large trees and to ensure the space remains comfortable for pedestrians;
- > provide sufficient public seating and street furniture;
- > mitigate pedestrian and cycling conflicts at the intersection between the forecourt and the rear laneway. Ensure the space remains free of motor vehicles; and
- > consider integration of permeable materials in the space.

Djerring Trail and Railway Reserve

Enhance the amenity and functionality of the Djerring Trail and Railway Reserve through the following public realm improvements:

- > protect solar access in the space to ensure the trail remains comfortable for people walking or cycling;
- > improve wayfinding to and along the Djerring Trail; and
- > use wayfinding and signage to emphasise the significance of place.

Woorayl Street Reserve

Protect the amenity of the green space and playground in Woorayl Street, through the following public realm considerations:

- > ensure protection of the Council's Classified Remnant Red Gums (*Eucalyptus camaldulensis*) in line with requirements of Glen Eira's *Classified Tree Local Law*;
- > maintain solar access provision to the green space; and
- > maintain passive surveillance over the playground during the day and night.

PUBLIC SPACES



Egan Street

Situated in the urban renewal precinct, Egan Street will provide a liveable, walkable, slow road environment to prioritise pedestrians, on-street dining and street greening. This important street will connect the urban renewal precinct to the main retail precinct within the Carnegie Major Activity Centre.

Consider the following public realm recommendations:

- > encourage a vibrant streetscape with active frontages, passive surveillance and alfresco dining along the northern footpath to create a walkable street for the increasing number of residents in the area;
- > create a safe street environment with high pedestrian amenity;
- > consider streetscape greening that is appropriate in shaded areas, due to likely overshadowing of the northern footpath from future development;
- > consider planting of canopy trees on the southern side of Egan Street;
- > ensure new developments contribute to a walkable streetscape with continuous awnings along the length of the northern footpath, providing shelter from wind and rain;
- > provide ample bicycle parking to encourage people to stop and visit local shops and cafes on Egan Street; and
- > encourage new developments to avoid, consolidate or minimise additional vehicle crossovers along this street.

EXISTING TYPICAL STREET SECTION OF EGAN STREET.

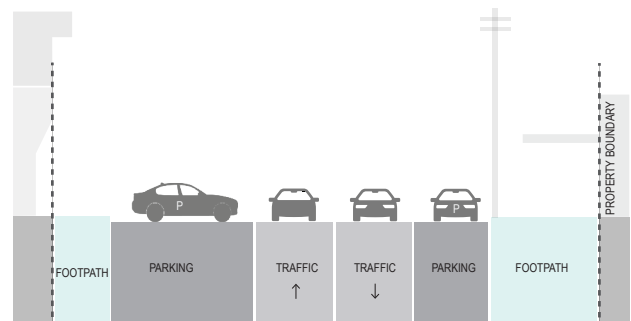


Figure 38: Egan Street existing streetscape.

POTENTIAL TYPICAL STREET SECTION OF EGAN STREET.

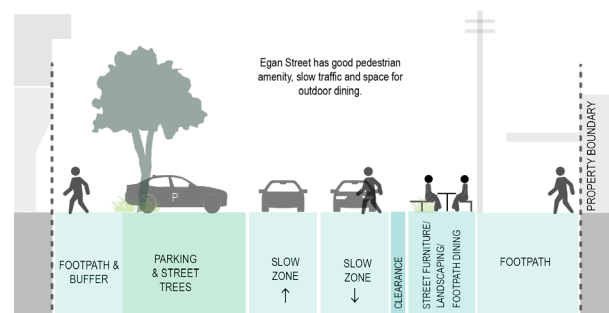


Figure 39: Egan Street concept streetscape. Concept only, subject to further detailed investigation, design and approval.

PUBLIC SPACES



Morton Avenue

Morton Avenue is located off Koornang Road within the main retail precinct of the Major Activity Centre.

Convert Morton Avenue to a one-way street (eastbound) and improve pedestrian amenity through the following public realm improvements:

- > create a vibrant and welcoming shared streetscape with coherent wayfinding, active frontages, passive surveillance and alfresco dining spaces;
- > investigate traffic calming devices to improve safety of all road users and prioritise pedestrians;
- > create a walkable streetscape by ensuring new developments incorporate continuous awnings along the length of the southern footpath, providing shelter from wind and rain;
- > plant a continuous row of canopy trees along the length of the street and consider opportunities for water sensitive urban design;
- > improve cycling facilities in the street by formalising the connection between the Shepparson Avenue safe cycling street and the Djerring Trail; and
- > identify opportunities to inject colour and activity into the streetscape with place-specific public art.

PUBLIC SPACES



Laneways and pedestrian connections

The Major Activity Centre is characterised by a network of laneways providing access to pedestrians, private vehicles and service vehicles.

Improve laneways, arcades and pedestrian connectivity throughout the centre through the following public realm improvements and strategies:

- > ensure laneways are publicly accessible 24 hours a day;
- > encourage arcades to be publicly accessible and allow an accessible path of travel;
- > ensure laneways are visually open to the sky and have clear visual connections from street to street;
- > provide an accessible path of travel from street to street and wayfinding signage identifying the street to which the laneway/arcade connects;
- > ensure pedestrian laneways are safe, well lit, have good passive surveillance during the day and at night, and are designed with crime prevention in mind;
- > enhance the look and feel of laneways with public art opportunities, including creative lighting installations;
- > encourage ground floor active frontages and where space permits, outdoor dining opportunities to activate laneways and pedestrian links;
- > encourage second storey active frontages and visual connections during the day and at night;
- > ensure new laneways or pedestrian connections provide sufficient width (minimum three metres) and are clear of obstructions to support movement and stopping spaces, incorporate active frontages, and provide good pedestrian amenity and safety; and
- > encourage new developments to provide connections within their development for pedestrians to access the rear of the site. This can be internal or external and should include passive surveillance.



MOVEMENT AND PARKING

The Carnegie Major Activity Centre is a highly accessible precinct with good public transport options, viable for transit-orientated development.

The Carnegie Major Activity Centre is an area where people can live, work, shop and meet.

Development controls that allow increased co-location of population density, jobs and services, in a high-accessibility location, provide broader benefits in terms of more sustainable travel patterns, as well as community health and wellbeing through better transport choice.

As Carnegie's population grows, opportunities to access work, leisure, food and other retail should also be facilitated by means of walking, cycling and high-quality public transport within and beyond the precinct.



MOVEMENT AND PARKING



A number of recommendations made through this section are based on the following objectives:

- > promote sustainable modes of transport such as walking, cycling and access to public transport to reduce reliance on private vehicles.
- > improve connections for the pedestrian environment to make pedestrian movements more direct, comfortable and safe;
- > create an engaging on-street environment through active frontage and installations;
- > provide opportunities for people of all ages and abilities to move freely within the precinct;
- > give priority to pedestrians and cyclists and create a safe and inclusive cycling environment; and
- > improve the legibility of public transport connections and the ease of transfer between modes.

A transport investigation and assessment has been undertaken to determine whether Carnegie can cater for future growth.

The assessment found that Carnegie can accommodate the 15 year growth forecast through a combination of road network mitigation initiatives and travel demand management (including initiatives such as reduced parking provision in residential development). The mitigation recommendations however are not through the traditional means of increasing the fixed road network and parking capacity, as Carnegie does not have opportunities to significantly increase the road network's capacity.

Increasing parking is not the answer to this as increasing parking numbers will only exacerbate existing congestion issues on the fixed road network.

However, there is a great opportunity to cater for future growth through a combination of measures involving improving vehicle movement and access, improving pedestrian, cycling and access to public transport amenity and managing parking. These are discussed below.

MOVEMENT AND PARKING



Vehicle movement/access

- > establish interconnected north-south pedestrian laneways between Egan Street and Dandenong Road;
- > focus new development access to Arawatta Street;
- > investigate treatments for improved safety and amenity on Dandenong Road;
- > continue to monitor network performance to assist with long-term advocacy for infrastructure improvements;
- > investigate potential restriction to left-in/left-out at Koornang Road/laneway access (located adjacent Rosstown Hotel);
- > encourage future developments to maintain north-south through-site links to Dandenong Road;
- > investigate minor upgrades to the intersection layout at Neerim and Kokaribb Roads;
- > develop a *Local Area Traffic Management Scheme* for Jersey Parade and surrounding streets;
- > develop a *Local Area Traffic Management Scheme* for the residential growth zones to the west of Kokaribb Road;
- > monitor the performance of the Koornang and Rosstown Roads intersection and investigate potential lane storage upgrade to enhance intersection operations;
- > develop transition zones between the surrounding road network and any future shared zones to show a change in priority between transport modes;
- > retain existing laneways with minor upgrades in conjunction with development and specific requirements;
- > investigate minor upgrades to the intersection layout at Neerim Road and Shepparson Avenue; and
- > facilitate laneway access to the development west of Koornang Road by:
 - investigating pedestrian crossing facilities connecting through to the Koornang Road shopping strip for movements across the north-south laneway to/from the open space;
 - creation of an east-west shared lane for circulation and access to the new development, limited primarily to vehicle access and small vehicles. This link is nominally shown in the location of the existing connection south of Woolworths;
 - consider a single access point to the development near the existing Woolworths site from Kokaribb Road, for larger vehicles, and/or any major commercial car park entrances.

MOVEMENT AND PARKING



Pedestrian/cycling

- > investigate potential right-turn bans from Koornang Road;
- > provide building splays to ground floor level (subject to heritage controls) to improve intersection layout and address existing pedestrian safety issues;
- > explore opportunities to create a slow road environment along Egan Street to prioritise pedestrians, on-street dining and street greening;
- > improve pedestrian crossing at Arawatta Street;
- > encourage new developments to provide public access between Dandenong Road, Rosstown Road and the Djerring Trail;
- > investigate the feasibility of a one-way shared zone on Morton and Shepparson Avenues, including a contraflow bike lane on Shepparson Avenue between Jersey Parade and Morton Avenue (and provide a connection to the Djerring Trail);
- > investigate the closure of the existing laneway connection to Neerim Road west of Koornang Road, retaining the land as a Pedestrian Link;
- > provide east-west shared lanes as part of the future development of Council's Shepparson Avenue car park;
- > encourage developments to provide east-west pedestrian link from Shepparson Avenue and linking to Koornang Road via existing laneways;
- > investigate improved cycling connections on Shepparson Ave between Neerim Road through to the Djerring Trail;
- > investigate opportunities to promote sustainable forms of transport such as supporting the rollout of an e-micromobility e-bikes/e-scooters trial, reviewing the adequacy of public bicycle parking rails, and ways of improving broader north-south accessibility to Carnegie Station by bike to support bicycle park 'n' ride; and
- > increase secure and easily accessible bicycle parking within Carnegie.

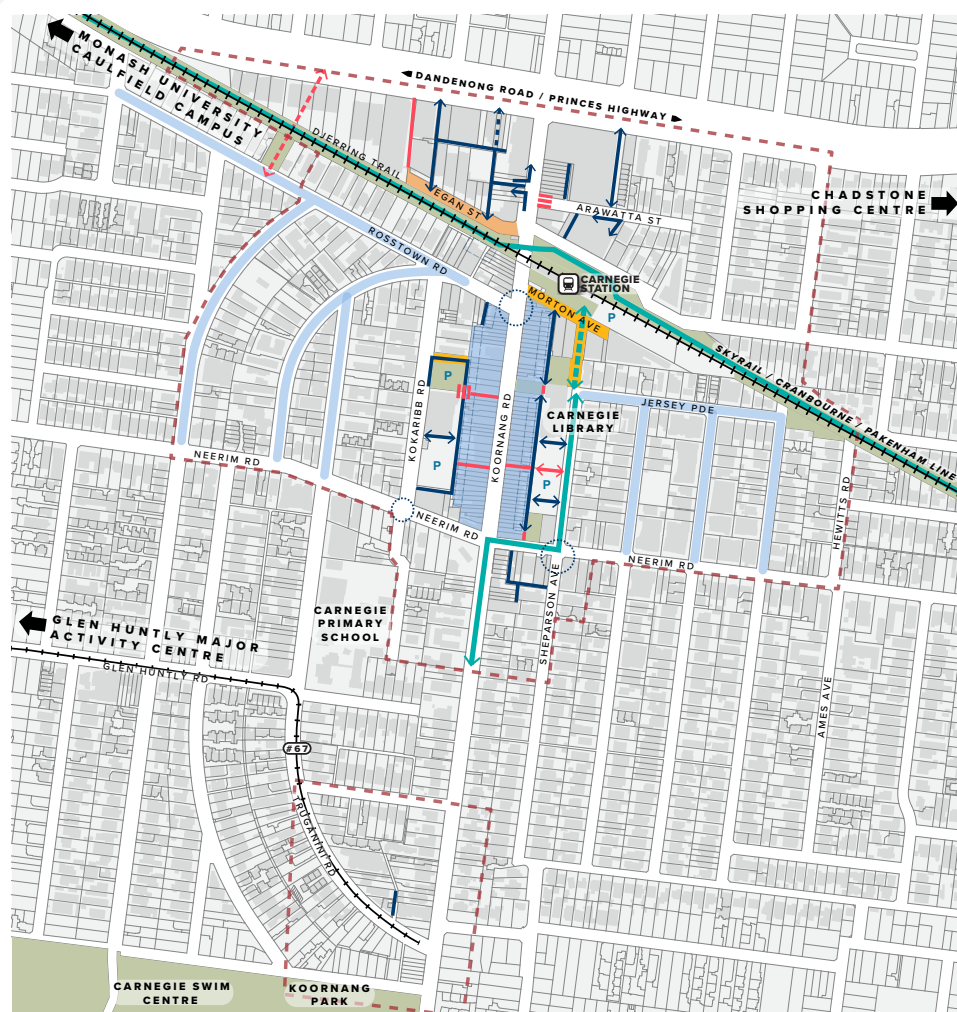
Parking

- > update the parking policy to support low traffic generating developments;
- > continue the use of permit-only schemes in local streets where parking from the activity centre is likely to cause parking overspill, to protect local amenity — as outlined in the *Glen Eira Parking Policy*;
- > review the existing car parking policy and update to consider supporting car parking below statutory requirements in Carnegie, as well allowing low-car and no-car development for properties fronting Koornang Road to mitigate traffic impacts to rear laneways;
- > undertake a study to investigate reduced car parking provision, or a capped provision as part of a policy-led initiative, particularly for 'shop-top' residential development along Koornang Road;
- > consider the incremental removal of on-street parking over time at key sites, such as at intersections, to facilitate public realm and pedestrian improvements, including pro-active supportive measures to manage the remaining supply of parking; and
- > investigate a parking pricing scheme as a way of offsetting peak parking demand and encouraging a shift to other modes, or less busy times of day.

Advocacy

- > support a rapid transit corridor (trackless tram) along the Dandenong Road corridor between Caulfield and Monash National Employment and Innovation Cluster; and
- > continue to advocate for public transport improvements in and around Carnegie.

MOVEMENT AND PARKING



KEY

- Transport study area boundary
- Train line
- Proposed/existing public open space
- Local area traffic management scheme/policy
- Proposed shared zone
- Proposed slow zone
- ← Vehicle recommendations
- ← Pedestrian recommendations
- - - Future vehicle Investigations
- - - Future pedestrian investigations
- Pedestrian crossing
- ← Cycling route
- - - Cycling facility recommendations
- P Public parking
- Intersection recommendations

Figure 40: Transport in Carnegie.



PART THREE: **MAKING IT HAPPEN —** **THE IMPLEMENTATION** **PLAN**

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

When will the *Structure Plan* be implemented?

The recommended statutory changes to the building and land use controls on all affected land will be implemented through a Planning Scheme Amendment which will commence in late 2022 or early 2023. An amendment changes the town planning controls which determine how land can be used or developed. For privately owned land, development will occur over time within these newly implemented controls.

In terms of the major projects proposed on Council-owned land, such as new public spaces, a more detailed implementation plan has been prepared which includes non-statutory implementation and advocacy strategies.

How will the plan be funded?

To deliver on the vision we will need to undertake capital works projects to make physical changes, improvements and other place making initiatives to support activity and engagement within public spaces. The actions contained in the implementation plan are prioritised to indicate works that are more critical or less critical to support the growth and development of the centre. The priorities will be reviewed as required and only the short-term priorities will be submitted for capital funding consideration. Medium-term and long-term priorities will not be included until which time the short-term priorities have been completed or circumstances exist where the action may not be required or could be delivered by others. All actions will be subject to Council's budgetary processes and considered against broader priorities of Council.

How will the plan be reviewed?

To monitor and review the final *Carnegie Structure Plan*, we will carry out the following steps:

- > *The Structure Plan* will be internally reviewed every four years.
- > Reporting undertaken against Council's *Glen Eira Council and Community Plan* will include updates on elements of this *Plan* which have been advanced.
- > Council will continue to discuss the outcomes in this *Plan* and the progress of identified projects with the Carnegie Traders Association.
- > A complete review of the process of implementing this *Plan* will occur at four-year intervals.

The implementation plan assigns responsibilities and timing to each of the actions.

The actions encompass:

- > strategy and policy actions (including changes to the *Planning Scheme*);
- > potential infrastructure and capital works; and
- > advocacy.

The following timings are utilised:

- > Short term — one to five years
- > Medium term — five to 10 years
- > Long term — more than 10 years
- > Ongoing

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

Timing is indicative and the delivery of the *Structure Plan* needs to be flexible.

1. OVERARCHING SUSTAINABILITY GOAL

ACTION		RESPONSIBILITY	TIMING
1.1	<p>Consider the following in every project and incorporate where relevant:</p> <ul style="list-style-type: none"> • Environmentally sustainable design • Water sensitive urban design • Integrated water management • The circular economy • Reducing waste • Climate risk assessment for refurbished or new Council assets 	All teams	Ongoing

2. PLANNING SCHEME AMENDMENT

ACTION		RESPONSIBILITY	TIMING
2.1	<p>Planning Scheme Amendment to:</p> <ul style="list-style-type: none"> • Introduce Design and Development Overlay with planning controls • Update local policies in the <i>Glen Eira Planning Scheme</i> relating to Carnegie 	City Strategy and Place Planning	Immediate upon adoption of the <i>Structure Plan</i>

Timing

Short term (Short term)	Up to 5 years include in budget bid)
Medium term	5-9 years
Long term	10+ years

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

3. KOORNANG ROAD/NEERIM ROAD

ACTION	RESPONSIBILITY	TIMING
<p>3.1 Prepare a Streetscape Masterplan for Koornang Road between Neerim Road and Dandenong Road that considers the following:</p> <ul style="list-style-type: none"> • Increase tree planting including 'cool routes'. • Opportunities to improve pedestrian amenity. • Improved pedestrian crossing points on Koornang Road, Arawatta Street and other streets as needed. • Improved cycling connections. • Street furniture. • Widening and repaving of footpaths. • Consolidation of signage and improve wayfinding. • Use of the library forecourt. • Reduced crossing widths on side streets. 	City Transport and Place Design	Short term
<p>3.2 Consider the incremental removal or relocation of on-street parking over time at key sites such as at intersections to facilitate tree planting, public realm and pedestrian improvements, including supportive measures to manage the remaining supply of parking.</p>	City Transport and Place Design Sustainability and Infrastructure Park Services	Ongoing
<p>3.3 Permanently limit traffic speed to 30km/hr in Koornang Road between Dandenong Road and Neerim Road.</p>	Sustainability and Infrastructure	Medium term
<p>3.4 Investigate feasibility of undergrounding powerlines, improving street lighting and opportunities for water sensitive urban design.</p>	City Transport and Place Design Sustainability and Infrastructure	Long term
<p>3.5 Investigate a precinct-wide approach to improving waste management.</p>	Sustainability and Infrastructure	Short to medium term

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

4. TRANSPORT INVESTIGATIONS

ACTION		RESPONSIBILITY	TIMING
4.1	Investigate and identify locations for public electric vehicle charging stations.	Sustainability and Infrastructure	Short term
4.2	Advocate and/or investigate treatments for improved safety and amenity on Dandenong Road (DOT road) and monitor network performance to assist with long term advocacy for infrastructure improvements.	City Transport and Place Design Sustainability and Infrastructure	Long term, in response to development
4.3	Investigate potential restriction to left-in/left-out at Koornang Road for laneway access between Dandenong Road and the railway line.	Sustainability and Infrastructure	Long term
4.4	Investigate minor upgrades to the intersection layout at Neerim Road/Kokaribb Road.	Sustainability and Infrastructure	At time of supermarket redevelopment
4.5	Investigate minor upgrades to the intersection layout at Neerim Road/Shepparson Avenue.	Sustainability and Infrastructure	At time of library car park redevelopment
4.6	Investigate the banning of right-hand-turns from Egan Street into Koornang Road.	Sustainability and Infrastructure	Medium term, depends on development in Egan St
4.7	Investigate the feasibility of a one-way shared zone on Morton Avenue/Shepparson Avenue including a contraflow bike lane on Shepparson Avenue between Jersey Parade and Morton Avenue (and provide a connection to the Djerring Trail).	City Transport and Place Design	Short term
4.8	Investigate the rollout of an e-scooter and e-bike trial.	City Transport and Place Design	Short term
4.9	Investigate the introduction of a Parking Overlay in all Major Activity Centres if the review of the <i>Car Parking Policy</i> to support reduced parking provision outlined in Action 5.2 clearly demonstrates that it is necessary.	City Transport and Place Design	Short to medium term
4.10	Investigate a parking pricing scheme across all Major Activity Centres as a way of offsetting peak parking demand and encouraging a shift to other modes, or less busy times of day.	City Transport and Place Design	Long term

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

5. TRANSPORT STUDIES AND REVIEWS

ACTION		RESPONSIBILITY	TIMING
5.1	Review ways of improving broader north-south accessibility to Carnegie Station by bike to support bicycle “park ‘n’ ride”.	City Transport and Place Design	Short term
5.2	Review existing <i>Car Parking Policy</i> and update to consider supporting car parking below statutory requirements in Carnegie, as well allowing low-car and no-car development for properties fronting Koornang Road to mitigate traffic impacts to rear laneways.	City Transport and Place Design	Short term
5.3	Develop a <i>Local Area Traffic Management Scheme</i> for Jersey Parade and surrounding streets.	Sustainability and Infrastructure	Long term, depends on future development
5.4	Develop a <i>Local Area Traffic Management Scheme</i> for the residential growth zones to the west of Kokaribb Road.	Sustainability and Infrastructure	Long term, depends on future development
5.5	Monitor the performance of the Koornang Road/Rosstown Road intersection and investigate potential lane storage upgrade to enhance intersection operations.	Sustainability and Infrastructure	Long term
5.6	Develop transition zones between the Morton Avenue share zone where it meets Koornang Road and Shepparson Avenue to show a change in priority between transport modes, pending the successful feasibility at Action 4.7.	City Transport and Place Design Sustainability and Infrastructure	Medium term
5.7	Continue the use of permit-only schemes in local streets to protect them from overspill parking from the Major Activity Centre.	Community Safety and Compliance	Ongoing

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

6. LANEWAYS

ACTION		RESPONSIBILITY	TIMING
6.1	Improve the amenity and safety of existing pedestrian links and laneways through lighting, public art and wayfinding.	City Economy and Place Making City Transport and Place Design	Short term
6.2	Investigate the closure of the existing laneway connection to Neerim Road east of Koornang Road, retaining the land as a pedestrian link. Cars would exit onto Shepparson Avenue.	City Transport and Place Design Buildings, Properties and Statutory Building Services	Short term

7. SHEPPARSON AVENUE/MORTON AVENUE

ACTION		RESPONSIBILITY	TIMING
7.1	Introduce formal cycling facilities on Shepparson Avenue and Morton Avenue, connecting people riding bikes to the Djerring Trail, pending the successful feasibility at Action 4.7.	Sustainability and Infrastructure	Medium term
7.2	Consider widening the footpath to remove the pedestrian pinch point on the western footpath of Shepparson Avenue near Morton Avenue, pending the successful feasibility at Action 4.7.	Sustainability and Infrastructure	Medium term
7.3	Introduce a one-way street on Morton Avenue, pending the successful feasibility at Action 4.7.	Sustainability and Infrastructure	Medium term

MAKING IT HAPPEN — THE IMPLEMENTATION PLAN

8. EGAN STREET

ACTION		RESPONSIBILITY	TIMING
8.1	Explore opportunities to create a shared zone along Egan Street to prioritise pedestrians, on-street dining, street-tree planting and landscaping.	City Transport and Place Design	Long term
8.2	Undertake a streetscape renewal project to create a safe pedestrian environment aligning with construction of new developments.	Sustainability and Infrastructure	Long term

9. ADVOCACY

ACTION		RESPONSIBILITY	TIMING
9.1	Support a rapid transit corridor (trackless tram) along the Dandenong Road corridor between Caulfield and Monash National Employment and Innovation Cluster.	City Transport and Place Design	Ongoing

10. FEASIBILITY STUDIES

ACTION		RESPONSIBILITY	TIMING
10.1	Library car park site — undertake feasibility study to determine the future direction and redevelopment of the site. Consider community uses, commercial uses and parking.	PMO	Medium term
10.2	Kokaribb Road car park — identified as future open space. Investigate options for the open space at the time of the redevelopment of the supermarket or prior if circumstances permit.	Recreation and Open Space	Medium term



GLOSSARY AND **APPENDIX**

GLOSSARY

Active frontage

Refers to street frontages where there is an active visual engagement between those in the street and those on the ground and upper floors of buildings.

Major Activity Centre

A mixed-use area that provides a focus for commercial, retail, employment, housing, transport, services and social interactions.

At-grade

At ground level.

Built form

The height, volume and overall shape of a building as well as its surface appearance.

Curtilage

The area of land occupied by a dwelling and its yard and outbuildings, actually enclosed or considered as enclosed.

Heritage Overlay

Applied to a place, object or area identified as being of heritage significance. Trees, gardens, parks, structures, buildings and streetscapes can be included in the Heritage Overlay.

Neighbourhood character overlay

Protects areas that have a particular urban character, includes private and public realm aspects and how features interact with each other to create a sense of place.

Planning controls

Local councils and State Government develop planning controls that generally provide for any permit requirements and prohibitions on land use and development.

Public realm

The public realm comprises spaces and places that are open and freely accessible to everyone, regardless of their economic or social conditions. These spaces can include streets, laneways and roads, parks, public plazas, waterways and foreshores.

Setback

The distance that a structure or building is set back from the property boundary, road or other buildings. Setbacks can occur at ground level or on upper floors of a building.

Structure plan

A long-term plan that guides important aspects of an area, including development, land use, transport and car parking, community facilities, public and open spaces and strategic opportunities.

Statutory implementation

Including recommended controls and policies in the planning scheme through a statutory amendment process.

Urban renewal

The process of unlocking well located, underused land to support employment, residential or commercial growth.

Walkability

The degree to which the built form of an area supports walking as a means of transport or recreation. Walkable areas are connected, safe and accessible for pedestrians.

Wayfinding

The way people are guided through built environments. Wayfinding can include signage, barriers or ground treatments to delineate space and help users to navigate the urban environment.

APPENDIX A: RESEARCH REPORTS

The preparation of the Carnegie Structure Plan has been informed by the following consultant reports:

- > *Carnegie Built Form Framework*, June 2022, Lat 37
- > *Carnegie Built Form Framework, Background Report*, December 2021, Lat 37
- > *Glen Eira City Council Carnegie Activity Centre Transport Study*, July 2022, ARUP
- > *Carnegie Public Realm Review, Structure Plan Revision 2022*, Glen Eira Council
- > *Employment Land Needs Assessment for the Bentleigh, Carnegie, and Elsternwick Major Activity Centres*, March 2022, SGS Australia
- > Heritage advice from GJM Heritage consultants and RBA Architects and Conservation Consultants 2022
- > *Glen Eira Economic Analysis and Forecasting Study*, 2018, Blair Warman Economics Consultants
- > *Assessment of the Economic Impacts of Transformation Concepts on Activity Centres: Bentleigh, Carnegie and Elsternwick*, 2017, Blair Warman Economics Consultants
- > *Peer Review of Glen Eira's Draft Quality Design Guidelines and Strategic and Urban Renewal Development Plans Analysis*, 2017, AECOM
- > *Glen Eira Activity Centres Urban Context Report 2017*, Co Design Studio
- > *Glen Eira Activity Centres Urban Design Guidelines 2017*, Planisphere
- > *Glen Eira Urban Design Analysis Report 2017*, Planisphere
- > *Glen Eira Community Benefits Discussion Paper 2017*, Planisphere
- > *Glen Eira Activity Centres Community Engagement Summary Final Report 2017*, Co Design Studio
- > *Glen Eira Transformational Concepts Draft Report 2017*, Planisphere
- > *Glen Eira Transformative Concepts Review 2017*, One Mile Grid Traffic Engineering
- > *Glen Eira Transport Analysis and Forecasting Discussion Paper 2017*, MRCagney

Research and reports prepared by Council:

- > *Planning Strategy Impacts on Housing Opportunity 2017*
- > *Parking Analysis for the Bentleigh, Carnegie and Elsternwick Structure Plans 2017*
- > *Glen Eira City Plan 2020*



GLEN EIRA
CITY COUNCIL

Glen Eira City Council

Corner Glen Eira and Hawthorn Roads, Caulfield

Mail address: PO Box 42

Caulfield South, 3162

Phone: (03) 9524 3333

Fax: (03) 9523 0339

mail@gleneira.vic.gov.au

www.gleneira.vic.gov.au

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Glen Eira Sustainable Living:

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