

CARNEGIE ACTIVITY CENTRE DRAFT STRUCTURE PLAN

BACKGROUND REPORT — OCTOBER 2017



GLEN EIRA
CITY COUNCIL

Carnegie Structure Plan Background Report

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INTRODUCTION

THE PURPOSE OF THIS REPORT

The purpose of this report is to summarise and synthesise the background research that contributed to the development of the Carnegie draft *Structure Plan*. This research takes several forms including community engagement and feedback; technical studies; and detailed analysis of existing conditions.

HOW TO READ THIS REPORT

This report is organised in chapters which cover themes such as Built Form, Transport and Local Economy. Each section includes information, as appropriate, that is garnered from technical research and/or community feedback. Each chapter includes 'key issues and opportunities'. This report provides the link between research, analysis and community feedback and the directions included in the Carnegie draft *Structure Plan*. It can therefore be read in tandem with the draft *Structure Plan* to provide a greater level of content.

THE STRUCTURE PLANNING PROCESS

The commencement of the *Structure Plan* process was prompted by the *Glen Eira Planning Scheme Review* conducted in 2016. Since this time an incremental and iterative process has been undertaken to develop the draft *Structure Plan*. The process has sought to maximise community input through a series of consultation stages.

GLEN EIRA PLANNING SCHEME REVIEW

In 2016, the Council undertook an extensive community-led review of its *Planning Scheme*, which involved an extensive community engagement program.

The consultation spanned a two month period, commencing in April to the end of May 2016.

Approximately 247 people attended meetings, 68 people participated via the *Have Your Say* online forum and 122 written submissions were received.

This consultation process revealed a strong level of community concern regarding overdevelopment, loss of character and subsequent impacts on surrounding residential areas.

Community feedback also revealed that both the Carnegie and Bentleigh activity centres were significant priorities for the community and required better management of future development through *Structure Plans*. Structure planning was a prominent project called for in the feedback.

At the Ordinary Council Meeting of 9 August 2016, the *Planning Scheme Review 2016 Report* and its corresponding *Work Plan* were adopted by Council. The *Work Plan* specified three *Structure Plans* to be implemented for Council's activity centres within the first four years, which includes a *Structure Plan* for the Carnegie activity centre.

THE STRUCTURE PLANNING PROCESS TO DATE

The process to develop a Structure Plan for Carnegie (in addition to Bentleigh and Elsternwick) has involved the following stages:



PLACE CONTEXT

SETTLEMENT HISTORY

The Boonwurring people of the Kulin Nation are the traditional custodians of the area that now makes up the southern and south-eastern suburbs of Melbourne, which includes the municipality of Glen Eira. European settlement of the Carnegie area dates from the mid-1800s, although population was minimal until the late 1800s following the opening of the railway line in 1879. Carnegie was developed in stages from the 1880s to the 1950s, with early development focussed around the railway line. The opening of the tramline to Koornang Road in 1927 encouraged development in the southern areas of the suburb, which continued through to the post-war period. Many of the original larger lots were redeveloped for flats and units in the 1960s and 1970s. The population has gradually increased since the early 1990s as new dwellings were added to the area.¹

LAND USE PATTERNS AND CONNECTIONS

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 Road and Neerim Road. 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 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 removal of the level crossing may increase the benefits to the Koornang Road shopping strip. Public transport access to the centre is primarily via rail services on the Pakenham/Cranbourne line, although bus route 626 also provides connections to the Chadstone Shopping Centre bus interchange, as well as to the west along Glen Eira Road.

Commercial activity within the Carnegie activity centre comprises three main precincts being:

- Koornang Road shopping strip extending south of the railway line and which also includes a Woolworths supermarket to the rear;
- Carnegie Central shopping centre located on the corner of Koornang and Dandenong roads; and
- A bulky goods precinct along Dandenong Road.

¹ profile.id.com.au/glen-eira

ACTIVITY CENTRE BOUNDARY

The study area included in the draft *Structure Plan* is bounded by Dandenong Road to the north, Mile End Road, Seymour Avenue, Mimosa and Truganini Roads to the west, The Crossover and McLaurin Road to the south, and Margaret Street, Ames Avenue, Hewitts Road and Poplar Grove to the east. The boundary is formed around the commercial core of Koornang Road with a catchment size of an approximate 800 metre to one kilometre — which is an approximate 10 minute walking distance.

POLICY CONTEXT

STATE PLANNING POLICY CONTEXT

PLAN MELBOURNE 2017–2050

The State Government's *Plan Melbourne 2017–2050* is the metropolitan planning strategy that sets the vision and policy direction for managing growth across Melbourne. The plan sets the direction for each municipality, seeking to increase density and activity in established areas that are well-served with public transport and employment opportunities and other existing infrastructure, rather than simply continuing outward expansion. *Plan Melbourne* identifies Carnegie as a major activity centre that should accommodate increased housing and employment growth. This is due to its location in an established area with good access to public transport and other services. The following outcomes and directions of *Plan Melbourne* are relevant to planning for the Carnegie activity centre.

Outcome 1 Melbourne is a productive city that attracts investment, supports innovation and creates jobs

- *Improve access to jobs across Melbourne and closer to where people live*

Outcome 2 Melbourne provides housing choice in locations close to jobs and services

- *Manage the supply of new housing in the right locations to meet population growth and create a sustainable city*
- *Deliver more housing closer to jobs and public transport*
- *Increase the supply of social and affordable housing*
- *Facilitate decision-making processes for housing in the right locations*
- *Provide greater choice and diversity of housing*

Outcome 3 Melbourne has an integrated transport system that connects people to jobs and services and goods to market

- *Improve local travel options to support 20-minute neighbourhoods*

Outcome 4 Melbourne is a distinctive and liveable city with quality design and amenity

- *Create more great public places across Melbourne*
- *Achieve and promote design excellence*
- *Respect Melbourne's heritage as we build for the future*
- *Strengthen community participation in the planning of our city*

Outcome 5 Melbourne is a city of inclusive, vibrant and healthy neighbourhoods

- *Create a city of 20-minute neighbourhoods*
- *Create neighbourhoods that support safe communities and healthy lifestyles*
- *Deliver social infrastructure to support strong communities*
- *Deliver local parks and green neighbourhoods in collaboration with communities*

Outcome 6 Melbourne is a sustainable and resilient city

- *Transition to a low-carbon city to enable Victoria to achieve its target of net zero greenhouse gas emissions*
- *Reduce the likelihood and consequences of natural hazard events and adapt to climate change*
- *Integrate urban development and water cycle management to support a resilient and liveable city*
- *Make Melbourne cooler and greener*

STATE PLANNING POLICY FRAMEWORK

Glen Eira's planning for its local areas must support the State Planning Policy Framework, which forms part of the *Glen Eira Planning Scheme*. The following objectives of the State Planning Policy Framework are relevant to planning for the Carnegie activity centre:

CLAUSE 11.02 URBAN GROWTH

- 11.02-1 Supply of urban land - *To ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.*
- 11.02-2 Structure planning - *To facilitate the orderly development of urban areas.*

CLAUSE 11.03 ACTIVITY CENTRES

- 11.03-1 Activity centre network - *To build up activity centres as a focus for high-quality development, activity and living for the whole community by developing a network of activity centres.*

CLAUSE 11.04 OPEN SPACE

- 11.04-1 Open space planning - *To assist creation of a diverse and integrated network of public open space commensurate with the needs of the community.*

CLAUSE 11.06 METROPOLITAN MELBOURNE

In considering the policy objectives and strategies for metropolitan Melbourne, planning must consider as relevant: *Plan Melbourne 2017-2050: Metropolitan Planning Strategy (Department of Environment, Land Water and Planning, 2017)*.

CLAUSE 15.01 URBAN ENVIRONMENT

- 15.01-1 Urban design - *To create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.*
- 15.01-2 Urban design principles - *To achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties.*
- 15.01-4 Design for safety - *To improve community safety and encourage neighbourhood design that makes people feel safe.*
- 15.01-5 Cultural identity and neighbourhood character - *To recognise and protect cultural identity, neighbourhood character and sense of place.*
- 15.01-6 Healthy neighbourhoods - *To achieve neighbourhoods that foster healthy and active living and community wellbeing.*

CLAUSE 15.02 SUSTAINABLE DEVELOPMENT

- 15.02-1 Energy and resource efficiency - *To encourage land use and development that is consistent with the efficient use of energy and the minimisation of greenhouse gas emissions.*

CLAUSE 15.03 HERITAGE

- 15.03-1 Heritage conservation - *To ensure the conservation of places of heritage significance.*

CLAUSE 16.01 RESIDENTIAL DEVELOPMENT

- 16.01-1 Integrated housing - *To promote a housing market that meets community needs.*
- 16.01-2 Location of residential development - *To locate new housing in or close to activity centres and in urban renewal precincts and sites that offer good access to jobs, services and transport.*
- 16.01-3 Housing opportunity areas - *To identify areas that offer opportunities for more medium and high density housing near employment and transport in Metropolitan Melbourne.*
- 16.01-4 Housing diversity - *To provide for a range of housing types to meet increasingly diverse needs.*
- 16.01-5 Housing affordability - *To deliver more affordable housing closer to jobs, transport and services.*

CLAUSE 17.01 COMMERCIAL

- 17.01-1 Business - *To encourage development which meet the communities' needs for retail, entertainment, office and other commercial services and provides net community benefit in relation to accessibility, efficient infrastructure use and the aggregation and sustainability of commercial facilities.*

CLAUSE 18.01 INTEGRATED TRANSPORT

- 18.01-1 Land use and transport planning - *To create a safe and sustainable transport system by integrating land-use and transport.*
- 18.01-2 Transport system - *To coordinate development of all transport modes to provide a comprehensive transport system.*
- 18.02-1 Sustainable personal transport - *To promote the use of sustainable personal transport.*
- 18.02-2 Cycling - *To integrate planning for cycling with land use and development planning and encourage alternative modes of travel.*
- 18.02-3 Principal Public Transport Network - *To facilitate greater use of public transport and promote increased development close to high-quality public transport routes in Metropolitan Melbourne.*
- 18.02-5 Car parking - *To ensure an adequate supply of car parking that is appropriately designed and located.*

CLAUSE 19.02 COMMUNITY INFRASTRUCTURE

- 19.02-3 Cultural facilities - *To develop a strong cultural environment and increase access to arts, recreation and other cultural facilities.*

- 19.02-4 Distribution of social and cultural infrastructure - *To provide fairer distribution of and access to social and cultural infrastructure.*

CLAUSE 19.03 DEVELOPMENT INFRASTRUCTURE

- 19.03-1 Development contribution plans - *To facilitate the timely provision of planned infrastructure to communities through the preparation and implementation of development contributions plans.*

LOCAL POLICY CONTEXT

GLEN EIRA COUNCIL AND COMMUNITY PLAN 2017-2021

The *Glen Eira Council and Community Plan* outlines a clear vision for Glen Eira including the theme *Liveable and Well Designed* which states the following objectives:

- Create prosperous, accessible and vibrant urban places.
- Encourage development that benefits the community.
- Proactively plan for and manage change within our urban places.
- Invest sustainably in our infrastructure and community assets.

LOCAL PLANNING POLICY FRAMEWORK – GLEN EIRA PLANNING SCHEME

The following objectives of the Local Planning Policy Framework are relevant to planning for the Carnegie activity centre:

CLAUSE 21.04 HOUSING AND RESIDENTIAL DEVELOPMENT

- *To ensure a greater diversity of housing to meet future housing needs.*
- *To improve and protect the liveability, neighbourhood character and amenity of Glen Eira.*
- *To promote environmental, social and economic sustainability.*
- *To stimulate and improve the vitality of Glen Eira’s commercial centres.*
- *To improve access to housing for residents with special housing needs.*
- *To ensure integrated neighbourhood planning of Glen Eira’s suburbs.*

CLAUSE 21.06 BUSINESS

- *To maintain a mix of commercial centres that cater for the needs of the Glen Eira community.*
- *To enhance and further develop urban villages and neighbourhood centres as the focus for community life.*
- *To encourage competitive retail outlets in viable, lively and interesting strip shopping centres.*
- *To maintain pleasant and safe public environments in commercial centres in partnership with business.*
- *To encourage more local employment and attract more local spending in partnership with business.*

CLAUSE 21.09 PUBLIC USES/COMMUNITY FACILITIES

- *To ensure the designation of adequate land for existing and proposed public purposes.*
- *To ensure an equitable and accessible distribution of community facilities to meet community needs and to complement urban villages.*

CLAUSE 21.10 HERITAGE

- *Protect places identified as having architectural, cultural or historical significance.*
- *Ensure sympathetic redevelopment and renovation of areas and places identified as having architectural, cultural or historic significance in the municipality.*

CLAUSE 21.11 INFRASTRUCTURE

- *To maintain and improve Glen Eira's infrastructure including roads, streets, drains and essential services.*
- *To ensure that new development contributes appropriately particularly where it is likely to impact on the capacity of existing infrastructure.*

CLAUSE 21.12 TRANSPORT

- *To advocate and encourage the provision of a safe, convenient and efficient transportation network which meets the needs of Glen Eira's residents, businesses and through traffic.*
- *To encourage increased access and use of public transport.*
- *To minimise the adverse effects of vehicular traffic, especially in Glen Eira's residential areas.*
- *To ensure the adequate provision of car parking in appropriate locations to serve the needs of business and its customers.*

CLAUSE 21.13 OPEN SPACE

- *Implement the City of Glen Eira Open Space Strategy 8 April 2014.*
- *Encourage development that will result in improvements to Glen Eira's public open space network.*
- *Encourage the protection of indigenous flora.*
- *Ensure that if land is subdivided, a public open space contribution is sought.*

CLAUSE 22.01 HERITAGE POLICY

- *To identify the City's heritage assets and to give effect to the recommendations of the Glen Eira Heritage Management Plan 1996, and the Addendum to the Glen Eira Heritage Management Plan 2014.*
- *To recognise and preserve the aesthetic and cultural characteristics of heritage places which are held in high esteem by the community of Glen Eira.*
- *To protect places identified as having architectural, cultural or historic significance and which demonstrate the various eras of Glen Eira's development.*

- *To ensure sympathetic development and renovation of places identified as having architectural, cultural or historic significance.*
- *To promote a better appreciation and wider understanding of the City's heritage.*

CLAUSE 22.05 URBAN VILLAGES POLICY

- *To create urban villages by co-locating work, leisure, community and residential uses and developments that complement each other.*
- *To encourage economic and employment generating development which is appropriate to the desired qualities and character of the area.*
- *To consolidate retail functions within existing strip shopping centres.*
- *To improve, where possible, community uses (elderly centres, library, etc) in a manner that respects proximity to retail hub, and the surrounding nature of development.*
- *To encourage increased densities within and around commercial/transport nodes which respects transition to the surrounding residential area.*
- *To ensure development respects the amenity of the surrounding area and provides a transition to surrounding residential uses.*
- *To promote residential and office use in upper levels of buildings within the retail hub.*
- *To protect and enhance the heritage, streetscape and pedestrian environment.*
- *To ensure future development is appropriate to the constraints of infrastructure and vehicular traffic movement (including parking).*
- *To create pleasant and safe public spaces.*
- *To encourage environmental sustainability and a reduction in green house gas emissions through the co-location of work, leisure, community and residential uses and developments.*

CURRENT PLANNING CONTROLS - ZONES AND OVERLAYS

EXISTING CONDITIONS PLAN

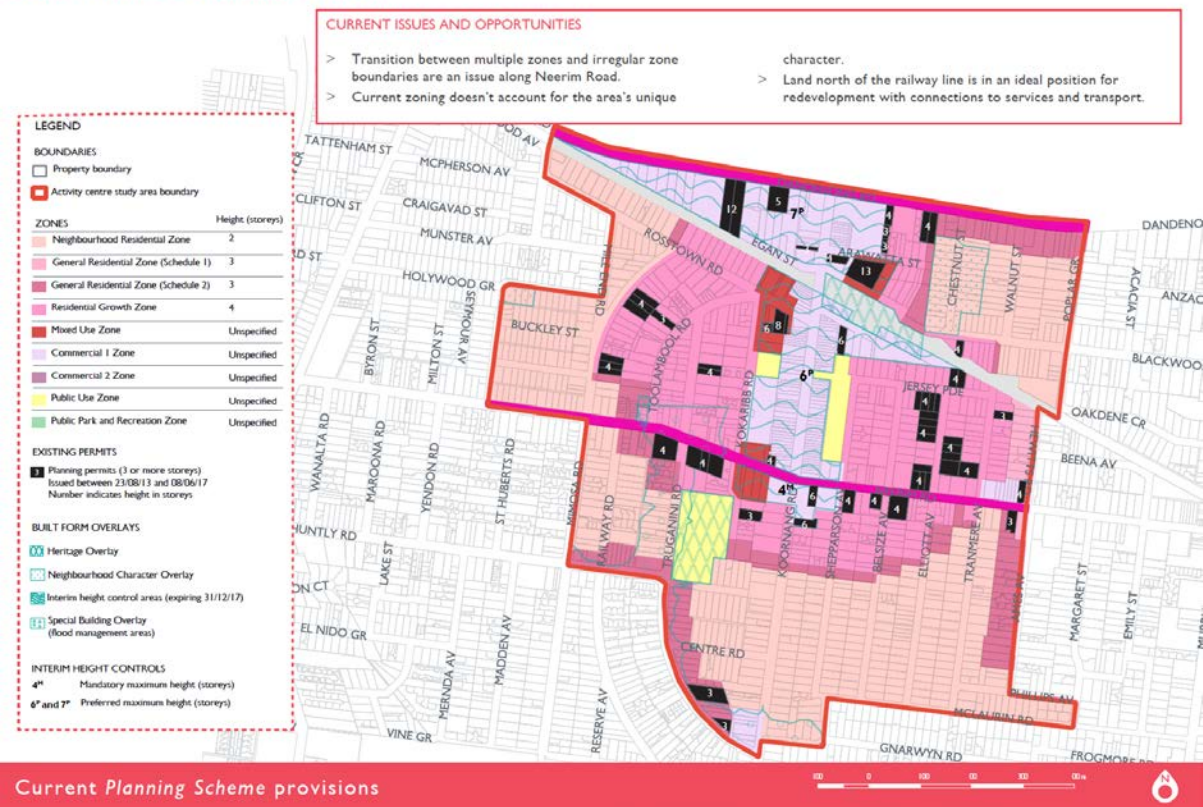


Figure 1 Summary of existing planning controls (excerpt from Draft Concept Plan)

RESIDENTIAL ZONES

The Residential Growth Zone is applied in a radial fashion around the Carnegie train station, primarily to the south of the railway line. The application of this zone represents a radius of approximately 500m (on average). The General Residential Zone Schedule 2 provides a narrow ring around the Residential Growth Zone, which provides a buffer of generally one residential lot in depth to the surrounding Neighbourhood Residential Zone. This zone is also applied to transport routes and major roads. The Mixed Use Zone is applied to a number of sites adjacent to the Commercial 1 Zone.

Residential Growth Zone

The purpose of the Residential Growth Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To provide housing at increased densities in buildings up to and including four storey buildings.
- To encourage a diversity of housing types in locations offering good access to services and transport including activity centres and town centres.

- To encourage a scale of development that provides a transition between areas of more intensive use and development and other residential areas.
- To ensure residential development achieves design objectives specified in a schedule to the zone.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

General Residential Zone

The purpose of the General Residential Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To encourage development that respects the neighbourhood character of the area.
- To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

Neighbourhood Residential Zone

The purpose of the Neighbourhood Residential Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To recognise areas of predominantly single and double storey residential development.
- To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

Mixed Use Zone

The purpose of the Mixed Use Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality.
- To provide for housing at higher densities.
- To encourage development that responds to the existing or preferred neighbourhood character of the area. To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.

IMPLEMENTATION OF THE REFORMED RESIDENTIAL ZONES 2014

Amendment C110 implemented the reformed residential zones into the Glen Eira Planning Scheme. The methodology for implementing the reformed zones sought to reflect the existing policy framework in the Glen Eira Planning Scheme. This framework provides the overarching approach for residential development including the:

- Minimal Change Policy;
- Housing Diversity Policy; and
- Urban Village Policy.

This approach resulted in a zoning regime where the vast majority of residential land is zoned Neighbourhood Residential Zone. Approximately 80 per cent of Glen Eira's residential land is zoned NRZ which was applied to areas identified for minimal change in the Glen Eira Planning Scheme (Clause 21.04). The 13 per cent of land zoned GRZ tends to surround the municipality's activity centres primarily in Ormond, Glen Huntly, Caulfield and Bentleigh East. Land zoned GRZ is also located within public transport corridors along Glen Huntly Road and Balaclava Road. Land zoned RGZ is generally applied to areas within the three larger activity centres of Carnegie, Elsternwick and Bentleigh. RGZ and GRZ have generally been applied to land supported for housing diversity within Council's planning policy (Clause 21.04).²

Applying the zones to reflect policy principles has resulted in the radial zoning pattern currently apparent in Carnegie. This results in outcomes that could be seen as 'zoning anomalies', such as:

- a number of north-south streets affected by multiple zones; and
- a fairly narrow buffer of one residential lot between Residential Growth Zone and Neighbourhood Residential Zone.

COMMERCIAL AND PUBLIC ZONES

Commercial I Zone

Commercial land along the Koornang Road spine is zoned Commercial I Zone, with some instances of this zone extending beyond the main road interface. This zone is also applied to a large area between the railway line and Dandenong Road.

The purpose of the Commercial I Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.

² Southern Sub Residential Zones State of Play, Region State of Play, January 2016, Managing Residential Development Taskforce, Department of Environment, Land, Water and Planning

- To provide for residential uses at densities complementary to the role and scale of the commercial centre.

Public Use Zone

The purpose of the Public Use Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To recognise public land use for public utility and community services and facilities.
- To provide for associated uses that are consistent with the intent of the public land reservation or purpose.

Schedule 6 to the Public Use Zone relates to Local Government (Council-owned land).

OVERLAYS

Design and Development Overlay

The purpose of the Design and Development Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To identify areas which are affected by specific requirements relating to the design and built form of new development.

Schedule 9 to the Design and Development Overlay is specific to the Carnegie Major Activity Centre, and is applied to land that is zoned Commercial I Zone. It has been applied on an interim basis. The design objectives of the schedule are:

- To ensure that development enhances the character of Carnegie Urban Village³, including the scale, shape and rhythm of built form and the variety of building heights, roof forms, setbacks and building designs.
- To ensure that retail development that abuts a rear-ward facing car park provides pedestrian access to both the car park and Koornang Road.
- To ensure that development along any residential interface be sympathetic to the scale and amenity of the residential area.
- To ensure that development is designed to maintain safe and efficient vehicle movements.
- To ensure development optimises principles of environmentally sustainable design.
- To ensure high quality internal amenity for future residents.

Heritage Overlay

The purpose of the Heritage Overlay is:

³ The Glen Eira Planning Scheme currently refers to Carnegie as an 'urban village'. The *Glen Eira Activity Centre, Housing and Local Economy Strategy* introduces the designation 'major activity centre'.

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To conserve and enhance heritage places of natural or cultural significance.
- To conserve and enhance those elements which contribute to the significance of heritage places.
- To ensure that development does not adversely affect the significance of heritage places.
- To conserve specifically identified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Schedule 67 to the Heritage Overlay applies to Carnegie Primary School. Schedule 123 applies to the Carnegie Train Station site.

Neighbourhood Character Overlay

The purpose of the Neighbourhood Character Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To identify areas of existing or preferred neighbourhood character.
- To ensure that development respects the neighbourhood character.
- To prevent, where necessary, the removal of buildings and vegetation before the neighbourhood character features of the site and the new development have been evaluated.

Schedule 2 to the Neighbourhood Character overlay is applied to Chestnut Street, along with the Design and Development Overlay Schedule 3.

Special Building Overlay

The purpose of the Special Building Overlay is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the *Municipal Strategic Statement* and local planning policies.
- To identify land in urban areas liable to inundation by overland flows from the urban drainage system as determined by, or in consultation with, the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

The Special Building Overlay applies to the southern part of the activity centre, generally in alignment with Truganini Road.

ACTIVITY CENTRE, HOUSING & LOCAL ECONOMY STRATEGY 2017

The *Glen Eira Activity Centre, Housing and Local Economy Strategy 2017* provides a local policy link between the *Glen Eira Council and Community Plan 2017-2021* and *Plan Melbourne 2017–2050*. The *Strategy* sets the city vision, activity centre framework and policy direction for each activity centre in Glen Eira as detailed below.

GLEN EIRA — CITY VISION

The *Strategy* identifies a vision for Glen Eira’s activity centres:

Glen Eira will be a city of walkable neighbourhoods that are centred on a network of vibrant, socially inclusive and well designed activity centres, providing for the needs of and reflecting the character of their communities.

ACTIVITY CENTRE FRAMEWORK

The *Strategy* identifies a network of activity centres in Glen Eira, each with unique policy directions.

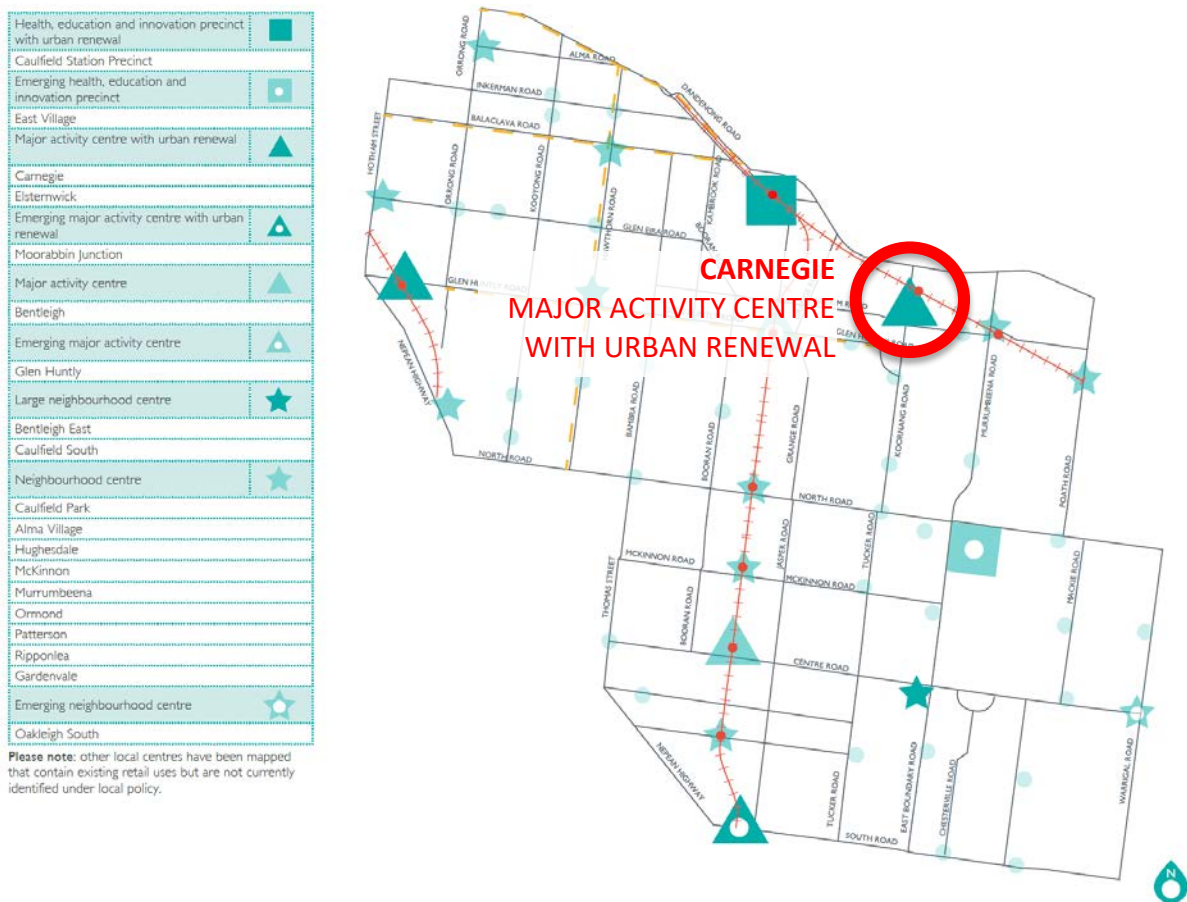


Figure 2 Glen Eira Activity Centre Framework Plan

The *Strategy* sets the policy direction for each activity centre, with Carnegie detailed as follows.

POLICY DIRECTION	
CENTRE	CARNEGIE
POLICY STATUS	MAJOR ACTIVITY CENTRE WITH URBAN RENEWAL
FUNCTION	<ul style="list-style-type: none"> Centres that provide access to a wide range of goods, services and activities, including commercial, retail, entertainment and community facilities. Includes urban renewal sites in strategic locations that provide opportunity to take advantage of underutilised land close to jobs, services and public transport infrastructure, to provide new housing, jobs and services.
EMPLOYMENT	<ul style="list-style-type: none"> Major focus for employment growth opportunities, particularly professional employment, retail and hospitality to a lesser degree. 1:1 new jobs to new housing ratio.
ECONOMY / RETAIL	<ul style="list-style-type: none"> Retail should provide for the weekly needs of an approximate 800 metre to two kilometre residential catchment. Typically this may include: <ul style="list-style-type: none"> a minimum of (or demonstrated capacity to accommodate) approximately two supermarkets or similar fresh food market; business services; specialty retailing; hospitality; and entertainment.
HOUSING	<ul style="list-style-type: none"> Major focus for housing growth opportunities. Major focus on new family, single, aged care and affordable households.
TRANSPORT	<ul style="list-style-type: none"> Centre should be well serviced by public transport, particularly fixed transport. Opportunity to create new street networks to ensure a high level of walkability and accessibility. Due to broader catchment, driving to the centre is required, however aim for majority of visits by public transport, foot or bike.
OPEN SPACE	<ul style="list-style-type: none"> Major focus for implementation of new open space preferably with walking and bicycle linkages.
LIVEABILITY	<ul style="list-style-type: none"> Typically, centres should provide services for the wider community, including a range of the following: <ul style="list-style-type: none"> a library; a community hub; an entertainment complex; maternal child health care services; child care; a senior citizens centre; medical centres; and a chemist.

EFFECTIVENESS OF EXISTING PLANNING FRAMEWORK

The *Glen Eira Activity Centres Urban Context Report*, prepared by *Planisphere*, identified the following key issues that planning policies and controls should address in the Glen Eira context:

- Setting maximum building heights and setbacks from the street or adjoining sites.
- Ensuring a transitional building form to adjoining residential or lower-scale interfaces.
- Managing amenity issues at the interface with adjoining residential sites, including overlooking, overshadowing and visual bulk.
- Activation of the lower building levels, as appropriate to a retail/commercial or residential streetscape.

- Ensuring a high standard of overall design quality, with improved outcomes in terms of design detail, materials and articulation.
- Improved design of basement car parking, including setting a minimum footprint to allow space for tree planting and design of the entrance so that it does not detract from the streetscape.
- For higher scale mixed use buildings, clear expression of a podium base and tower form above.
- In residential areas, ensuring adequate space is retained for garden areas and landscaping, including canopy trees; this is a particular issue in the General Residential Zoned areas.
- Providing a diversity of housing types in new residential development, including accommodation for singles, larger household groups, the elderly and affordable housing.

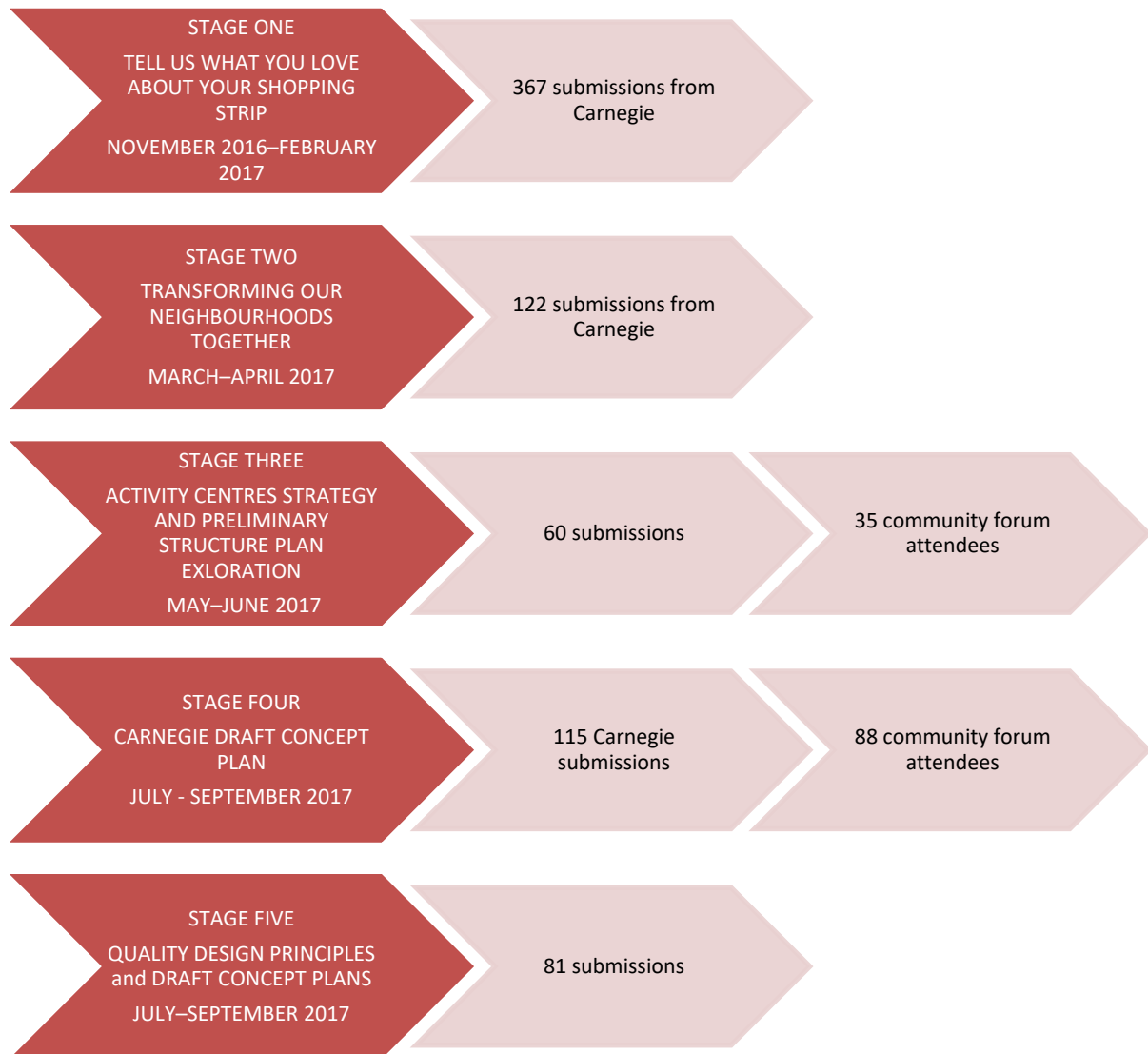
KEY ISSUES AND OPPORTUNITIES – POLICY CONTEXT

- State Planning Policy directs growth in Housing and Employment to areas that are well serviced for public transport and existing services.
- Carnegie is designated as a Major Activity Centre in *Plan Melbourne* and a Major Activity Centre with Urban Renewal in the *Glen Eira Activity Centre, Housing and Local Economy Strategy 2017*.
- The existing residential zoning regime results in a number of ‘zoning anomalies’.
- The Structure Planning process provides an opportunity to introduce a locally specific planning framework for Carnegie, provided this supports the directions of the State Planning Policy Framework.
- There are opportunities to improve planning policies and controls to improve built form outcomes.

COMMUNITY CONSULTATION

PROCESS

Five stages of community consultation have been undertaken to inform the (draft) *Carnegie Structure Plan*.



OVERVIEW OF COMMUNITY FEEDBACK – KEY THEMES

The following feedback was received on the *Carnegie Draft Concept Plan* during Stage Five of community consultation.

CONCEPT PLANS

General support/agreement that the concept plan is a step in the right direction and welcome forward planning however many felt that it should have been done earlier as some damage has already been done and doesn't do enough to address overdevelopment. Some residents remain dubious of Council's intent, level of influence with developers and power against VCAT. General support for the *Building Transitions Plan*, but a desire for more information to be provided. Some felt that the *Plan* makes more sense than the previous *Plan*, others felt it is inconsistent and messy and may encourage more development. Decreased value of homes was a common response for limiting higher building types or for decreased height of own property.

URBAN RENEWAL

Many felt that the urban renewal was in the right spot. Concern was raised over the transition – particularly backing onto Chestnut St and some felt that 12 storeys is too high and will impact on neighbours, put strain on narrow streets and further worsen traffic and parking. More information required about community benefit including weighting and quantifying benefit. There was some suggestion that any community benefit should be external to the building and available to all. It was felt that any developer contributions should go back into the area that it is paid.

CHESTNUT STREET

The majority of submissions received related to the proximity of urban renewal area to Chestnut Street with calls from residents of Chestnut and surrounding streets to remove the Neighbourhood Character Overlay and incorporate the western side of Chestnut Street into the urban renewal area. It was thought that neighbourhood character in this area has been significantly compromised already and would be further compromised by the urban renewal behind, that many homes had deteriorated beyond repair and that the area can accommodate growth. In contrast there were also submissions requesting to retain the neighbourhood character protection. Some residents would like to see images to illustrate how the transitions may look.

STUDY AREA

Some questions were raised at the community forum about the boundary/study area, particularly the expansion into the minimal change area and east of Mile End Road – near Buckley St.

OVER-DEVELOPMENT

Over-development is changing the character of Carnegie – the suburb is losing its sense of community. Concern about loss of amenity associated with any further apartments and high-rise

development. Some felt that there was too much high-rise. Concerns that this will push people out of the area. Belief that Carnegie is already providing enough dwellings. Others felt that there was a good balance of density but need to ensure greater stock of 3+ bedroom homes. Concern over whether infrastructure will cope with future developments and how Council intends to plan for this (drainage, sewerage, internet).

TRANSFORMATION PROJECTS

There was a high level of general support for the transformation projects. Open space was seen as vital due to the increasing density of the suburb and should be further addressed in the plan including pocket parks. There was mixed support for increasing the tram line. Most feedback on this project came from a submission of a survey of 41 residents. Traffic congestion was the biggest concern along with other priorities for use of the space including cars, parking, cycling, pedestrians, wider footpaths, trees. Activating the laneways was well received with safety the only concern identified. General support shown for the market. Some concern about the impact on neighbouring residents – particularly in Shepparson Ave in relation to traffic, safety and waste/cleanliness. It was felt that all projects should consider residents abutting the projects and ensure access is maintained.

PARKING

Car parking initiatives were seen as essential. It was thought any multi-deck parking should be easily accessible, attractive and safe. Innovative ways should be sought to manage/review on-street parking and restrictions should be better enforced.

TRAFFIC

Calls to improve traffic between the station and Dandenong Road (including Chestnut St and Arawatta St) and on Koornang Road. Some suggestion to make Koornang Road one way to allow additional space for a cycle path, pedestrian space, wider footpaths or trees. Some respondents wanted to see a traffic flow analysis.

PEDESTRIANISATION

Support for making Shepparson Ave more pedestrian friendly – calls for Koornang Road to be more pedestrian friendly also. Some calls for pedestrian accessways from Rosstown Road through to the linear park under the railway. Pedestrian safety important was seen as important - particularly near Carnegie Primary School.

ENVIRONMENTAL DESIGN

Calls for a greater focus on environmental design principles (such as solar power, water sensitive design, drainage) and retaining or providing mature/canopy trees.

COMMUNITY PROFILE

The following community profile and trends section provides analysis of 2011 and 2016 Census data as it applies to the suburb of Carnegie (which extends beyond the activity centre). The following information considers current data, provides a comparison to 2011 Census data and a comparison to Glen Eira more broadly. In some cases, 2016 data is not yet available, in which case reference is made only to 2011. The following also identifies both 'dominant' and 'emerging' groups.

Demographic data is analysed and presented by *.id Consulting*. Interactive demographic information is available at <http://profile.id.com.au/glen-eira>.

AGE STRUCTURE

In 2016, the largest age group (five year groups) in Carnegie was 25 to 29 year olds (11.4 per cent). Compared to the City of Glen Eira shows that there was a lower proportion of people in the younger age groups (under 15) as well as a lower proportion of people in the older age groups (65+).

'Service age groups' divide the population into age categories that reflect typical life-stages. They indicate the level of need for services for people at different stages in life and how demand is changing.

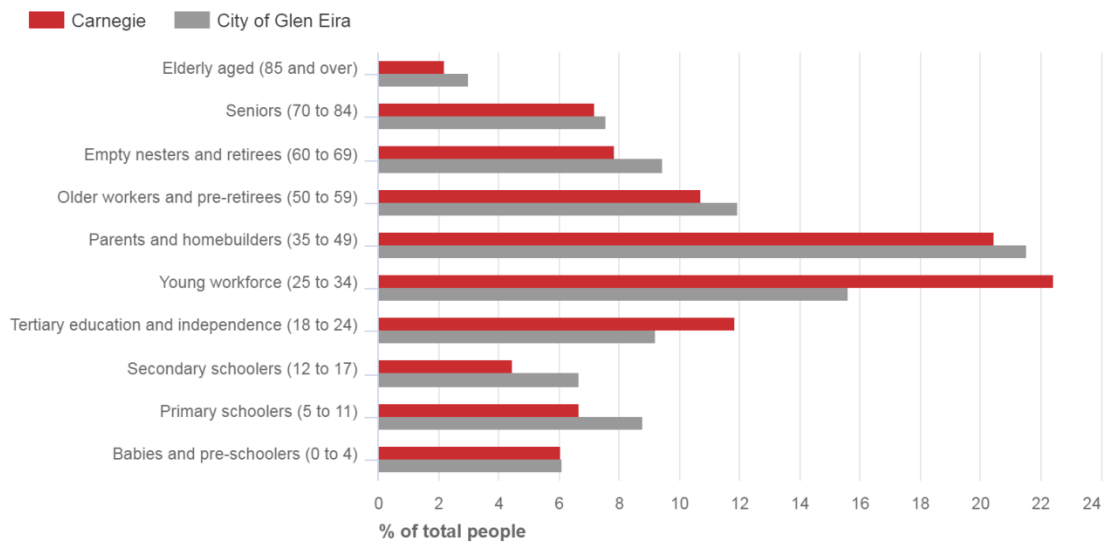
The dominant service age groups in Carnegie (2016) are young workforce (25 to 34) at 22.4 per cent and Parents and Homebuilders (35 to 49) at 20.5 per cent. Compared to City of Glen Eira shows that, in Carnegie, there was a lower proportion of people in the younger age groups (0 to 17 years) as well as a lower proportion of people in the older age groups (60+ years).

The major differences between the age structure of Carnegie and City of Glen Eira were:

- A *larger* percentage of 'Young workforce (25 to 34)' (22.4 per cent compared to 15.6 per cent)
- A *larger* percentage of 'Tertiary education and independence (18 to 24)' (11.8 per cent compared to 9.2 per cent)
- A *smaller* percentage of 'Secondary schoolers (12 to 17)' (4.5 per cent compared to 6.7 per cent)
- A *smaller* percentage of 'Primary schoolers (5 to 11)' (6.7 per cent compared to 8.8 per cent)

Age structure - service age groups, 2016

Total persons



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

.id the population experts

Figure 3 Age Structure

HOUSEHOLD STRUCTURE

Household and family structure is one of the most important demographic indicators. It reveals an area's residential role and function, era of settlement and provides key insights into the level of demand for services and facilities as most are related to age and household types.

The 2016 ABS Census identified that the dominant household type in Glen Eira is couples with children, totalling 17,979 households and comprising about one-third of the total. The number of couples with children households increased by 19.2 per cent across Glen Eira (over 2,200 households) between 2006 and 2016, and the proportion increased from 31.7 per cent to 34.9 per cent. This was the most significant change to the household mix over this ten year period.⁴

Analysis of the household/family types in Carnegie in 2016 compared to the City of Glen Eira shows that there was a lower proportion of couple families with child(ren) as well as a lower proportion of one-parent families. Overall, 26.4 per cent of total families were couple families with child(ren), and 6.0 per cent were one-parent families, compared with 33.0 per cent and 7.9 per cent respectively for the City of Glen Eira.

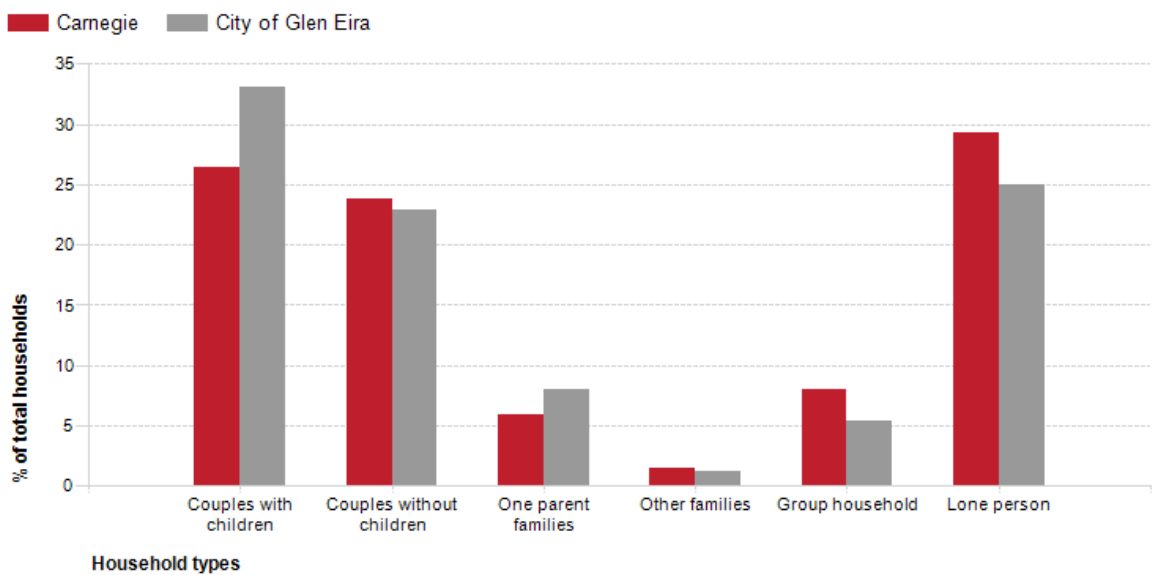
There were a higher proportion of lone person households and a higher proportion of couples without children. Overall, the proportion of lone person households was 29.3 per cent compared to 25.0 per cent in the City of Glen Eira while the proportion of couples without children was 23.8 per cent compared to 23.0 per cent in the City of Glen Eira.

⁴ Id housing report

The number of households in Carnegie increased by 432 between 2011 and 2016. The largest changes in family/household types in Carnegie between 2011 and 2016 were:

- Couples with children (+230 households)
- Group household (+124 households)
- Couples without children (+92 households)
- Other families (-63 households)

Household type, 2016

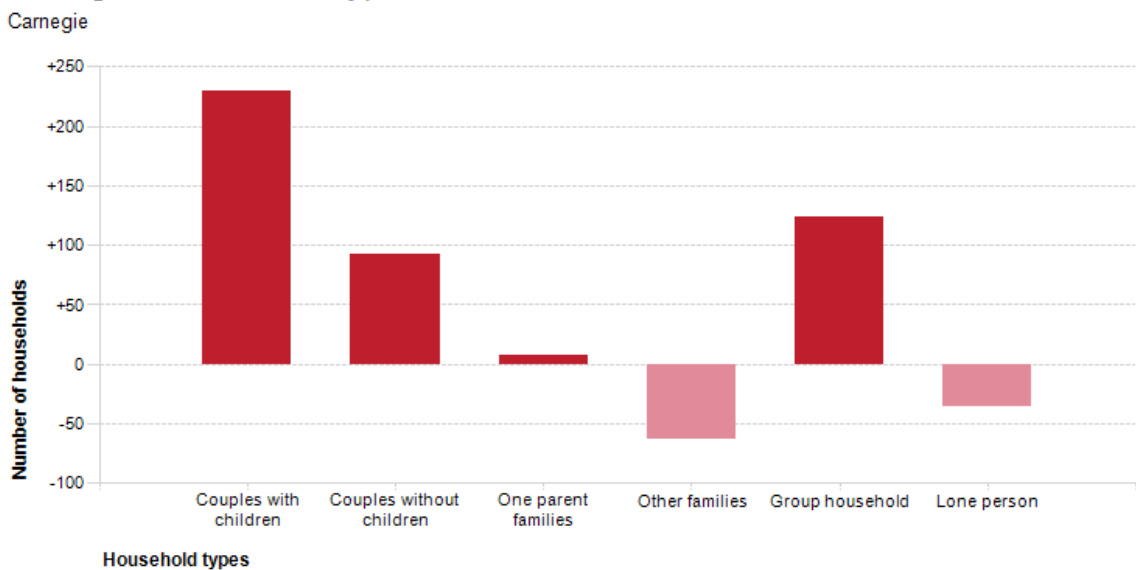


Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.



Figure 4 Household Type, Carnegie

Change in household type, 2011 to 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 and 2016 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.



Figure 5 Change in Household Type, Carnegie, 2011 to 2016

HOUSEHOLD SIZE

Analysis of the number of persons usually resident in a household in Carnegie shows that, in 2016, 31 per cent of households in Carnegie contained only one person, with the most dominant household size in Carnegie being 2 persons per household (32.6 per cent).

The major differences in the household size for Carnegie and the City of Glen Eira were:

- A *larger* percentage of households with 1 person usually resident (30.9 per cent compared to 26.2 per cent)
- A *larger* percentage of households with 2 persons usually resident (32.6 per cent compared to 30.9 per cent)
- A *smaller* percentage of households with 4 persons usually resident (14.4 per cent compared to 17.8 per cent)
- A *smaller* percentage of households with 5 persons usually resident (4.7 per cent compared to 6.3 per cent)

The number of households in Carnegie increased by 410 between 2011 and 2016. The largest changes in the number of persons usually resident in a household in Carnegie between 2011 and 2016 were:

- 4 persons (+151 households).
- 2 persons (+118 households).
- 3 persons (+103 households).

ETHNICITY AND RELIGION

PLACE OF BIRTH AND ANCESTRY

'Country of Birth' data identifies where people were born and is indicative of the level of cultural diversity in Carnegie. The mix of Country of Birth groups is also indicative of historical settlement patterns, as source countries for Australia's immigration program have varied significantly over time. Analysis of the country of birth of the population in Carnegie in 2016 compared to the City of Glen Eira shows that there was a larger proportion of people born overseas, as well as a larger proportion of people from a non-English speaking background.

Overall, 42.4 per cent of the population was born overseas, and 36.0 per cent were from a non-English speaking background, compared with 36.0 per cent and 27.5 per cent respectively for the City of Glen Eira.

The largest non-English speaking country of birth in Carnegie was China, where 9.8 per cent of the population, or 1,622 people, were born.

The major differences between the countries of birth of the population in Carnegie and the City of Glen Eira were:

- A *larger* percentage of people born in India (9.2 per cent compared to 4.4 per cent).
- A *larger* percentage of people born in China (9.8 per cent compared to 5.1 per cent).
- A *smaller* percentage of people born in South Africa (1.2 per cent compared to 2.3 per cent).

Between 2011 and 2016, the number of people born overseas increased by 465 or 7.1 per cent, and the number of people from a non-English speaking background increased by 486 or 8.8 per cent.

The largest changes in birthplace countries of the population in this area between 2011 and 2016 were for those born in:

- China (+766 persons).
- India (+221 persons).
- Ukraine (-73 persons).

Analysis of the ancestry responses of the population in Carnegie in 2016 shows that the top five ancestries nominated were:

- English (3,786 people or 22.1 per cent).
- Australian (3,446 people or 20.1 per cent).
- Chinese (2,535 people or 14.8 per cent).
- Indian (1,608 people or 9.4 per cent).
- Irish (1,589 people or 9.3 per cent).

In combination these five ancestries account for 12,964 responses in total, or 75.52 per cent of all responses.

The major differences between the ancestries of the population in Carnegie and the City of Glen Eira were:

- A *larger* percentage of people with Chinese ancestry (14.8 per cent compared to 8.7 per cent).
- A *larger* percentage of people with Indian ancestry (9.4 per cent compared to 5.0 per cent).
- A *smaller* percentage of people with Australian ancestry (20.1 per cent compared to 23.5 per cent).
- A *smaller* percentage of people with Polish ancestry (1.8 per cent compared to 4.5 per cent).

The largest changes in the reported ancestries of the population in this area between 2011 and 2016 were:

- Chinese (+979 persons).
- Indian (+360 persons).
- English (+298 persons).
- Irish (+157 persons).

RELIGION

Analysis of the religious affiliation of the population of Carnegie in 2016 compared to the City of Glen Eira shows that there was a lower proportion of people who professed a religion and a higher proportion who stated they had no religion.

Overall, 53.7 per cent of the population nominated a religion, and 37.2 per cent said they had no religion, compared with 59.4 per cent and 31.6 per cent respectively for the City of Glen Eira.

The largest single religion in Carnegie was Western (Roman) Catholic, with 16.5 per cent of the population or 2,842 people as adherents.

The major differences between the religious affiliation for the population of Carnegie and the City of Glen Eira were:

- A larger percentage who nominated Hinduism (8.6 per cent compared to 4.0 per cent).
- A larger percentage who nominated Buddhism (3.2 per cent compared to 2.1 per cent).
- A smaller percentage who nominated Judaism (6.4 per cent compared to 16.8 per cent).

The largest changes in the religious affiliation of the population in Carnegie between 2011 and 2016 were for those who nominated:

- Hinduism (+405 persons).
- Anglican (-365 persons).
- Western (Roman) Catholic (-340 persons).
- Judaism (-201 persons).

EDUCATION

'Educational Qualifications' relate to education outside of primary and secondary school and are one of the most important indicators of socio-economic status. With other data sources, such as Employment Status, Income and Occupation, Carnegie's Educational Qualifications help to evaluate the economic opportunities and socio-economic status of the area and identify skill gaps in the labour market. Analysis of the qualifications of the population in Carnegie in 2011 compared to the City of Glen Eira shows that there was a higher proportion of people holding formal qualifications (Bachelor or higher degree; Advanced Diploma or Diploma; or Vocational qualifications), and a lower proportion of people with no formal qualifications.

Overall, 59.7 per cent of the population aged 15 and over held educational qualifications, and 31.6 per cent had no qualifications, compared with 56.2 per cent and 34.1 per cent respectively for the City of Glen Eira.

The major differences between qualifications held by the population of Carnegie and the City of Glen Eira were:

- A *larger* percentage of persons with Bachelor or Higher degrees (40.3 per cent compared to 35.7 per cent)
- A *smaller* percentage of persons with No qualifications (31.6 per cent compared to 34.1 per cent)

The largest changes in the qualifications of the population in Carnegie between 2006 and 2011 were in those with:

- Bachelor or Higher degrees (+1,306 persons).
- Advanced Diploma or Diplomas (+267 persons).
- No qualifications (-109 persons).
- Vocational qualifications (+57 persons).

EMPLOYMENT

LABOUR FORCE

The size of Carnegie's labour force in 2011 was 8,705, of which 2,771 were employed part-time and 5,362 were full time workers. Analysis of the employment status (as a percentage of the labour force) in Carnegie in 2011 compared to the City of Glen Eira shows that there was a lower proportion in employment, and a higher proportion unemployed. Overall, 94.4 per cent of the labour force was employed (61.4 per cent of the population aged 15+), and 5.6 per cent unemployed (3.6 per cent of the population aged 15+), compared with 95.4 per cent and 4.6 per cent respectively for the City of Glen Eira.

The labour force participation rate refers to the proportion of the population aged 15 years and over that was employed or actively looking for work. Analysis of the labour force participation rate of the population in Carnegie in 2011 shows that there was a similar proportion in the labour force (65.0 per cent) compared with the City of Glen Eira (64.5 per cent).

Between 2006 and 2011, the number of people employed in Carnegie showed an increase of 916, and the number unemployed showed an increase of 21. In the same period, the number of people in the labour force showed an increase of 936 or 12.1 per cent.

INDUSTRIES

An analysis of the jobs held by residents in Carnegie in 2011 shows the three most popular industry sectors were:

- Professional, Scientific and Technical Services (1,083 people or 13.1 per cent)
- Health Care and Social Assistance (906 people or 10.9 per cent)
- Retail Trade (808 people or 9.8 per cent)

In combination, these three industries employed 2,797 people in total or 33.8 per cent of the total employed resident population. In comparison, the City of Glen Eira employed 13.4 per cent in Professional, Scientific and Technical Services; 12.0 per cent in Health Care and Social Assistance; and 10.3 per cent in Retail Trade.

JOURNEY TO WORK

In 2011, 45,790 (69.3 per cent) of the City of Glen Eira's working residents travelled outside of the area to work. In Carnegie, there were 2,433 people who caught public transport to work (train, bus, tram or ferry) in 2011, compared with 4,361 who drove in private vehicles (car – as driver, car – as passenger, motorbike, or truck). Analysis of the method of travel to work of the residents in Carnegie in 2011, compared to the City of Glen Eira, shows that 29.8 per cent used public transport, while 53.4 per cent used a private vehicle, compared with 20.3 per cent and 59.9 per cent respectively in the City of Glen Eira. The major differences in persons between the method of travel to work of Carnegie and the City of Glen Eira were:

- A larger percentage of persons who travelled by train (27.4 per cent compared to 17.8 per cent).
- A smaller percentage of persons who travelled by car (as driver) (50.4 per cent compared to 55.8 per cent).
- A smaller percentage of persons who worked at home (3.3 per cent compared to 4.5 per cent).

INCOME

Households form the common 'economic unit' in our society. Carnegie's Household Income is one of the most important indicators of socio-economic status. With other data sources, such as Qualifications and Occupation, it helps to reveal the economic opportunities and socio-economic status of Carnegie. It is important to note that income data is not necessarily a measure of wealth. For example, if an area has a large number of retirees this will produce a higher proportion of households with low income but the retirees may have large capital wealth. For this reason, household income should be viewed in conjunction with Age and Household Composition. Analysis of household income levels in Carnegie in 2016 compared to the City of Glen Eira shows that there was a smaller proportion of high income households (those earning \$2,500 per week or more) and a higher proportion of low income households (those earning less than \$650 per week). Overall, 23.5 per cent of the households earned a high income and 18.6 per cent were low income households, compared with 29.2 per cent and 16.0 per cent respectively for the City of Glen Eira. The major differences between the household incomes of Carnegie and the City of Glen Eira were:

- A *larger* percentage of households who earned \$1,000 - \$1,249 (8.6 per cent compared to 6.9 per cent).
- A *larger* percentage of households who earned \$400 - \$499 (6.1 per cent compared to 5.0 per cent).
- A *smaller* percentage of households who earned Not stated (8.0 per cent compared to 9.7 per cent).
- A *smaller* percentage of households who earned \$6,000 - \$7,999 (1.6 per cent compared to 2.7 per cent).

POPULATION PROJECTIONS

Glen Eira is forecast to grow by 22,000 people, 9,000 dwellings and 9,500 jobs over the next 15 years. Carnegie increased in population by 1,516 people between the 2011 and 2016 periods from 15,683 to 17,200 people. The population is forecast to increase to 22,228 by 2031.

KEY ISSUES AND OPPORTUNITIES – COMMUNITY PROFILE

- Carnegie is relatively culturally diverse and this diversity is increasing.
- The predominant 'service age group' is 'young workforce' (25-34 year olds)
- A large number of Glen Eira residents travel out of the area to work.

HOUSING

CURRENT DWELLING STOCK

In 2016, there were 54,751 occupied private dwellings in Glen Eira. Almost half (49.9 per cent) of these were separate houses. When the data is considered by number of bedrooms, separate houses with three bedrooms are the most common (22.5 per cent), followed by medium and high density dwellings with two bedrooms (21.9 per cent) and separate houses with four or more dwellings (18.8 per cent).

In the Carnegie context, these figures show that in 2016, there were 2,650 separate houses in the area, 4,513 medium density dwellings, and 718 high density dwellings. 33.5 per cent of all dwellings in Carnegie were separate houses; 57.0 per cent were medium density dwellings, and 9.1 per cent were in high density dwellings, compared with 49.3 per cent, 43.4 per cent, and 6.6 per cent in the City of Glen Eira respectively.

The major differences between the number of bedrooms per dwelling of Carnegie and the City of Glen Eira were:

- A larger percentage of 2 bedroom dwellings (37.0 per cent compared to 28.3 per cent)
- A larger percentage of dwellings with 1 or no bedrooms (includes bedsitters) (16.6 per cent compared to 8.9 per cent)
- A smaller percentage of 3 bedroom dwellings (27.1 per cent compared to 35.1 per cent)
- A smaller percentage of 4 bedroom dwellings (10.4 per cent compared to 17.3 per cent)

In 2017, Council commissioned a study to analyse housing trends in the City of Glen Eira. The *City of Glen Eira Analysis of housing consumption and opportunities* was completed in May 2017 and updated in October 2017 to reflect 2016 Census data. This study provides municipal wide data and analysis which informed the *Glen Eira Activity Centre, Local Economy and Housing Strategy 2017*.

HOUSING DEMAND AND SUPPLY

Through the *Structure Planning* process, Council officers have undertaken a subsequent analysis of how alternative planning outcomes may impact the delivery of new housing in the City of Glen Eira.⁵

This preliminary analysis assesses:

- Expected housing targets.
- Housing Opportunity outcomes based on current planning policy.
- Housing Opportunity outcomes based on a range of alternative planning policy scenarios, including implementation of new *Structure Plan* and *Quality Design Guideline* recommendations.
- An assessment of how each scenario 'stacks up' to deliver on expected housing targets.

⁵ Planning Strategy Impacts on Housing Opportunity, Glen Eira City Council

HOUSING TARGETS

When creating strategies for the future, Council must demonstrate that its plans will deliver on housing targets set by the State Government. To inform current strategic work, Council officers have calculated Glen Eira's likely *Plan Melbourne* housing targets based on the current distribution of growth across our region (see Table 1.)⁶

It is assumed that regions will need to meet *Plan Melbourne's* aspirational Scenario 2 target (125,000 additional dwellings for Inner South East).

We conservatively estimate that Glen Eira will need to deliver approximately

- Approximately 9,000 additional dwellings by 2031 based on confirmed projections identified within *Plan Melbourne (Victoria in Future – VIF Projection)*.
- Approximately 25,000 to 28,000 additional dwellings by 2051 (however this could be as high as 33,000 depending on how the share is calculated) based on *Plan Melbourne's* aspirational targets.

	Bayside	Boroondara	Glen Eira	Stonnington	Total
VIF 2016 PROJECTIONS TO 2031 (CONFIRMED)					
Current No. Households in 2016	40056	68541	59754	51240	219591
Projected No. Households by 2031	47892	79561	68747	63149	259349
Distribution (%)	18.47%	30.68%	26.51%	24.35%	100.00%
Increase over the 15 year period	7836	11020	8993	11909	39758
Distribution (%)	19.71%	27.72%	22.62%	29.95%	100.00%
PLAN MELBOURNE 2051 HOUSING TARGETS (SCENARIOS)					
Based on distribution % of 'Projected No. Households by 2031'					
110,000 households target	20313	33745	29158	26784	110000
125,000 households target	23083	38346	33134	30436	125000
Based on distribution % of 'Increase over the 15 year period'					
110,000 households target	21680	30489	24881	32949	110000
125,000 households target	24637	34647	28274	37442	125000

Table 1 Scenarios for accommodating housing for 'Inner South East Region'

HOUSING OPPORTUNITY

Housing opportunity has been assessed, rather than *housing capacity*. *Housing opportunity* assesses housing supply in a way that is linked to location attractiveness and likely development uptake. It attempts to quantify how land will be developed in a realistic way for the medium-term.

Housing opportunity differs from *housing capacity* in that:

- Not all land is likely to be developed (for example, existing strata titled units or land that has recently been developed are examples of land that is unlikely to be developed);
- Not all land will be developed to its maximum capacity; and

⁶ For the full analysis and methodology refer to *Planning Strategy Impacts on Housing Opportunity (Glen Eira City Council)*

- Some areas will experience higher levels of development based on their relative attractiveness, which affects market demand (development uptake is not exclusively linked to the spatial distribution of land or zoning – i.e. just because something is zoned for a specific residential purpose doesn't mean people will build/purchase new housing there: development trends respond to pent up market demand).

Council's analysis considers scenarios to test alternative planning policy scenarios and their impact on housing opportunity.

Scenario	Description
THE BASE CASE (No Change to Current Policy)	This analysis identifies current housing opportunity based on existing planning scheme controls (no change). This analysis seeks to generally recreate and match the ID report forecast, and is used as a base case for comparing the following 3 scenarios for implementing policy changes.
SCENARIO 1 (Restricting GRZ and CIZ Areas)	Implementing key Quality Design Guideline recommendations to restrict development across all centres for General Residential Zoned ('Garden Townhouse' and 'Townhouse & Apartment Mix'), and all Commercial I Zoned land (new 'Shoptop' variations). No other changes.
SCENARIO 2 (Structure Plan Implementation)	Only implementing the revised Structure Plans for Bentleigh, Carnegie, Elsternwick and East Village.
SCENARIO 3 (Combination)	An integrated approach implementing both Scenarios 1 and 2.

Table 2 Planning strategy scenarios investigated

THE BASE CASE (NO CHANGE TO CURRENT POLICY)

The base case identifies current housing opportunity based on existing planning scheme controls and zoning distribution. This provides a fair base case for comparing the subsequent 3 scenarios.

The base case identifies a foreseeable opportunity for **26,198 additional dwellings across Glen Eira**, which is within the low range of Council's expected housing targets. In the Carnegie context, this scenario indicates a housing opportunity of 3,224 dwellings.

SCENARIO 1 (RESTRICTING GRZ AND CIZ AREAS)

Scenario 1 investigates implementation of key *Quality Design Guideline* recommendations to restrict development across all centres for the General Residential Zone and Commercial I Zone. The key variations are noted as follows:

- All General Residential Zoned Land rezoned to achieve a 'Garden Townhouse' on local streets and 'Townhouse and Apartment Mix' on main roads.

- All Commercial I Zoned land rezoned to achieve variations of the 'Shoptop (Heritage Character)' or the 'Shoptop (Standard)'.

Scenario 1 identifies a foreseeable opportunity for **22,315 additional dwellings**. This output is **3883 less than the base case** and does not meet Council's expected housing target range. In the Carnegie context, this scenario suggests a housing opportunity of 2,849 dwellings.

SCENARIO 2 (STRUCTURE PLAN IMPLEMENTATION)

Scenario 2 investigates the alternative housing opportunity scenarios when implementing four key strategic projects:

- Bentleigh Structure Plan;
- Carnegie Structure Plan;
- Elsternwick Structure Plan; and
- East Village Structure Plan.

Scenario 2 identifies a foreseeable opportunity for **29,359 additional dwellings**. This output is **3,161 more than the base case** and exceeds Council's expected housing target range. In Carnegie, this scenario indicates a housing opportunity of 3,280 dwellings.

SCENARIO 3 (COMBINATION)

Scenario 3 implements both Scenarios 1 and 2, including:

- Alternative structure plan projections for Bentleigh, Carnegie, East Village and Elsternwick activity centre study areas (Scenario 2); and
- Alternative zone recommendations across the remaining centres for the General Residential Zone and Commercial I Zone (Scenario 1).

Scenario 3 identifies a foreseeable opportunity for **26,529 additional dwellings**. This output is **111 dwellings more than the base case** (generally aligned) and meets the expected housing target range. In Carnegie, this scenario suggests a housing opportunity of 3,280.

The following key conclusions of Council's housing opportunity analysis are:

- The city should meet expected housing targets with no changes to current policy and zone distributions (**Base Case**). However, community concern around inappropriate built form outcomes is likely to continue. The base case identifies a foreseeable opportunity for 26,198 additional dwellings, which is within the low range of Council's expected housing targets.
- If Council seeks to introduce further restrictions in key zones of contention (**Scenario 1**), it is unlikely that Glen Eira will meet expected housing targets. Scenario 1 identifies a foreseeable opportunity for 22,315 additional dwellings. This output is 3883 less than the base case and does not meet Council's expected housing target range.

- Implementing structure plans with identified urban renewal and growth areas should ensure that Council meets and exceeds expected housing targets (**Scenario 2**). Scenario 2 identifies a foreseeable opportunity for 29,359 additional dwellings. This output is 3,161 more than the base case and exceeds Council's expected housing target range.
- Noting that Glen Eira's high proportion of restrictive Neighbourhood Residential Zoning has received heavy industry criticism, and that this will become a large matter of contention in any future planning scheme amendment proposing restrictions to development in activity centres, it is vital to ensure that any proposed policy changes do not reduce housing opportunity as a whole across the city. The Scenario 3 approach demonstrates a way to achieve '**no reduction**' – a strategy that encourages growth in suitable locations that will compensate for other areas of further restriction in a way that continues to meet the expected housing target under Plan Melbourne.

Scenario	Description	Housing Opportunity - Glen Eira	Housing Opportunity - Carnegie
Base Case	Housing opportunity based on current zone distribution, policy and controls.	26,198	3,224
Scenario 1	Introducing restrictive modifications to General Residential Zone and Commercial Zone areas city-wide (based on Quality Design Guideline Recommendations).	22,315	2,849
Scenario 2	Implementing Structure Plan recommendations for Bentleigh, Carnegie, Elsternwick and East Village.	29,359	3,280
Scenario 3	The full package, implementing Scenario 1 and 2.	26,529	3,280

Table 3 Summary of Housing Opportunity Analysis

KEY ISSUES AND OPPORTUNITIES – HOUSING

- 33.5 per cent of all dwellings in Carnegie were separate houses; 57.0 per cent were medium density dwellings, and 9.1 per cent were high density dwellings,
- Carnegie has a smaller number of 3-4 bedroom dwellings, compared to the City of Glen Eira more broadly.
- It is estimated that Glen Eira will need to deliver an additional 9000 dwellings by 2031; and as many as approximately 25,000-28,000 by 2051. Analysis shows that the draft structure plans for Bentleigh, Carnegie and Elsternwick will contribute to the delivery of new housing to meet this demand.

LOCAL ECONOMY

Council commissioned the *Glen Eira Economic Analysis and Forecasting Study* in December 2016 to provide an assessment of the municipality's activity centres, for the purpose of establishing a foundation for the hierarchy of centres that would support a vibrant, dynamic and sustainable vision for the future of Glen Eira.

The key tasks undertaken were:

- A review of relevant land use policies, residents' demographic and socio economic characteristics, and retail industry trends that together influence the role and function of Glen Eira's activity centres.
- Surveying residents' shopping behaviour, activity centres' business and land use mix, and the catchment area of Glen Eira's three major activity centres.
- Forecasting future supportable retail floor space within Glen Eira.
- Preparing individual assessments for all major activity centres and neighbourhood centres.
- Assessing the viability of Glen Eira's Commercial 2 and Industrial zoned precincts to support ongoing employment and commercial activity.
- Identifying economic development initiatives that may be undertaken by Council to support the performance and viability of Glen Eira's activity centres.

This assessment informed the development of the *Glen Eira Activity Centre, Housing and Local Economy Strategy 2017*, which was adopted by Council in July 2017. The individual assessment of the Carnegie activity centre provides an input into the draft *Structure Plan*.

RETAIL MIX

Carnegie 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 six retailers, compared to only two within Carnegie Central. This reflects the dominance of the Woolworths supermarket within the latter, which may also include pressure upon the centre's owners to limit the number of fresh produce retailers. By comparison, there are only four fresh produce retailers within Elsternwick, and a total of nine within Bentleigh. Therefore, despite the strong competition from the two full-line supermarkets, there is a strong presence of fresh produce retailers within the centre.

Apart from the Spotlight store within Carnegie Central, there is no significant non-food retailing within the Carnegie activity centre to attract visitors. While there are a number of bulky goods retailers located along Dandenong Road that would draw shoppers from across a wider catchment,

there is not a strong physical connection to the Koornang Road strip. As a result, these two precincts function independently of each other.

The number of cafes and restaurants within the Carnegie activity centre has grown significantly from 18 to 47 over the period since 2010. This represents an increase of 160 per cent compared to an increase of 77 per cent in Elsternwick and 82 per cent in Bentleigh over the same period.

VACANCY RATES

At the time of the assessment, Carnegie had a relatively low vacancy rate at 2.1 per cent (193 properties).⁷

LOCAL SHOPPING

The preparation of the *Glen Eira Economic Analysis and Forecasting Study 2017* included telephone surveys of Glen Eira residents to identify their current shopping behaviour. A representative survey of 402 residents was conducted during February 2017.⁸

Overall, 73 per cent of survey respondents nominated centres within Glen Eira as being their main location for fresh food and grocery shopping. Nearby centres such as The Links (Oakleigh South), Moorabbin Activity Centre, Brighton, Carlisle Street Balaclava, Glenferrie Road Malvern, and Chadstone and Southland shopping centres were nominated by a further 18 per cent of respondents. As a result, 90 per cent of Glen Eira residents shop at centres within or immediately adjacent to, Glen Eira. This pattern is also reflected in the reasons for shopping at these centres, with the location of centres relative to where respondents live being a key factor.

The Carnegie Activity Centre, including Carnegie Central, was nominated by 16 per cent of respondents as being their main centre for fresh food and grocery shopping. However, given its location on the northern boundary of Glen Eira, it may be assumed to be equally as popular as Bentleigh for food and grocery shopping (29 per cent) which is more central within the municipality.

⁷ Glen Eira Economic Analysis and Forecasting Study 2017 (Blair Warman Economics)

⁸ Glen Eira Economic Analysis and Forecasting Study 2017 (Blair Warman Economics)

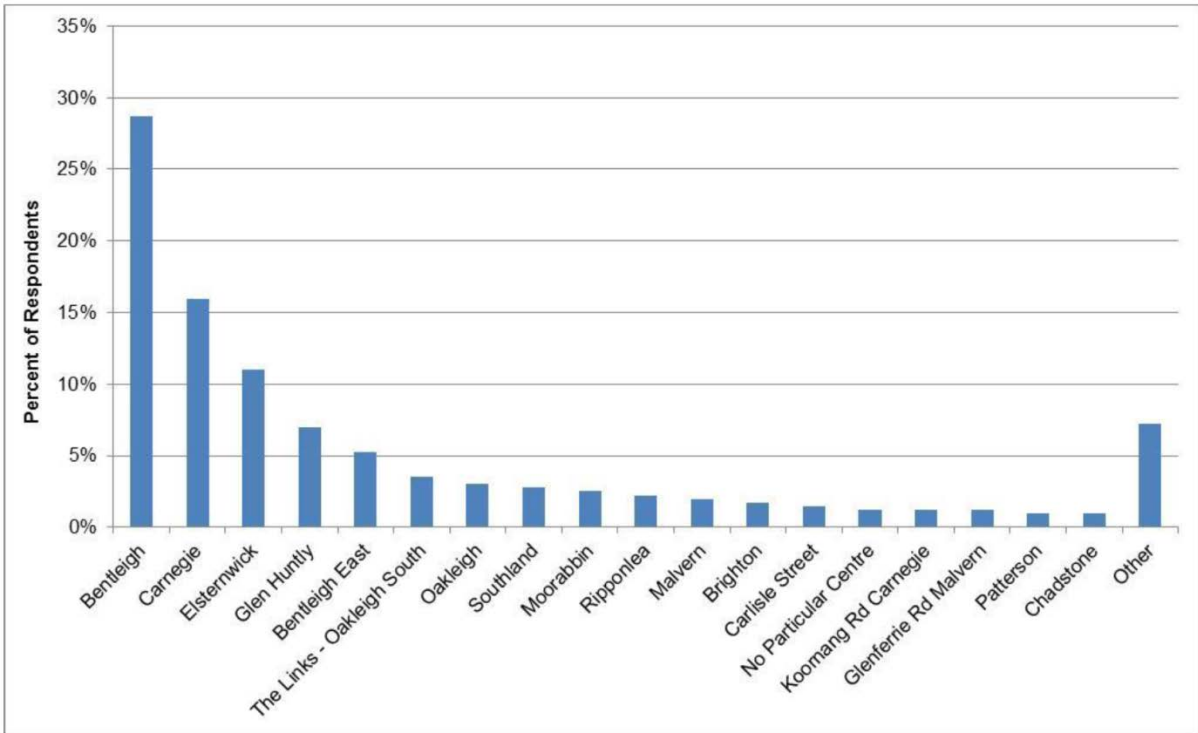


Figure 6 Main Shopping Area for Fresh Food and Groceries (Glen Eira residents)

Discretionary spending, shopping for clothes, gifts, homewares and other non-food items, is generally undertaken outside of local centres such as Carnegie. Chadstone and Southland shopping centres are the most popular ‘main’ shopping locations for fashion, gifts and homewares, together accounting for around 65 per cent of survey respondents.

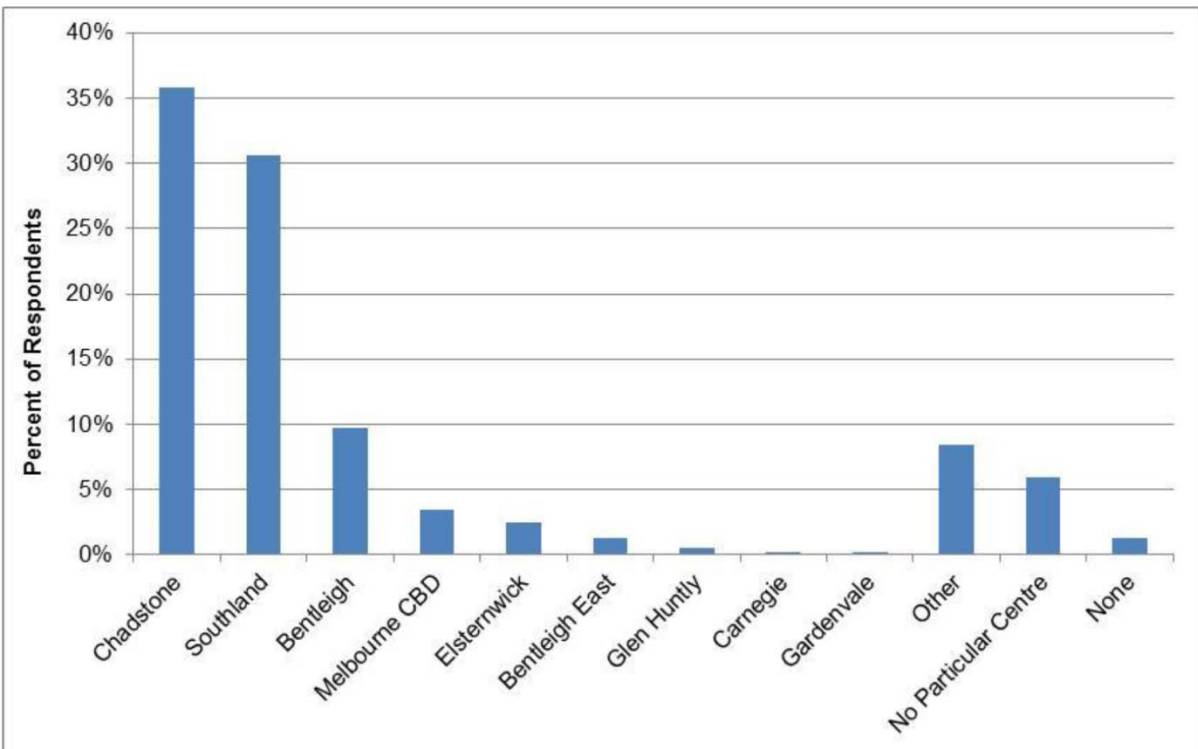


Figure 7 Main Shopping Area for Fashion, Gifts and Homewares (Glen Eira Residents)

SERVICE INDUSTRIES (PERSONAL, BUSINESS, MEDICAL)

The main locations used by Glen Eira residents for personal and business services are the three major activity centres (Bentleigh, Carnegie and Elsternwick) together with Bentleigh East, which together accounted for 50 per cent of the centres nominated by survey respondents.

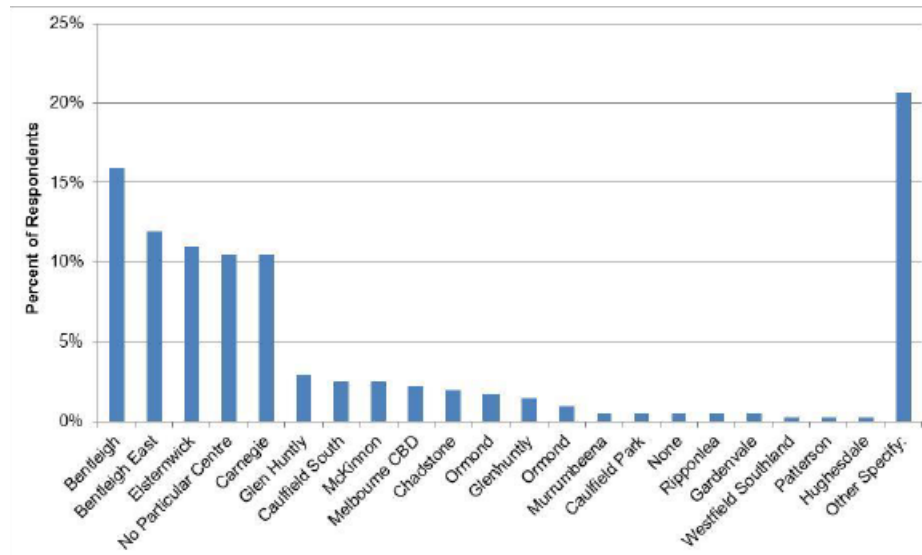


Figure 8 Main location for services (personal, business, medical, etc) (Glen Eira Residents)

VISITORS TO CARNEGIE (TRADE AREA)

The research for the *Glen Eira Economic Analysis and Forecasting Study 2017* included surveying vehicles within each centre to gain an indication of the trade area for centres. Vehicle number plate details were recorded, and registration postcode obtained from VicRoads at an aggregated postcode level. Car Park surveys were undertaken separately for the Koornang Road strip and Carnegie Central shopping centre. Residents of postcode 3163 (Carnegie, Glen Huntly and Murrumbeena) accounted for a similar proportion of car-based trips to each, 29 per cent for Koornang Road and 27 per cent for Carnegie Central. There is a notable difference in the proportion of trips accounted for by residents living north of Dandenong Road in Malvern East. These residents accounted for 17 per cent of visitors to Carnegie Central, but only 7 per cent of those to the Koornang Road shopping strip. This may possibly reflect the opportunities for these residents to undertake strip shopping in Glenferrie Road Malvern or High Street Ashburton. Compared to the Elsternwick and Bentleigh activity centres, the distribution of visitors to the Koornang Road strip appears to be more dispersed.

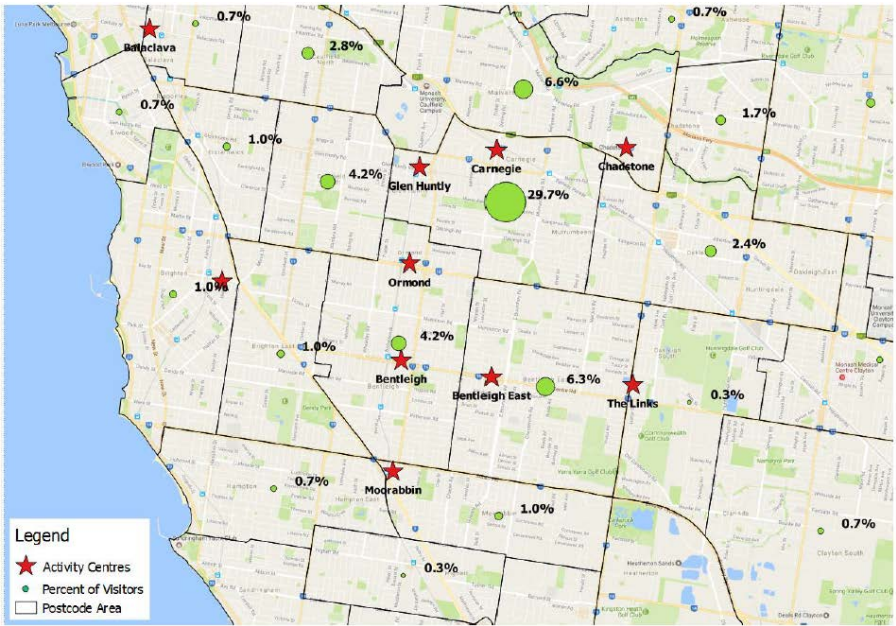


Figure 9 Koornang Road Trade Area

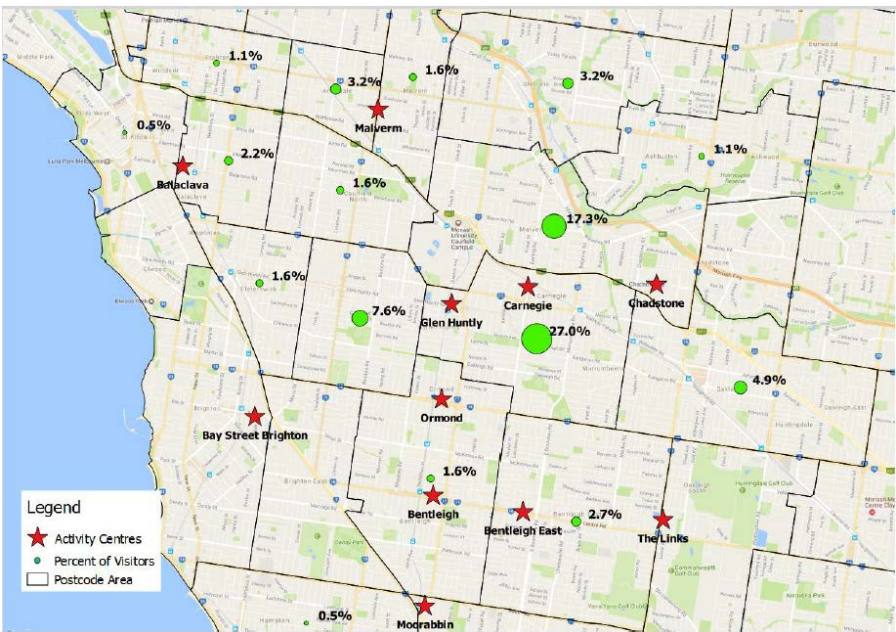


Figure 10 Carnegie Central Trade Area

OFFICE SPACE

Glen Eira, across the board, has a very limited supply of office space with no identifiable office precinct.⁹ As a result, the majority of office workers living in Glen Eira travel to the Melbourne CBD and other inner city locations to work. Table 4 shows the relatively low proportion of office uses in Glen Eira’s ‘Urban Villages’ (now referred to as Major Activity Centres).

⁹ Assessment of the Economic Impacts of Transformation Concepts on Activity Centres: Bentleigh, Carnegie & Elsternwick, Blair Warman Economics

Business Type	Urban Village
Food Retailing	10.1 per cent
Non-Food Retailing	24.0 per cent
Hospitality	23.7 per cent
Personal Services	12.1 per cent
Health Care	8.4 per cent
Business Services	7.0 per cent
Office Uses	3.8 per cent
Other	6.7 per cent
Vacant	4.2 per cent
Total	100.0 per cent

Table 4 Business Mix – Percent of Businesses in Urban Villages

The city’s major activity centres provide an opportunity to provide new office space, potentially on identified strategic sites (including Council-owned land).

Plan Melbourne aims to facilitate affordable housing that is accessible to employment opportunities.

Similarly, the need for increased employment opportunities in outer metropolitan areas is also a key element of *Plan Melbourne*. Essentially, this represents a two pronged approach of ‘locating workers close to jobs’ as well as ‘locating jobs closer to workers’.

KEY ISSUES AND OPPORTUNITIES – LOCAL ECONOMY AND EMPLOYMENT

- Carnegie provides two full-line supermarkets, a smaller supermarket, fresh food retailing, bulky goods and non-food retailing and a significant amount of cafes and restaurants.
- The trade areas for Koornang Road and Carnegie Central are distinct.
- Glen Eira’s major activity centres have relatively low levels of office space, across the board.

URBAN DESIGN AND BUILT ENVIRONMENT

BUILT ENVIRONMENT OVERVIEW

The *Glen Eira Activity Centres Urban Context Report*, prepared by *Planisphere*, identified the following key characteristics of Glen Eira's major activity centres:

- Well-established centres based around a train or tram corridor or major arterial road. Some centres have historic buildings protected through the Heritage Overlay.
- A mix of activity, including a core retail area developed around a main strip shopping street, surrounding mixed use activity and adjoining residential neighbourhoods.
- Larger format retail, such as supermarkets or 'big box'/bulky goods retail interspersed through the retail area, often to the rear of the shopping strip.
- Higher scale apartment buildings up to seven storeys are being developed on strategic sites or in renewal areas, reflecting the current demand for residential floor space.
- The Major Activity Centres suited for urban renewal are currently attracting higher scale development.
- Level crossing removal is seeing significant changes in several major centres. The elevated rail will introduce a distinctive urban element to Carnegie, and the new station in Bentleigh has opened up space for redevelopment at ground level.
- Centres perform important civic and community roles, and have uses such as a library, museum or health centre.
- Open space is provided in the form of plazas, informal kerbside spaces or adjacent parkland.
- All centres have sensitive interfaces with adjoining residential areas.

Generally, the built form of these centres can be summarised as comprising:

RETAIL CORE

Core retail area which typically has fine-grained shopfronts with an established parapet height of 1-2 storeys in scale. Some shops have been redeveloped with apartments or offices above, up to an overall height of 3-6 storeys.

COMMERCIAL & MIXED USE AROUND RETAIL CORE

Buildings up to 6-7 storeys either behind shops or on large strategic sites. This includes mixed use development with commercial at the ground or lower levels, up to 4-7 storeys.

RENEWAL

Discreet areas where buildings up to 12-15 storeys are being developed. These are specific areas with limited interface issues where higher buildings can be accommodated, namely north of the railway line in Carnegie and west of the railway line in Elsternwick.

SURROUNDING RESIDENTIAL

Within the RGZ immediately adjoining the activity centre, buildings up to four storeys are evident. Within the GRZ surrounding the RGZ or directly adjoining activity centres, buildings up to three storeys are being developed.

CARNEGIE'S COMMERCIAL AREAS

The commercial areas of the Carnegie activity centre are comprised of three main areas: north of the railway line, south of the railway line along Koornang Road to the Neerim Road intersection and the small area south of Neerim Road.

The core retail area along Koornang Road, between the railway line and Neerim Road, has a strong Interwar-era character, with many older shopfronts of one to two storeys in scale. This low scale, together with the characterful older buildings, creates a retail core that is highly distinctive and attractive. Larger sites located behind the Koornang Road shops, north of the railway line and along the Neerim Road intersection, have a strong emerging and transforming character, due to the development of higher scale apartment buildings of up to six storeys. This provides a strong contrast with the historic retail core. The rear of the Koornang Road shops currently has a poor interface with the adjoining laneway network and surface carparks. This is evident on both the east and west side of Koornang Road. The elevated railway line that is to be constructed over Koornang Road as part of the level crossing upgrade will significantly change the character of the activity centre, and will be a highly visible element of hard infrastructure, of several storeys in scale.

Figure 11 provides an overview of building heights within the Commercial areas of Carnegie.



Figure 11 Commercial Areas - Existing building heights

Council commissioned the *Urban Design Analysis – Bentleigh, Carnegie & Elsternwick* (Planisphere) to provide an analysis of the core retail areas of Bentleigh, Elsternwick and Carnegie. This analysis included the following elements:

1. Site visit and urban design assessment of existing built form and public realm conditions of the centres.
2. Review and analysis of recent and current planning permit applications.
3. Mapping of existing building heights.
4. Mapping of potential future buildings heights of proposed and approved planning permit applications.
5. Identification of urban design issues at sensitive interfaces.
6. Identification of key urban renewal opportunities, possible future land use directions and potential building heights for the centres.
7. Review of interim DDO controls for Bentleigh and Carnegie.

The key findings of this analysis for Carnegie are outlined below.

Key Public Realm Spaces

Key public realm spaces that require a level of protection are:

- Koornang Road – ensure continued pedestrian interaction with the built environment and areas for cafes and shops to spill out onto the footpath.
- Library plaza – this is a central focus for the community, provides an area for rest and relaxation and acts as an entrance point to the library.
- Rear laneway along east carpark – this is a well utilised pedestrian laneway that allows access to the library forecourt and through to Koornang Road. This laneway should be retained but requires significant improvements.
- Morton Ave – already a well-used pedestrian link; an expanded pedestrianised space along this street would create a safer walking environment and allow for the existing cafes to spill out.
- Egan Street – would also benefit from a pedestrianised space and link; the construction of the elevated railway line will create public space and opportunities for new pedestrian links.
- Shepparson Ave, Rosstown Road, Kokaribb Road – these roads are all important local connector streets.
- Laneways and activation of rear of shops – existing laneways and carparks could be improved through the activation of the rear of shops.
- Carparks – all are very well used but not an efficient use of space within the centre; all could have improved connectivity with existing laneways and there is potential to redevelop sites to integrate other uses, including open space and market areas.
- Spaces around station – the implementation of an elevated rail line will create additional space in this area, which could act as a connector space into surrounding pedestrian links.

SENSITIVE INTERFACES

Significant scale buildings within the commercial and mixed use zone that have a direct interface with residential dwellings will need to consider visual bulk, overshadowing and overlooking. Mitigating design measures should include setbacks at ground and upper levels, careful orientation and screening of windows and quality of design and materiality choice.

There are significant interface issues at the residential edges of the east and west carparks. The majority of the existing residential dwellings that face the east and west carparks are of one or two storey scale. These interfaces will need to be considered when investigating the land use and development opportunities within the activity centre.

Interfaces with public space must also consider overshadowing impacts and ensure for the provision of a positive and active frontage to the open space that encourages passive surveillance.

RENEWAL AND OPPORTUNITY AREAS

Due to the current growth and stage of transition of the Carnegie activity centre, there are multiple areas that should be considered as areas of renewal and/or opportunity.

LAND USE & DEVELOPMENT

Current development trends show that there is significant opportunity for residential infill development within the centre. Ongoing provision of new housing will ultimately require an increase in commercial floor space, additional community facilities and quality public space.

Retail core

The low scale and level of historic character of the buildings within the core of the activity centre form a gateway at the Neerim Road intersection. As a distinctive contrast with the high scale built form on the periphery and north of the railway line, consideration should be given to a heritage overlay (HO).

Due to the transitional stage of the activity centre, it is important to, at the very least; retain the low scale of existing built form along the street frontage. This will ensure the existing intimate and human scale environment is preserved. This could be achieved through the use of shop tops or mixed use development within the Koornang Road shopping strip, which can already be seen in recent three storey developments.

MORTON AVE

Due to its close proximity to the train station which will include an elevated train line as part of its upgrade, this street would benefit from a pedestrianised space. Morton Ave connects to Shepparson Ave which is an important local street and would provide existing residents with a plaza type area that connects the surrounds to the station.

NORTH OF RAILWAY LINE – ALL AREAS

All areas between the railway line and Dandenong Road could be intensified at an appropriate scale. Proximity to station, larger lot sizes and lack of heritage/character buildings would allow for this area to transition from industrial uses to infill with higher density development. Given the size of some sites in this area and their high exposure to the major arterial corridor of Dandenong Road, a higher scale may be achievable in some locations. As a result, this part of the Carnegie activity centre has significant potential for development and transition to a new character.

The preferred maximum height could potentially be extended to nine storeys, to accommodate a greater building scale than within the lower scale area south of the railway line.

An appropriate building scale would need to consider the emerging character of the centre overall, respect of the finer-grain pedestrian scale of Koornang Road and east-west connecting streets, and the impact upon residential amenity.

However, the Rosstown Hotel site located on the west side of Koornang Road and north of Arawatta St should be further investigated as to its heritage value.

KOORNANG ROAD (NORTH OF RAILWAY LINE) PUBLIC REALM INCLUDING FOOTPATH WEST SIDE (OPPOSITE ARAWATTA ST)

The growth and development of this area must include public realm improvements and ensure a highly pedestrianised built environment. The existing area west of Arawatta St presents an opportunity to create a public plaza with street trees and seating.

REAR OF SHOPS EAST & WEST

Existing laneways and carparks should serve as the basis for the activation of the rear of shops. This area of opportunity would create a vibrant and connected pedestrian network within the activity centre.

INTERIM PLANNING CONTROLS

On 30 August 2016, Council resolved to “Request the Minister for Planning to prepare, adopt and approve Planning Scheme Amendment C147 and C148 in accordance with Section 20 (4) of the *Planning and Environment Act 1987*”. Amendments C147 and C148 proposed to introduce and apply height and built form controls to the Bentleigh and Carnegie activity centres on an interim basis until 30 September 2019.

Planning Scheme Amendments C147 and C148 were approved by the Minister for Planning in April 2017 and apply Schedule 8 to the Design and Development Overlay (DDO) to commercially zoned land in Bentleigh and Schedule 9 to the DDO to commercially zoned land in Carnegie. The expiry date applied to these interim controls in 31 December 2017.

In seeking interim controls, Council acknowledged the significant development pressure being experienced in Bentleigh and Carnegie activity centres. Council’s Planning Department had experienced a significant increase in the number and complexity of planning applications between 2010 and 2016.

Analysis of planning permit data undertaken in support of the interim controls illustrated that there was significant development pressure in these activity centres with applications proposing tall buildings up to 16 storeys in Carnegie and nine storeys in Bentleigh. It further highlighted that a number of applications have been refused by Council and then later overturned at VCAT, despite not according with Council policy or the shared vision of the Glen Eira community.

In the face of such development pressure, the introduction of interim planning controls, allows Council to engage with the community to ensure a joint vision is established and appropriate permanent planning controls are implemented.

STRATEGIC SITES AND URBAN RENEWAL

The structure planning process provides an opportunity to identify strategic redevelopment sites, both existing and potential, that can support the objectives for the activity centre. The *Carnegie Concept Plan* identified an 'urban renewal area' and a number of potential 'strategic sites' in Carnegie, shown in light and dark pink shading in Figure 12.

BUILDING TRANSITIONS PLAN

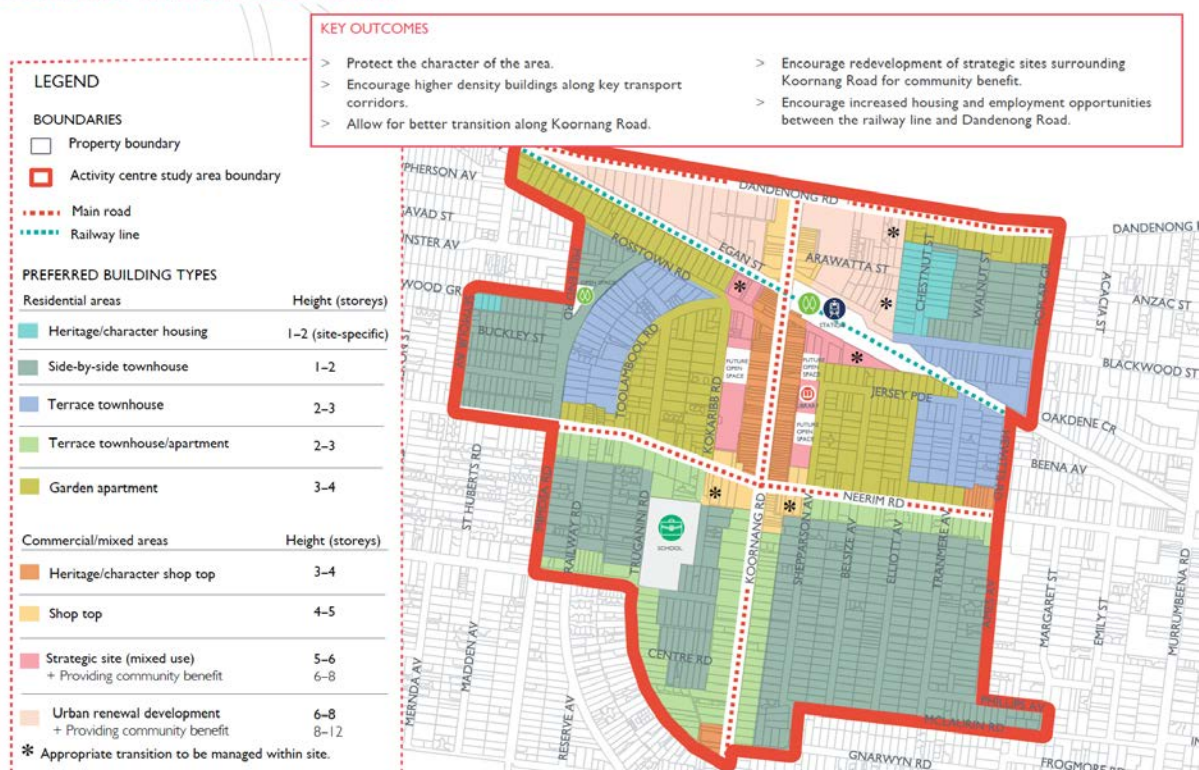


Figure 12 Carnegie Building Transitions Plan

STRATEGIC SITES

The *Concept Plan* identified a number of private and publicly owned sites East and West of Koornang Road as 'strategic sites'. Publicly-owned sites were primarily identified as suitable for providing public benefits such as new public open space, consolidated car parking and community facilities (see 'Streets and Other Public Spaces' below).

Privately owned properties in suitable locations were nominated due to their strategic location and potential for redevelopment in a way that could contribute to the immediate public realm and provide a wider public benefit.

The areas identified as *Strategic sites* are intended to accommodate taller buildings of approximately six to eight storeys, while not unduly impacting on sensitive areas. It is expected that these sites are able to accommodate necessary transitions to adjoining properties within the site. In particular, consolidation is encouraged in order to achieve a taller building while managing impacts on sensitive interfaces.

Council's approach to strategic sites seeks to ensure that these taller buildings can provide significant community benefits currently not being delivered elsewhere. These community benefits may include, but are not limited to:

- 'Anchor' commercial uses that drive economic sustainability.
- Community uses and spaces.
- Needed housing such as affordable, student and/or aged-care housing.
- Additional public car parking.
- Additional public open space.
- New street connections.

URBAN RENEWAL

Council's *Activity Centre, Housing and Local Economy Strategy* identifies Carnegie as a major activity centre with urban renewal, with a major focus for housing and employment growth. This growth should be supported in locations that can accommodate the change with minimal external impact. This area of land between the railway line and Dandenong Road has been identified as a location for urban renewal, given:

- Dandenong Road and the railway line provide a clear barrier that minimises adverse impacts to low-scale surrounding areas (note: building transition can be accommodated on-site where adjoining low-scale residential areas to the east).
- The existing commercial building stock is ageing and the location is ideal for redevelopment due to its proximity to services and transport infrastructure.
- The development of the elevated rail will enhance amenity around the railway line, including the provision of open spaces, active frontages and pedestrian connectivity at ground level. Future developments can take advantage of these improvements.
- The area has good access to transport infrastructure, being walking distance from Carnegie Station and having quick access to the Dandenong Road.
- The identified urban renewal development precinct is intended to accommodate taller buildings while not unduly impacting on sensitive areas. It is expected that these sites are able to accommodate necessary transitions to adjoining properties within the site. In particular,

consolidation is encouraged within these areas in order to achieve a taller building while managing impacts on sensitive interfaces.

As with strategic sites, Council's approach to urban renewal areas seeks to ensure that taller buildings can provide significant community benefits currently not being delivered elsewhere.

COMMUNITY FEEDBACK

Significant community feedback was received through the Stage Five consultation process, regarding the scale of future development in the Urban Renewal Area and its proximity to low scale residential areas. In particular, interface to Chestnut Street was raised as a concern.

In response to this community feedback, two options may be considered to address this concern, and are provided for community consultation in the draft *Structure Plan*:

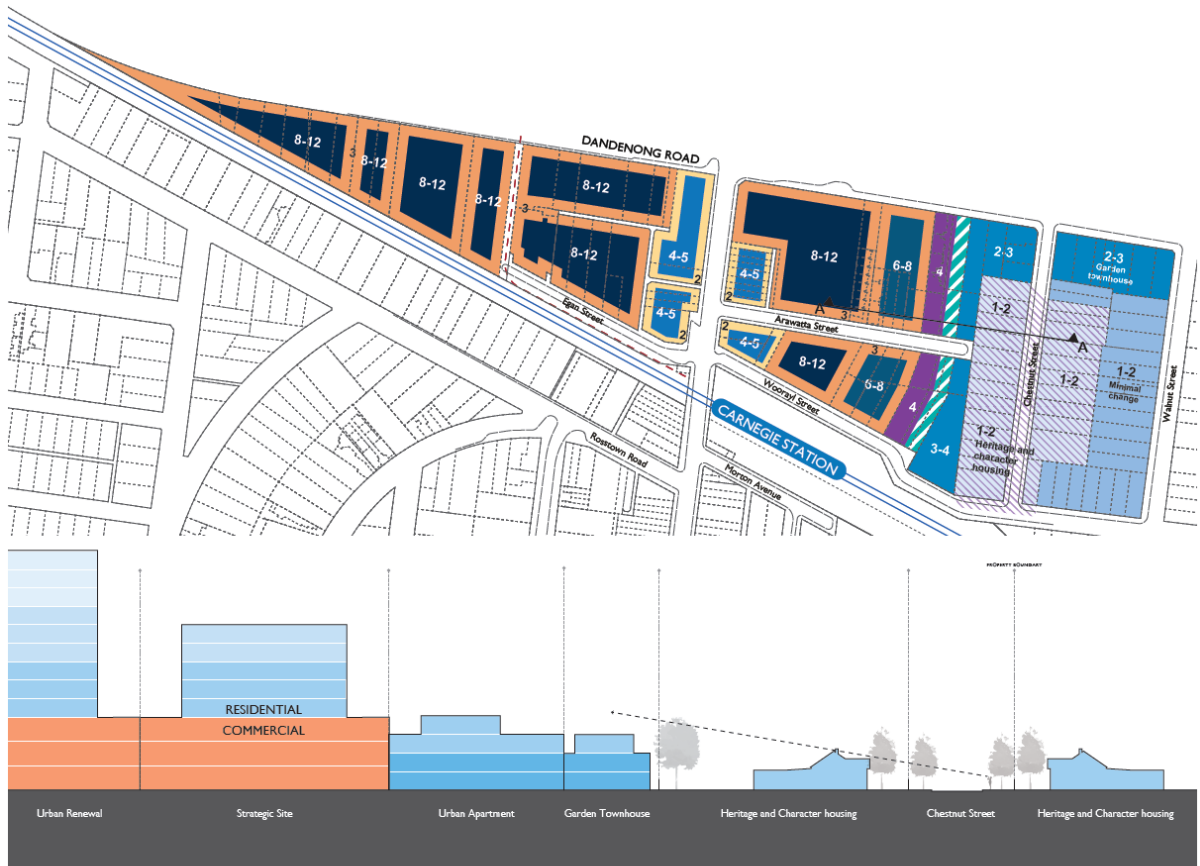
- Option 1 — Retain the existing Neighbourhood Character Overlay and further protect Chestnut Street by providing a clear transition to Chestnut Street by stepping down in height, building type and zoning.
- Option 2 — Remove Neighbourhood Character Overlay (NCO) in Chestnut Street and include the west side of Chestnut Street in urban renewal area and seek to extend Arrawatta Street.

The next stage of consultation provides the opportunity to gain feedback on both of these options. The *Structure Plan*, when adopted by Council in February of next year, will need to establish the preferred option, which will be Council's adopted position moving forward.

Both of these options seek to achieve a transition down to the established residential area to the east. In doing so, they both introduce a four-storey built form to the eastern 'edge' of the urban renewal area, albeit in different ways.

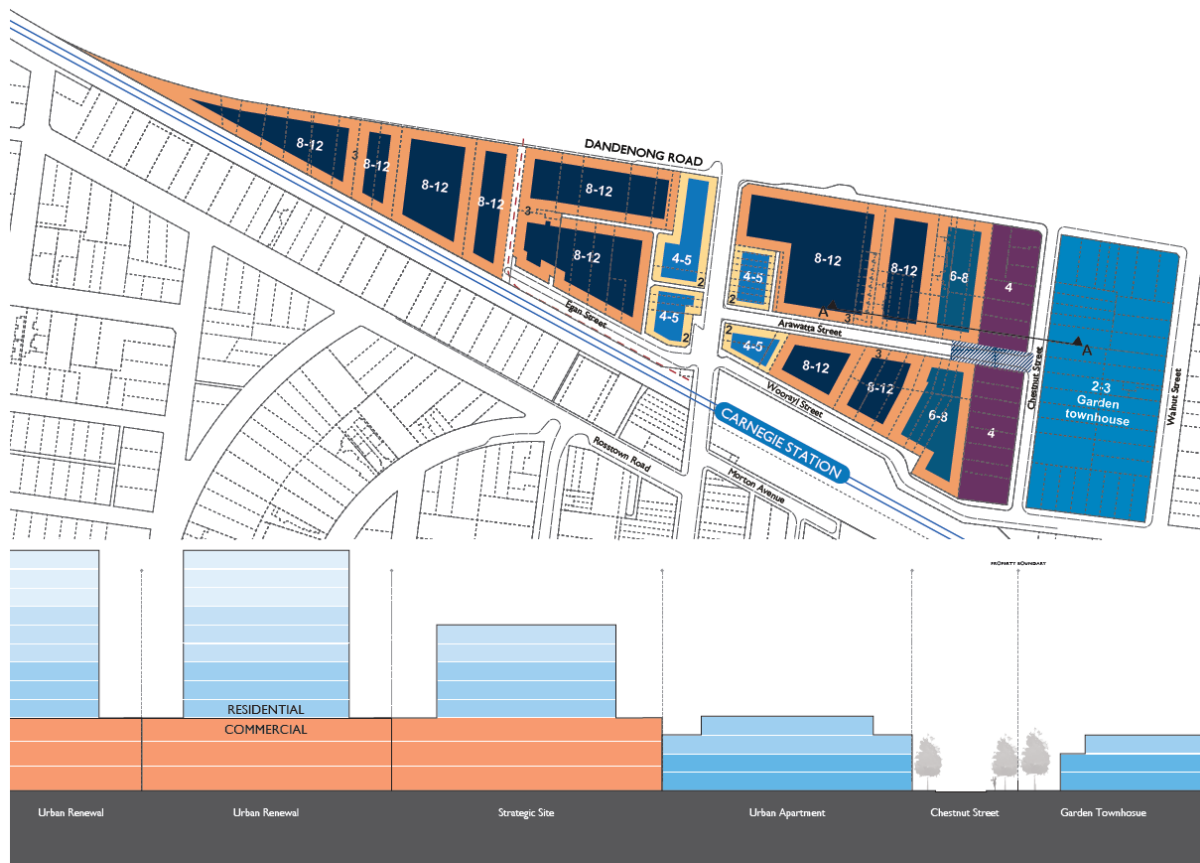
In effect, Option One starts this 'transitional space' at the rear boundary of residential properties on the west of side of Chestnut Street. The lower scale built form provides 'relief' to these properties in terms of the visual impact of the proposed 8-12 storey urban renewal sites. This option maintains the Neighbourhood Character Overlay, and therefore, a consistent character on both sides Chestnut Street.

Option Two removes the Neighbourhood Character Overlay from both sides of Chestnut Street and commences four storey 'transitional space' at the Chestnut Street road alignment. In order to achieve a suitable outcome on either side of Chestnut Street, this option would apply a two-three storey built form to the eastern side of the street (and, in turn, the western side of Walnut Street).



- 2 Storeys
- 3 Storeys
- 4 Storeys - Urban apartment
- 4-5 Storeys - Shop top (standard)
- 6-8 Storeys - Urban renewal (B)
- 8-12 Storeys - Urban renewal (A)
- Transition towards residential property
- Neighbourhood Character Overlay

Figure 13 Option 1 Urban Renewal



- 2 Storeys
- 3 Storeys
- 4 Storeys - Urban Apartment
- 4-5 Storeys - Shop top (standard)
- 6-8 Storeys - Urban renewal (B)
- 8-12 Storeys - Urban renewal (A)
- New connection

Figure 14 Option 2 Urban Renewal

HOUSING AND BUILT FORM ANALYSIS OF THE URBAN RENEWAL AREAS

An analysis of the Urban Renewal areas was commissioned after the Stage Five consultation period (Aecom). The purpose of this analysis was to ‘test’ the proposed strategic site and urban renewal development precincts within the *Structure Plan* areas, from both a built form and a property economics perspective. The built form testing involving applying the then work-in-progress built form guidelines. Consultation on the further developed *Quality Design Guidelines* will be undertaken concurrently with the draft *Structure Plans*.

This analysis provided a high level image of the future urban form of the Urban Renewal area, shown in Figure 15. *Note that this modelling reflects the parameters shown in the draft Concept Plan and applies the working draft of design guidelines. This built form does not reflect the options proposed in the draft Structure Plan.*

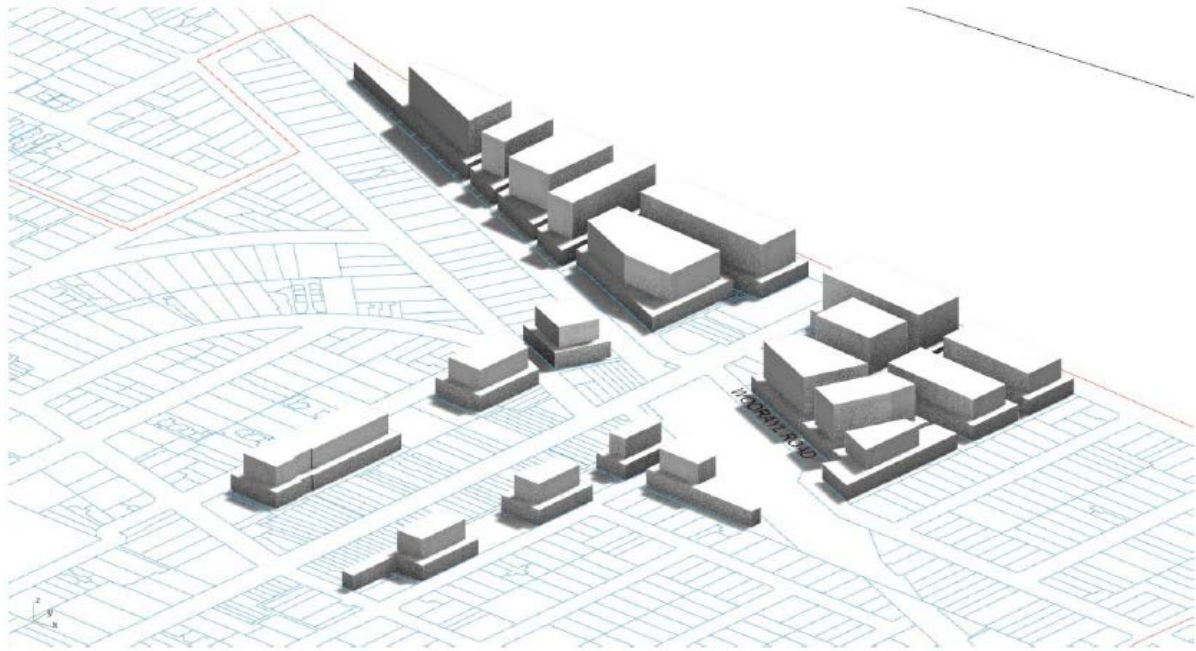


Figure 15 Carnegie Urban Renewal and Strategic Sites (September 2017)

It is important to have an understanding of the *feasibility* of urban renewal development such that it can play its anticipated role in the growth of the activity centre. From a property economics perspective, the analysis found that the ‘urban renewal’ building type achieved a suitable development margin, demonstrating a feasible outcome (the property economic assessment was undertaken *on a typical building footprint and envelope for this type* to understand the feasibility of the building development model, which includes a balance of commercial and residential space). The analysis estimated that in the urban renewal areas – combined across both Carnegie and Elsternwick – could provide in the realm of 1,500 dwellings.

The built form model incorporates the following assumptions for the Carnegie area:

- Site assembly will generally follow a pattern of attempting to create parcels that are approximately 36 metres wide, which will more easily accommodate efficient basement (or podium) car parking and suitable tower floor plates that provide for adequate setbacks (as per the draft *Quality Design Guidelines*) and provision for cross ventilation, suitable communal open space opportunities and attractive aspect for views and natural light.
- Large commercial sites are likely to experience further site assembly given the scale of potential development that could be accommodated through the *Guidelines* and existing design requirements that will need to be met such as the cross ventilation design standard for apartments.
- Smaller residential sites are likely to be experience site assembly given the scale of potential development that could be accommodated, though this is likely to occur later and at greater cost than the commercial sites.

- These smaller residential sites will likely to achieve lower yields, lower overall heights and fewer opportunities for significant community benefits that can be considered as part of their redevelopment due to the greater cost, smaller site size (even after site assembly) and the need to design with greater setbacks and more sensitive overlooking and overshadowing interfaces with adjacent residential areas
- Overall heights are likely to not exceed the preferred maximum height of 6-8 storeys on sites adjacent to residential areas.
- Overshadowing impacts to Woorayl Street Park would likely to substantially decrease the overall height and development yield of sites between Woorayl Street and Arawatta Street (to 5-6 storeys) if June 22 shadows are adopted in Guidelines, while September 22 shadows are more easily reconciled with the maximum height (with community benefits) as shown in Figure 20. This model has assumed an adoption of September 22 shadow.

Potential community benefits that should be considered as part of urban renewal in Carnegie and incorporated in this model:

- Pedestrian link between Woorayl Street, end of Arawatta Street and Dandenong Road; and
- Pedestrian link(s) between the rail corridor and Dandenong Road, Between Koornang Road and the western extents.

RESIDENTIAL AREAS

The residential areas of the Carnegie activity centre are generally of a low scale suburban character. However, development over the last 6-10 years has seen a change in the scale and style of residential buildings, particularly focused on those areas zoned Residential Growth Zone and General Residential Zone. Figure 16 provides an overview of building heights within the Residential Growth Zone and General Residential Zone in Carnegie. In this map:

- Blue shading = single storey
- Green shading = two storeys
- Orange shading = three storeys
- Yellow shading = More than three storeys



Figure 16 Residential Areas - Existing building heights

This map has been compiled using planning permit data and data obtained through dashboard surveys undertaken by Council staff in September 2017.

While Figure 16 shows the pattern of building heights associated with recent development, consideration is required of other elements of design that contribute to built form outcomes. The Urban Context Report prepared by *Planisphere* identified the following issues associated with recent residential development, that are common to the residential areas of Glen Eira's major activity centres:

EXCESSIVE SITE COVERAGE

New development is frequently typified by excessive site coverage, boundary to boundary built form with minimal setbacks. Whilst typically lower in height (three to four floors), these low, squat apartment buildings are significantly increasing the density of the area. This built form outcome

impacts on the streetscapes of these residential areas, as well as the residential amenity of adjacent properties.

FRONT SETBACKS

Minimal front setbacks disrupt the residential scale and rhythm of the streetscapes. Large development footprints leave very little area for vegetation and landscaping associated with traditional front yard areas. The vegetation in front setbacks is just as important as street trees in creating a sense of greenery in the streetscape. Instead, in recent developments and applications, front setbacks are typically occupied with private open space and defined by minimal and low scale vegetation and high fences.

STREET PRESENTATION

Some good examples of how residential apartments can present to the street are typically found in proposed developments on single lots. Such developments can present to the street in the form of a larger single dwelling, or as a pair of townhouses with further dwellings located to the rear. Developments on consolidated sites often lose the residential scale at the street address, disrupting the rhythm of the one to two storey single dwellings and front-yard tree canopy of the streetscape. The break with a residential scale is caused by a combination of minimal articulation in the facade pattern, large areas of blank facades or over-scaled facade elements, and an emphasis on horizontal lines.

SIDE INTERFACES

Excessive site coverage also causes issues in the form of potential amenity impacts with adjacent residential interfaces. This applies not only to development on consolidated lots, but also to examples on single lots, where additional dwellings are located behind the front facing dwellings. The deep lots that typify Glen Eira constrain this form of development to orient the remainder of the dwellings toward side boundaries.

However, the primary impact is caused by the presence of side development very close to the side boundary and overlooking windows. Boundary to boundary coverage creates apartments with outlooks to the adjacent residential dwellings along the entire side boundary, with minimal side setbacks. In addition, these interfaces frequently present facades with low levels of articulation and poor design quality which exacerbate the visual bulk at the interface. Whilst the built form of apartment blocks in the residential zones is typically relatively low in height at three to four floors, the minimal side setbacks present potential amenity impacts in the form of overshadowing, visual bulk, and overlooking.

VEHICLE ACCESS-WAYS

Access to rear or basement level parking also presents a significant streetscape issue for many of the residential apartment developments, with access driveways reading as a hole in the streetscape and creating issues for pedestrians. In addition, the façade treatment above and behind these accesses is often unarticulated.

These access-ways do present an opportunity however, to provide greater setback and open space buffers to adjacent single dwelling interfaces. A single access driveway is less disruptive to the streetscape, and can be paired with landscaping along the side boundary. One aspect in which developments are not successful is in providing activation behind the driveway, such as windows or semi-permeable fencing to private open space. Driveways and basement parking built close to the side or rear boundaries allow little space for canopy tree planting. Basements require substantial setbacks (approximately 5m) from side or rear boundaries to allow for a root zone. Narrow side setbacks allow space only for planting of columnar trees which may be an effective vegetation screen but do not provide a tree canopy.

DRAFT BUILDING TRANSITIONS PLAN

A *Building Transitions Plan* was developed for the Stage Five consultation process (see Figure 12 above), which sought to provide high level direction on the scale of development that could be supported in Carnegie. The plan was based on the concept of *preferred building types* and *achieving the right buildings in the right locations*.

This plan sought to respond to community feedback received in the early rounds of community engagement regarding poor development outcomes and to resolve policy conflicts addressed earlier in this report relating to residential zoning patterns. Carnegie has experienced a significant transformation in recent years with apartment developments being constructed in traditionally low-scale areas. Current policy supports dense apartment developments with little consideration for the area's existing character. The scale, rate of change and quality of new building stock are all issues that were raised through the early stages of consultation.

The *Building Transition Plan* sought to limit the amount of four story apartment buildings in the long residential streets of established homes in Carnegie; and sought to introduce a greater spread of building and household types, with a particular focus on medium density terrace town housing within suburban streets.

Importantly, the terrace town housing building type provides greater opportunity for a range of household types including families to live within walking distance of the activity centre.

The terrace town housing type was predominantly applied where current planning allows four storey apartments, such as in streets including:

- Mimosa Road (east side, north of Neerim Road).
- Toolambool Road (west side, north of Neerim Road).
- Elliot Avenue (east side, north of Neerim Road).
- Tranmere Avenue (both sides, north of Neerim Road).
- Hewitts Road (west side, north of Neerim Road).
- Blackwood Street (Southside, west of Poplar Grove).

The draft *Building Transitions Plan* proposed that these areas would see a change in the type of development that could be achieved, *from* four storey apartment buildings to two to three storey terrace townhouses. Where possible, the extent of the building types have carried through to a road boundary, which provides a clearer and more legible boundary for transition into lower or higher building forms. In some instances carrying the building type to the road border meant that the current policy boundaries would change.

LOCAL STREETS SOUTH OF NEERIM ROAD

In certain areas such as the residential land south of Neerim Road (ie. Truganini Road, Kokaribb Road, Shepparson Avenue, Belsize Avenue and Elliot Avenue) transitional issues are evident, caused by irregular 'radial' zone boundaries and multiple zones within a single streetscape. This creates inconsistency with the allowance for four storey apartment buildings and low-scale detached housing in the same street. To date, the area is relatively unaffected by approvals for larger developments, which have generally been focused in Carnegie to the north from Neerim Road.

In developing the *Building Transitions Plan*, a number of transition options were considered for local streets south of Neerim Road streets, including:

- Using the same 'radial' borders to separate different building types;
- Extending terrace town housing across the entire street, spreading low-scale growth across the area, rather than the current a split between apartments (north) and detached housing (south); and
- Protecting the local streets south of Neerim Road and focusing development in more appropriate locations to the north (the option proposed).

The *Building Transition Plan* sought to reduce development intensity in these streets by making the entire length of the street, south of Neerim Road, consistently low scale housing. Overall, the *Building Transition Plan* sought to protect a large proportion of Carnegie through provision of low-scale two storey building types including *Heritage/character housing* and the *Side-by-side townhouse*.

BETWEEN NEERIM ROAD AND THE RAILWAY LINE

There is significant construction and permit activity between Neerim Road and the railway line, particularly around the:

- Toolambool and Kokaribb Roads area; and
- Jersey Parade and Shepparson, Belsize and Elliot Avenue areas.

The *Building Transition Plan* continued to designate these areas as suitable for apartment buildings, however, it is anticipated that built form outcomes will be improved by implementation of appropriate building types under Council’s *Quality Design Principles* (see below). The *Garden apartment* (three to four storeys) building type seeks to ensure that apartments located within these residential streets look and feel residential with a strongly vegetated garden setting, and a recognisably residential building form.

Overall, the *Building Transition Plan* for Carnegie nominated a combination of *Garden apartments* (four storeys) and *Terrace townhouse* (two-three storeys), stepping down with distance from the centre. These building types focus on presenting a more residential character to the streetscape by encouraging front and backyard corridors.

COMMUNITY FEEDBACK – BUILDING TRANSITIONS PLAN

General support/agreement was received that the draft plan is a step in the right direction and welcome forward planning, however many felt that it should have been done earlier as some damage has already been done and the *Plan* doesn’t do enough to address over-development. General support was received for the *Building Transitions Plan* but more information was sought. Some felt that the plan makes more sense than the previous *Plan*, others felt it is inconsistent and messy and may encourage more development. Decreased value of homes was a common response for limiting higher building types or for decreased height of own property.

PREFERRED BUILDING TYPES

The draft *Building Transitions Plan* identified a series of building types that are further articulated in the *Glen Eira Quality Design Principles*. Community consultation on the draft *Principles* (Stage Four) was conducted concurrently with the Carnegie Concept Plan (Stage Five).

Following this stage of community consultation and further technical analysis, the building types were refined to the following:

RESIDENTIAL	DESCRIPTION
Heritage and Character Housing	New housing on land affected by a Heritage Overlay or Neighbourhood Character Overlay that respects and celebrates the character of the area.
Minimal Change (<i>formerly ‘Side-by-side’</i>)	One or two dwellings built on a standard lot.
Garden Townhouse (<i>formerly</i>	Townhouses in a detached or semi-detached format

'Terrace Townhouse')	
Townhouse Apartment Mix (formerly 'Terrace Townhouse/Apartment')	Predominantly town housing with a mix of apartments positioned behind or recessed on top of the townhouse.
Garden Apartments	Apartment buildings in a garden setting.

COMMERCIAL AND MIXED USE	DESCRIPTION
Shop Top (Heritage/Character)	Commercial building with ground floor retail and upper floor office/residential uses that is designed to celebrate and respect the heritage or significant character precinct in which it is located.
Shop Top	Commercial building that consists of ground floor retail or office with dwelling(s) located on upper levels.
Strategic Site	Mixed use building that with active retail and employment uses at lower floors and dwellings at upper levels.
Urban Renewal	Development in an area of urban renewal that has sufficient area to provide mixed use, higher scale form without significant impacts on lower scale areas.
Urban Apartment (newly added building type)	Residential apartment building in a dense urban setting.

QUALITY DESIGN GUIDELINES

Draft *Quality Design Guidelines* have been developed for community consultation, alongside the draft *Structure Plan*. The purpose of the Guidelines is to:

- Respond to the aspirations of the Glen Eira community and to deliver on the vision for our neighbourhoods.
- Encourage a high level of architectural design in new development for Glen Eira.
- Provide clear direction on Council's expectations for new development in Glen Eira.
- Support and supplement existing design guidance provided by the *Glen Eira Planning Scheme*, *Better Apartments Design Standards and Guidelines*, and other State Government guidelines.

The guidelines build on the *Glen Eira Quality Design Principles*, and provide clear direction for the residential and commercial building types listed above.

HERITAGE

CURRENT HERITAGE PROTECTION

Schedule 123 to the Heritage Overlay applies to the Carnegie Railway Station. The Statement of Significance states that:

The Carnegie railway station with associated gardens is located on Koornang Road, Carnegie and was presumably opened with the line on the 8th of October, 1877, the present main building and remains of the downside building having been erected at the time of electrification in 1922 when James Fawcett was the chief architect of the Way and Works Department. It is historically and aesthetically significant. It is historically significant (Criterion A) as a point of entry and departure for the Carnegie locality for over a century, having been associated with its development presumably since the opening of the line in 1877. It is understood that the platforms are the only surviving nineteenth century elements. The main building is historically significant also as a surviving standard structure of its type designed by the office of the chief architect in the Way and Works Branch during J.W. Hardy's term of office but undertaken by his successor, James Fawcett. It is aesthetically significant (Criterion E) as a surviving suburban station complex from the Great War period with up side building complemented by mature public gardens. The building's aesthetic importance is derived also from the use of Arts and Crafts forms and ornamentation in a manner which complements many of the contemporary houses in the vicinity of the railway station.

POTENTIAL HERITAGE AREAS OR BUILDINGS

Following Stage Four of the consultation process (consultation on the draft *Concept Plan*), Council undertook a high level in-house review of the activity centre. The purpose of the review was to ascertain:

1. Do any areas warrant further investigation as part of the Heritage Overlay?
2. In the urban renewal development and strategic site typology areas, where development will largely be concentrated, have any areas of potential heritage value been overlooked in the work undertaken to date?

The review comprised of a drive-by assessment and consultation with the *City of Glen Eira Heritage Management Plan 1996* to ascertain if any rating had been applied through this earlier work. In the case of Carnegie the review focussed on the following:

- Koornang Road shopping strip between Neerim Road and the railway line in Carnegie.
- 2, 4 and 6 Buckley St, Carnegie.
- 11 Edgewood St, Carnegie.
- Strategic site areas highlighted on the *Buildings Transitions Plan* map.
- Urban renewal development area highlighted on the *Buildings Transitions Plan* map.

The following assessment has been made:

KOORNANG ROAD SHOPPING STRIP BETWEEN NEERIM ROAD AND THE RAILWAY LINE IN CARNEGIE.

While the *City of Glen Eira Heritage Management Plan 1996* (HMP) did not rate the Carnegie Shopping Centre very highly, it forms quite a cohesive interwar shopping strip and warrants review.

2, 4 AND 6 BUCKLEY ST, CARNEGIE

The HMP rates these properties as 'not significant Edwardian Houses'. The roof of no. 2 is not original and there seems to have been an extension of the front façade of no. 4. These buildings are not considered significant enough to warrant an individual heritage listing. To the north, a number of streets including Holywood, Munster and McPherson are all protected by the Neighbourhood Character Overlay.



11 EDGEWOOD ST, CARNEGIE

The HMP rates this property as a 'Not significant Edwardian House'. On review, this rating is supported.

66 BLACKWOOD STREET, CARNEGIE (CONSIDERATION OF REMOVAL FROM NEIGHBOURHOOD CHARACTER OVERLAY)

This property is located in the Chestnut Street NCO, though it faces Blackwood Street. The Chestnut Street NCO is subject to the two options for the Urban Renewal area outlined in earlier

sections of this report. It is recommended that the status of 66 Blackwood Street is considered, when Council's position on the broader Chestnut Street NCO area is adopted.



STRATEGIC SITE AREAS HIGHLIGHTED ON THE BUILDINGS TRANSITIONS PLAN MAP

In the Strategic Sites area, the following buildings might warrant further heritage review:

- 59-67 Rosstown Road; and
- The Dutch Club at 60 Rosstown Road.

The HMP gave these buildings a D rating and not significant rating respectively. The remaining area has no significant heritage properties.

URBAN RENEWAL DEVELOPMENT AREA HIGHLIGHTED ON THE BUILDINGS TRANSITIONS PLAN MAP

There do not appear to be any properties of heritage significance within the Urban Renewal Development Area. There are two Edwardian houses in Arawatta Street that were rated in the HMP as Not Significant. Also the former Carnegie Theatre is located on Woorayl Street and was given a D rating in the HMP. This building is, however quite altered and there is an approval for

demolition of this building and construction of a mixed use development. It is not considered that this site warrants further attention.

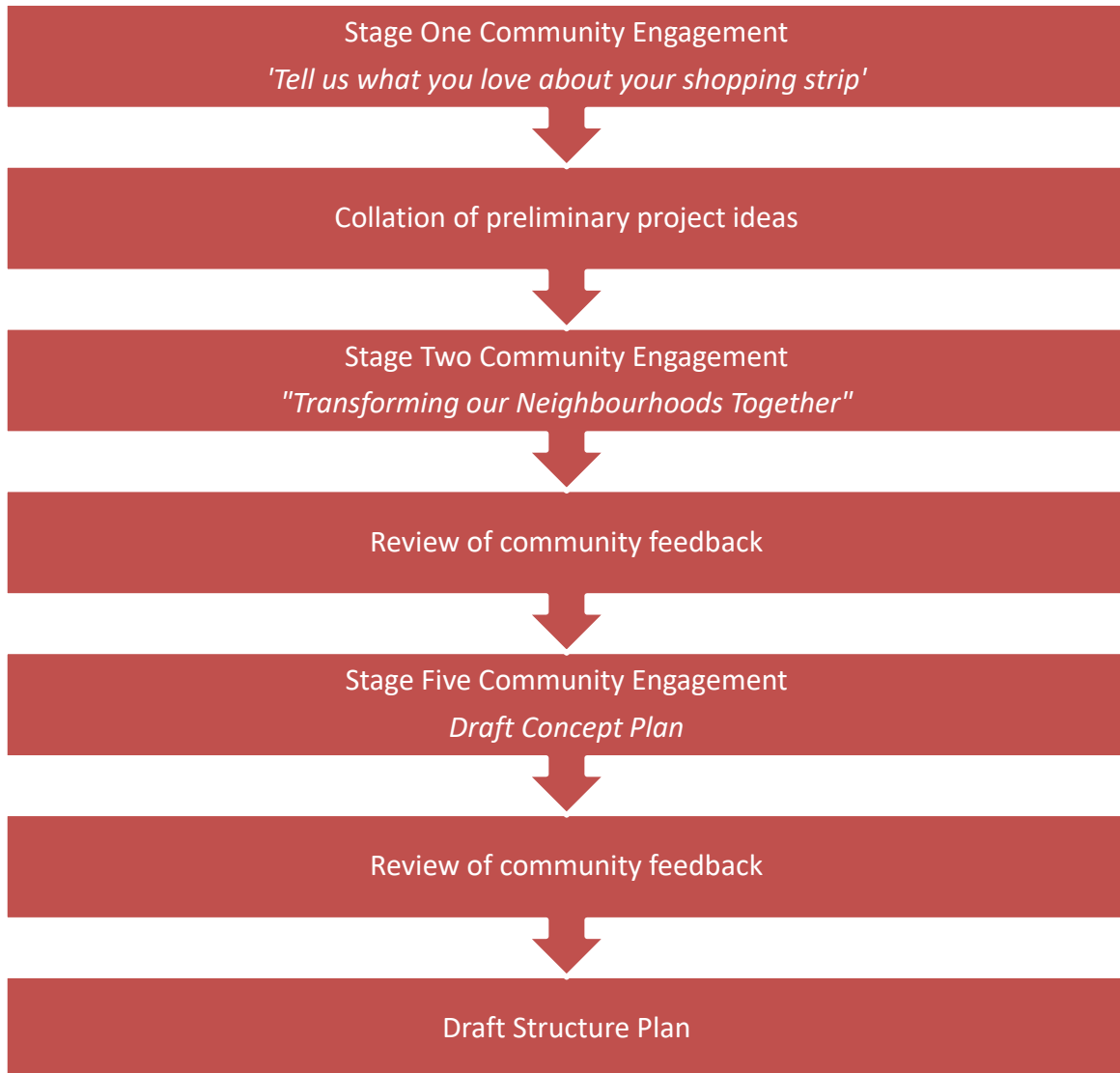
Note: it should be noted that the Rosstown Hotel (which is located in the “Shop Top” area of the Plan), was rated in the HMP as a C graded building. This building should be included in the 2018 Heritage Review.

KEY ISSUES AND OPPORTUNITIES – URBAN DESIGN AND BUILT ENVIRONMENT

- The Koornang Road retail core has a distinct and low-scale character.
- Dandenong Road retailers are not well connected to the Koornang Road shopping strip, however, the removal of the existing level crossing may improve connectivity within the centre.
- Residential areas between Neerim Road and the railway line have experienced significant growth in recent years.
- Local streets to the south of Neerim Road are subject to transitional issues resulting from multiple zones and irregular zone boundaries within a single streetscape, leading to apartments and low density housing within a single streetscape.
- Further investigation is required as to the heritage significance of some buildings and groups of buildings within the Activity Centre. This may be undertaken as part of Council’s Heritage Review to be commenced in 2018.
- 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 transformation projects that provide a community benefit.
- 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. However, a suitable transition to adjoining residential areas is required.
- Two options for addressing the interface between urban renewal and residential areas will be tested with the local community.

STREETS AND OTHER PUBLIC SPACES (PUBLIC REALM)

The structure planning process provides an opportunity to identify public realm improvements, including development of publicly owned strategic sites, changes to traffic and movement infrastructure and revitalisation of community infrastructure. An iterative process has been undertaken to develop public realm projects for Carnegie, comprising the following steps:



TRANSFORMATION PROJECT CONCEPTS

Potential public realm projects – referred to as ‘transformation projects’ – were garnered from the preliminary rounds of community engagement and from a range of projects that have considered in the past for Carnegie.

Council commissioned *Planisphere* to review potential projects from an urban design perspective. Specifically, the various ideas and options were tested in terms of how well they will enhance the

amenity, attractiveness, function and accessibility of the centre.¹⁰ Recommendations for traffic efficiency and safety were prepared by traffic consultants *One Mile Grid Traffic*, and were incorporated in the urban design review.¹¹ This review informed the projects included in Stage Two *Transforming our Neighbourhoods Together*.

The key high level project ideas for Carnegie were:

- New green space and additional car parking;
- Transition Carnegie to a pedestrian friendly centre; and
- Improve public transport connections.

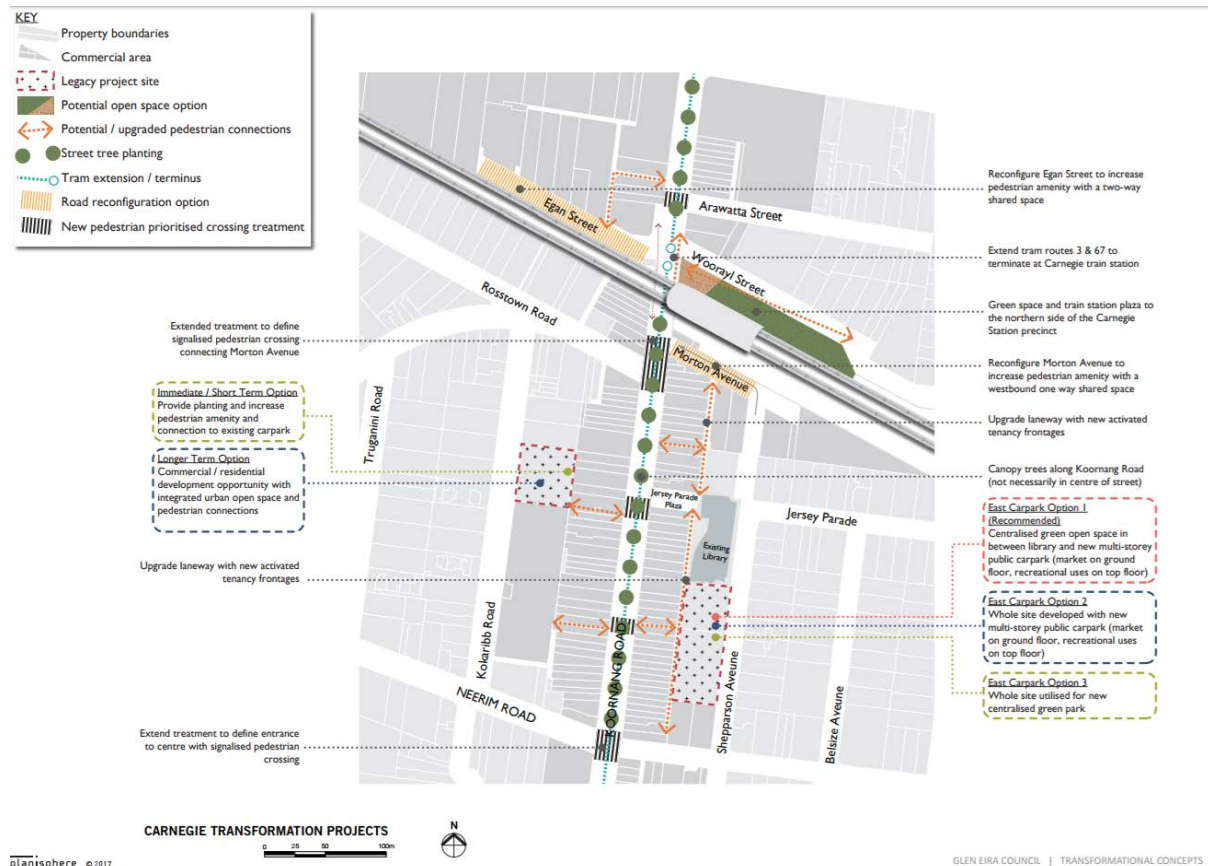


Figure 17 Map of potential transformation projects (Planisphere)

COMMUNITY CONSULTATION

Community feedback was sought on these high level concepts during Stage Two consultation:

Transforming our neighbourhoods together – our concepts based on your ideas. Figure 18 shows the refined concepts that were presented to the community for feedback during this stage.

¹⁰ Glen Eira Transformational Concepts Draft Report 2017 (Planisphere)

¹¹ Glen Eira Transformative Concepts Review 2017 (onemilegrid)

SUMMARY OF CONCEPTS

- 1 Create a new green space and additional car parking
Create more public car parking within one centralised structure that includes a new community hub and large green park.
- 2 Transition Carnegie to a pedestrian friendly centre
Create a pedestrian-friendly street and laneway network.
- 3 Improve public transport connections
Advocate for improvements to the current tram network within the Carnegie centre.

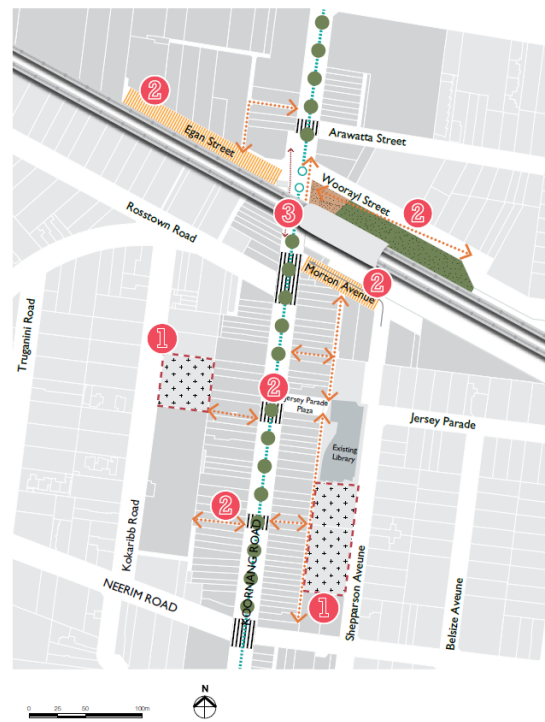


Figure 18 Summary of Concepts - Transforming our neighbourhood together (Stage Two community engagement)

The following summarises the feedback received during this stage:

CONCEPT ONE ‘CREATE A NEW GREEN SPACE WITH ADDITIONAL CAR PARKING’

There was widespread support for this concept. Most agreed that parking was an issue that would only get worse with further growth and as such needs to be addressed. The highest level of support was for the Eastern car park, although most people supported the concept in general so would support either option with the eastern being their preferred. Reasons for supporting the Eastern car park included its bigger size, its close proximity to the library and other community facilities and it was seen as being easier to conceal. Others thought the western car park area needed upgrading anyway and would have less of an effect on the village feel and current amenities. Both options were seen to have potential traffic concerns with the congestion, residential amenity and safety among the most common concerns. Some liked the idea of more parking but didn’t think a multi-storey option would work in practice, or would impact on the community/village feel. Alternative suggestions were posed such as underground or offsite with a shuttle bus. Others thought a focus on pedestrian, cycling and public transport access to the centre was more important than parking.

CONCEPT TWO ‘TRANSITION CARNEGIE TO A PEDESTRIAN FRIENDLY CENTRE’

The majority of comments about this proposal were positive. Increasing pedestrian safety and having more of a focus on pedestrians rather than cars was seen as a benefit for the area and would make

Morton Avenue accessible for all. Each option had mixed support. The main concern was the impact that changes to Morton Avenue would have on traffic. Morton Avenue is currently used as an alternative to Koornang Road with concern about access for residents and traffic being moved to other already busy streets. The shared zone was generally seen as an acceptable compromise, providing the greatest mix of amenity while still allowing essential access by car for those who need it. However some were concerned that shared zones can be dangerous and would end up being car dominated anyway. The one-way option was seen to cater well for the increased pedestrian traffic that will use the station.

CONCEPT THREE 'IMPROVE PUBLIC TRANSPORT CONNECTIONS'

The concept of extending the tram line was well supported. Many participants felt that it would help moderate traffic and encourage a greater use of public transport. Some were concerned about the potential congestion on Koornang Road and the reduction in space for footpath, parking and greenery in Koornang Road. A number of alternatives were suggested including extending the tramline just to Neerim Rd, directing the tram up an alternative street to Koornong Road or increasing bus frequency.

STAGE FOUR CONSULTATION – DRAFT CONCEPT PLAN

In light of the above feedback, the following project ideas were progressed for further consultation:

TRANSPORT AND PARKING

Create new green spaces

- Immediately north and south of Carnegie Library and Community Centre.
- Relocate Kokaribb Road car park underground and create new green space at ground level.
- Ensure that the new linear park beneath the elevated rail serves the needs of the community.

Market Hub and car parking

- Explore the opportunity to create a market at ground floor with office spaces, multi-level car parking, a community facility and a green rooftop above.

STATION PRECINCT

Improved public transport

- Advocate to the State Government for a tram extension to Carnegie Station.
- Advocate to the State Government for better bus connections within the centre of Carnegie.

Safe cycling link

- Create a bicycle path along Shepparson Avenue, connecting Carnegie railway station to Neerim Road and under the elevated rail.

Protect existing green space

- Advocate to the State Government for protection of open space along Woorayl Street, north of the railway station.

Improve pedestrian amenity

- Create a pedestrian link to Dandenong Road.
- Create a shared space on Egan Street to provide open space and pedestrian amenity for urban renewal area to the north.
- Improve pedestrian amenity in Morton Avenue.

NIGHT-LIFE PRECINCT

Improve Koornang Road streetscape

- Increase pedestrian amenity by improving street lighting, pedestrian crossings and seating.
- Introduce new street trees with large canopies.

RETAIL PRECINCT

Create laneway network

- Create new pedestrian laneways to improve connectivity.
- Activate existing rear laneways.

Figure 19 below shows the Transformation Projects Plan that was included in the Carnegie Concept Plan in Stage Four of community engagement.



Figure 19 Transformation Projects – draft Carnegie Concept Plan

During the Stage Five consultation stage, the following feedback was provided:

- **Transformation projects:** there was a high level of general support for the transformation projects. Open space was seen as vital due to the increasing density of the suburb and should be further addressed in the plan including pocket parks. There was mixed support for increasing the tram line. Most feedback on this project came from a submission of a survey of 41 residents. Traffic congestion was the biggest concern along with other priorities for use of the space including cars, parking, cycling, pedestrians, wider footpaths, trees. Activating the laneways was well received with safety the only concern identified. General support shown for the market. Some concern about the impact on neighbouring residents – particularly in Shepparson Avenue on relation to traffic, safety and waste/cleanliness. It was felt that all projects should consider residents abutting the projects and ensure access is maintained.
- **Parking:** Car parking initiatives were seen as essential. It was thought any multi-deck parking should be easily accessible, attractive and safe. Innovative ways should be sought to manage/review on-street parking and restrictions should be better enforced.
- **Pedestrianisation:** Support for making Shepparson Avenue more pedestrian friendly – calls for Koornang Road to be more pedestrian friendly also. Some calls for pedestrian access ways from Rosstown Road through to the linear park under the railway. Pedestrian safety important – particularly near Carnegie Primary.

NEXT STEPS - DRAFT STRUCTURE PLAN

Following consideration of community feedback on the *Transformation Projects Plan*, and further internal analysis by Council staff, the following projects are considered to support the strategic objectives for Carnegie, and are included in the draft *Structure Plan*. The factors to be considered and resolved through the realisation of these projects are also noted below.



Figure 20 Proposed public realm projects - draft Carnegie Structure Plan

NEW MARKET

- Redevelop the existing Shepparson Avenue car park site to provide a market at ground floor incorporating opportunities for employment and diverse housing in upper levels.

Key elements of this project include:

- No net loss of existing car parking.
- Activated ground floor frontages to Shepparson Avenue and the existing laneway.
- Creation of a new public plaza between the existing library and the proposed market building.
- Relocation of the existing childcare facility and car park from the north of the library and creation of a new public plaza.

Considerations for this project include:

- Relocation of childcare facility.
- Provision of existing public car parking within the site.
- Appropriate vehicular and pedestrian access to new building.
- Maintaining service access to the rear of Koornang Road shops.
- Improved pedestrian connections through to Koornang Road.
- Manage interim car parking requirements during the construction phase.

NEW PARK ON KOKARIBB ROAD

Create a new park in place of the Council car park in Kokaribb Street

Key elements of this project include:

- In partnership with a future supermarket redevelopment, seek to increase publicly accessible car parking. Create a new park in place of the Council car park in Kokaribb Road that serves the needs of the Carnegie community.
- Ensure a high quality pedestrian connection across the new green space to the existing pedestrian connection to Koornang Road.

Considerations for this project include:

- Partnering with supermarket to facilitate provision and increase of existing public car parking (including relocation of existing parking from Council land).
- Manage interim car parking requirements during the construction phase.
- The delivery of the new park is dependent on the incorporation of public car parking into the redevelopment of the supermarket site.
- Ensure vehicular access to the rear of Koornang Road shops.
- Working with landowners to provide high quality pedestrian access from Koornang Road to the new park.

- Appropriate governance and contractual arrangements to ensure beneficial outcomes for the Carnegie community.
- Consideration of the requirements of the Glen Eira *Open Space Strategy (refresh)* in the design and function of the new park.

IMPROVE PEDESTRIAN CONNECTIONS

Improve pedestrian connections and amenity, particularly around Carnegie Station.

Key elements of this project include:

- Create a shared space on Egan Street, connecting the urban renewal precinct to the Carnegie activity centre.
- Convert Morton Avenue to a one-way street (eastbound) and widen footpaths.
- Encourage the provision of a new pedestrian link from Egan Street to Dandenong Road.
- Ensuring high quality pedestrian and cycling connections to and through the activity.

Considerations for this project include:

- Advocate to State Government for the retention and protection of public open space to the north of the train station.
- Work with landowners to facilitate pedestrian links and public realm improvements.

IMPROVE THE RETAIL STREETSCAPE

Key elements of this project include:

- Increase amenity on Koornang Road by improving street lighting, pedestrian crossings and seating.
- Provide more trees and greening of the streetscape.

Considerations for this project include:

- Working with the Carnegie Traders Association and community members.
- VicRoads approval for additional pedestrian crossings.

Delivery of these projects will require Council to work with a range of stakeholders, either through advocacy or partnership, in order to undertake streetscape and public realm improvements in an orderly and staged manner. Stakeholders and project partners include local traders, landowners, VicRoads, and Public Transport Victoria. Delivery of these projects will require the preparation of a detailed implementation plan, following adoption of the Structure Plan and its associated projects.

It is not feasible to fully scope, design and budget for these types of activities at the structure planning stage. Each project will need to go through Council's processes for establishing and implementing significant community and capital works projects. As noted above however, in the case

of each of the projects, key ‘considerations’ are noted in the draft Structure Plans. These considerations flag the matters and issues that will need to be addressed for the project to proceed and succeed. In some cases, these are straightforward; in other cases, they highlight that one project is contingent on another. The adopted Structure Plans will form the basis for future public realm works, which will be subject to detailed funding, scheduling and design processes over the life of the Plans. To facilitate this process, a detailed implementation plan for each centre will be prepared following Council’s adoption of the Structure Plans.

KEY ISSUES AND OPPORTUNITIES – STREETS AND OTHER PUBLIC SPACES

- Four public realm projects are proposed in the draft *Structure Plan* resulting from ongoing community engagement and technical analysis.
- A detailed implementation plan will be required, following the adoption of the structure plan, in order to deliver public realm projects in an orderly and staged manner.

MOVEMENT AND PARKING

Council commissioned MR Cagney to provide an independent and expert view on transport-sector interventions that could support land-use change and development within the Carnegie activity centre.¹² The resultant discussion paper is based around the following policy directions, which are consistent with the directions provided by existing local and state-level policy:

- *Put walkability first – providing good conditions for walking improves the safety of the overall transport system, supports public transport use and local amenity while reducing traffic congestion.*
- *Manage parking for streetscape amenity, town centre vitality and to support mode shift – parking management can play a major role in changing transport behaviour.*
- *Intensify development around rapid transit – public transport works best in locations with dense walk-up catchments and excellent walking facilities to stations and stops.*
- *Ensure cycling plays its role – cycling can play a significant role in providing for short-medium distance trips, extending the range of trips that can use active transport.*
- *Work toward ‘vision zero’ road deaths and serious injuries – improving the safety of the transport system is a critical component of encouraging walking and cycling.*
- *Plan for attractive congestion-free networks rather than reducing congestion – prioritising congestion reduction with road capacity expansion risks making the environment for other modes less attractive. Public transport and cycling networks can provide congestion-free networks which is a more financially viable and effective measure.*

In the context of these policy directions, the discussion paper identifies the following challenges and opportunities:

Policy direction	Key challenges	Key opportunities
Put walkability first	Long trip distances to major employment centres results in limited use of walking for commuting trips. Presence of some major barriers that reduce the connectivity of the walking network; Dandenong Road.	Very high levels of existing walking to the activity centre for accessing shops and rail station (50-70 per cent mode share). Increased pedestrian permeability accompanying elevated rail project. Intensification of population and employment will provide a greater diversity of local services for more people, make walking a more viable choice. High student population living near to

¹² Glen Eira Transport Analysis and Forecasting Discussion Paper: Carnegie Activity Centre, MRCagney Pty Ltd

		university campus mean walking is an easy access option.
Manage parking for town centre vitality and to support mode shift	<p>Managing increased demand for parking accompanying residential and commercial development and population growth.</p> <p>Making trade-offs between kerbside space for parking and other uses such as cycling lanes, tram priority and extended footpaths.</p> <p>Ensuring parking is not 'over-supplied' through application of minimum parking regulations accompanying new development, or through over-supply of public off-street parking facilities.</p>	<p>Potential to consolidate parking supply at Council-owned with multi-story parking buildings.</p> <p>Potential to re-purpose on-street parking on Koornang Road.</p> <p>Potential to reduce council land devoted to off-street parking.</p> <p>Potential to reduce parking demand through increasing use of walking, cycling and PT.</p>
Intensify development around rapid transit	<p>Ensuring intensification is accompanied by improvements to local amenity and is not accompanied by congestion on local transport networks.</p> <p>Encouraging increased job density alongside residential population density.</p>	High market demand for residential development around rapid transit reflected in highest recent level of development activity in Glen Eira.
Ensure cycling plays its role	<p>Limited provision of a connected, safe cycling network limits uptake of cycling to a niche user group.</p> <p>Relatively high number of cycle crashes in area.</p> <p>Reallocation of kerbside space for improved cycling facilities will require trade-offs with provision of on-street parking and other potential uses such as extended footpaths.</p>	<p>Provision of safe cycling facilities alongside rail elevation project.</p> <p>Low existing cycle mode share means major opportunities for growth.</p> <p>Flat terrain supports increased cycling uptake.</p> <p>Reasonably high levels of activity density means a diversity of destinations are available with short trips, well-suited to cycling.</p> <p>Provision of high quality infrastructure can lead to major increases in cycling demand.</p>
Work toward 'vision zero' road deaths and serious injuries	<p>Reducing road crash deaths and serious injuries, particularly pedestrian and cyclist crashes on Koornang Road.</p> <p>Lowering speed limits will require trade-offs with other goals for high speed vehicle movement.</p>	Walking and cycling facility upgrades can improve safety.

Plan for attractive congestion-free networks rather than reducing congestion	Major mode shift to public transport depends on the quality and connectivity of broader metropolitan-scale networks. High levels of current overcrowding may be reducing the appeal of rail.	Opportunities for tram extensions to better serve the town centre. Future improvements to Carnegie Station and increased rail frequencies accompanying Melbourne Metro project will make rail more attractive.
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This discussion paper has, in part, informed the directions and interventions proposed in the draft Structure Plan. However, in response to on-going community concern regarding car parking, further analysis has been undertaken to ensure future interventions do not result in a parking shortfall (below). Further, community concern regarding the intensity of development on council-owned car parks has been acknowledged (addressed in earlier sections of this report).

MOVEMENT

Carnegie activity centre is 13km south east of Melbourne’s CBD. The centre is serviced by an extensive road network, Carnegie Station and multiple bus routes.

The Carnegie shopping strip is located on the Koornang Road, running north-south from its junction with Dandenong Road/ Princes Highway, a major east-west traffic route for the metropolitan region. Neerim road is the other major east connection within the activity centre.

The Cranbourne/ Pakenham rail line provide frequent passenger services between Carnegie and the Melbourne CBD while also providing connections to major employment and activity centres in the South-East of the Melbourne metropolitan area. Multiple bus routes and a tram route also serve the activity centre area, with trams providing east-west connectivity toward Elsternwick and onward to the CBD.

Walking networks are primarily comprised of footpaths that are near-universally provided on all streets within the activity centre. Major road intersections include signalised pedestrian crossings. Cyclists use the road network and dedicated cycling facilities are limited to a painted lane on Neerim Road.

The 10-minute walking catchment extends a maximum of approximately 700m distance from the retail strip. The relatively regular shape of the walking catchment reflects the good pedestrian connectivity enabled by the regular street grid. The railway and Princes highway introduces barriers to north-south pedestrian connectivity.

Current changes underway to the transport network within the Carnegie activity centre include construction of a new elevated railway station and the elevation of the railway line as part of the broader Caulfield to Dandenong Level Crossing Removal Project. The project will upgrade the

quality of the rail station and surrounding public spaces as well as enabling improved walking and cycling connectivity beneath the elevated line.

WALKING AND CYCLING

A PedShed is a map that shows the walkable catchments this is a simple technique for comparative evaluation of how easy it is to move through an urban area to get to and from centres or facilities.

These maps are the best estimates of walkability.

The below map shows the actual area within a 10 minute walking distance from the retail strip along Koornang Road, Carnegie.

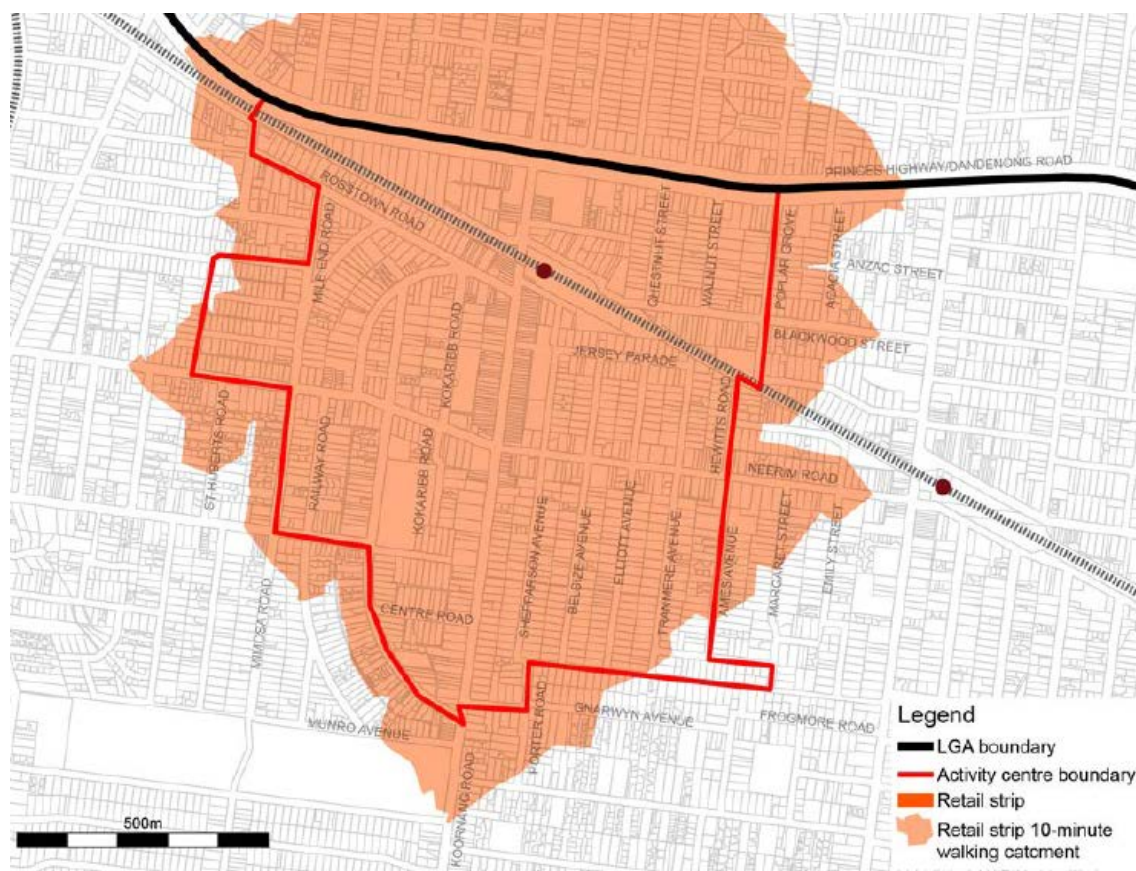


Figure 21 PedShed map for Carnegie (Source: MRCagney)

Recent community consultation undertaken by Council of over 2,100 surveys completed, reflect respondent modes of transport when accessing their local centres.¹³ Respondents were able to select more than one mode if they do access their centres in different ways.

	% Drive	% Walk	% Other (Bike, PT)
Major Activity centres			
Bentleigh	46	43	11
Carnegie	36	47	17

¹³ Glen Eira Activity Centres Community Engagement Summary Final Report, Co Design Studio

Caulfield Junction	35	48	17
Elsternwick	34	51	15
Moorabbin	45	35	20
Major Average	39	45	16

A comparison of Public Transport Patronage data collected at each station in 2013-14 shows how passenger arrival mode types.¹⁴

	Bus	Car	Bike	Other	Train	Tram	Walk
Major Activity Centre							
Bentleigh	10.4 %	24.7 %	0.9 %	0 %	4.0 %	0 %	59.9 %
# week day entries	273	645	24	0	103	0	1564
Carnegie	8.6 %	18.4 %	0.5 %	0 %	1.0 %	0.0 %	71.5 %
# week day entries	272	576	15	0	32	0	2245
Elsternwick	5.3 %	22.6 %	0 %	0 %	2.3 %	18.6 %	51.3 %
# week day entries	192	825	0	0	84	678	1871

TRAFFIC MOVEMENT

In order to ascertain recent and accurate traffic data Council commissioned onemilegrid to conduct traffic movement counts at key intersections within the activity centres, as shown in the images below.¹⁵

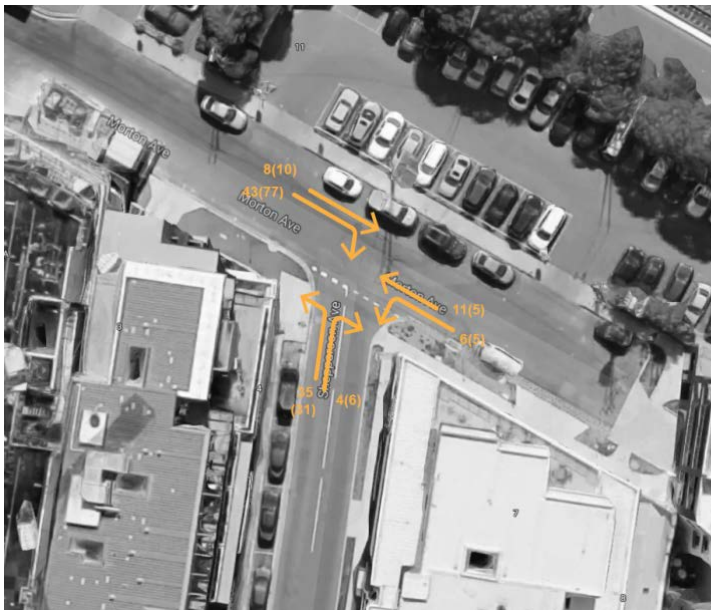
The orange text in the images shows the direction of travel, the number of car movements in the AM peak and, in brackets, the number of car movements in the PM peak.

¹⁴ <https://www.ptv.vic.gov.au/about-ptv/ptv-data-and-reports/research-and-statistics/>

¹⁵ Glen Eira Transformative Concepts Review 2017, onemilegrid



Koornang Road / Morton Avenue Street - AM (PM)



Morton Avenue / Shepperson Avenue Street - AM (PM)



Shepperson Avenue / Neerim Road Street - AM (PM)

To assess the operation of the intersection the traffic volumes have been input into SIDRA Intersection, a traffic modelling software package. The SIDRA Intersection software package has been developed to provide information on the capacity of an intersection with regard to a number of parameters. Degree of saturation (DoS) represents the ratio of the traffic volume making a particular movement compared to the maximum capacity for that particular movement. The DoS provides a rating of the performance of intersections, ranging from *Excellent* to *Very Poor*.

Degree of Saturation	Rating
0-0.6	Excellent
0.61-0.70	Very Good
0.71-0.80	Good
0.81-0.90	Fair
0.90 – 1	Poor
Above 1.00	Very Poor

The DoS for each of the assessed intersections is provide below.

Intersection	Peak	Approach	D.o.S
Koorang x Morton	AM	Koorang N	0.17
		Koorang S	0.37
		Morton	0.1
	PM	Koorang N	0.32
		Koorang S	0.23
		Morton	0.09

Morton x Shepparson	AM	Morton W	0.03
		Morton E	0.01
		Shepparson S	0.03
	PM	Morton W	0.05
		Morton E	0.01
		Shepparson S	0.03
Shepparson x Neerim	AM	Shepparson N	0.09
		Neerim W	0.18
		Neerim E	0.2
		Shepparson S	0.08
	PM	Shepparson N	0.19
		Neerim W	0.25
		Neerim E	0.22
		Shepparson S	0.05

OBSERVATIONS

- Carnegie train station has the highest walk-up catchment with over 2,245 people walking to the station. Car arrivals are the lower than both Elsternwick and Bentleigh at 18.5 per cent.
- The reasonably high proportion of access by car is emphasised by the results of car park surveys of Carnegie, which indicate that the highest proportion (around 30 per cent) of people who arrive by car live within the Carnegie centre's post code.
- The majority of the structure plan areas are within a 10 min walking catchment of the retail strip.
- The major intersections SIDRA analysis results show that all intersections are currently operating under 'excellent' conditions during both the morning and afternoon peak hours
- Morton Avenue experiences a higher volume of vehicles making the left in southbound 70 PM peak.
- The majority of vehicles entering Morton Avenue continue to Shepparson Avenue.
- Vickery Street experiences a high volume of southbound movements in the PM peak 120
- Car use within Carnegie is significantly lower than Bentleigh but approximately equal to Elsternwick.

PARKING

EXISTING PARKING SUPPLY

The Carnegie activity centre currently has a moderately high level of parking. It is primarily in the form of some medium and large at-grade public parking facilities provided behind the established shopping strip on Koornang Road.

Council Owned Car Parks	
On Street	409
Off Street	193
Total	602
Private Owned Public Car Parks	
Woolworths	81
Carnegie Central	376
Total	457
Grand Total	1,059

PARKING DEMAND

Surveys in Carnegie were commissioned by O'Brien Traffic on Thursday 27 July and Saturday 29 July 2017 on Council owned car parks.¹⁶

- The assessment of the public or shared parking available compared to the requirements set by the *Glen Eira Planning Scheme* based on the existing land uses would show an approximate undersupply based against these provisions. However this does not account for the temporal demand of different land uses, for example in Carnegie there are many restaurants that do not open during the day and vice versa many fresh food providers not open during the night.
- The occupancy studies indicate there are two clear peaks in parking demand for the centre, a lunch and dinner trade peak. During these peaks, parking demand is considered very high, approaching 90-95 per cent occupancy on both the typical week day and weekend.
- The car park to the north of the Carnegie library is notable for its sustained high parking demand from 9 am – 7 pm, however the very small size of this parking area suggests this of very little significance in the context of the greater activity centre.
- The commuter car parking at the train station may provide some relief on the weekend demand.
- Due to its distance from the Koornang Road shopping strip, the Carnegie Central carpark does not provide demand relief for the shopping strip.
- The surveys suggest there is an undersupply or high demand of public car parking in and around the Koornang Road shopping strip. The results indicate that parking occupancy consistently exceeds ideal levels of 70-85 per cent in Carnegie, suggesting that some mitigating measures, potentially including demand management strategies, are warranted.

¹⁶ See the *Parking Analysis for the Bentleigh, Carnegie and Elsternwick Structure Plans (Glen Eira City Council)* for detailed survey results.

- Saturday parking demand is generally consistent across all parking areas during peak periods from 11 am – 1 pm, however parking demand at Shepparson Ave is noticeably lower earlier in the day, suggesting that Shepparson Ave is in a less desirable location for parking in comparison to the comparably sized Kokaribb car park.
- Parking surveys do not cover on-street locations. Demand for on-street parking spaces in town centres is generally than off street locations due to convenience.

PARKING SHORTFALL ANALYSIS

In order to understand the extent of parking issues and implications for the future of the activity centre, a parking 'shortfall' analysis has been undertaken. The occupancy studies noted above have informed the analysis. The following tests were applied to assess parking shortfall:

1. Basic Test

$$[Basic\ shortfall] = [Planning\ Scheme\ Requirement] - [Total\ Public\ Parking\ Provided] .$$

This number is achieved by contrasting the planning scheme requirement and the total parking supply within the centre.

2. Shared Parking Test

$$[Shared\ Parking\ Shortfall] = [Planning\ Scheme\ Requirement \times Shared\ Parking\ Efficiency] - [Total\ Public\ Parking\ Provided].$$

Shared parking analysis acknowledges that the demand for parking is of a time-based nature. Demand fluctuates throughout the day operating on a peak and off-peak schedule depending on related land uses. For example the parking provided for the dentist could be easily used by customers of the nearby restaurant after hours when the dentist is shut.

3. 4 Hour Peak Occupancy Test

$$[4\ Hour\ Peak\ Occupancy] = [Sum\ of\ 4\ Highest\ Occupancy\ Rates\ for\ the\ Centre] / 4 .$$

The average 4-hour peak occupancy represents the average of the four highest hourly parking occupancies recorded across the day. The four highest parking occupancies do not have to occur across consecutive hours.

The analysis found that there is an existing parking shortfall, based on current car parking numbers.

Total Public Parking	Parking Assessment		
	Land Use	Shared Parking Efficiency	4 Hour Peak Occupancy
1,059	171 undersupply	75 oversupply	122 undersupply

DRAFT STRUCTURE PLAN.

Based on analysis and community feedback, the draft *Structure Plan* for Carnegie identifies the follow parking interventions for the centre.

1. Maintain existing car parking numbers at the Shepparson Avenue carpark.
2. Relocate Kokaribb Road car park in partnership with major supermarket to increase the number of car parks provided and create a new local urban park at street level.
3. Explore options to provide new public car parking in the urban renewal development area between the railway line and Dandenong Highway.
4. Prioritise Koornang Road for short term and needs-based parking on street.
5. Reduce parking on Morton Avenue to increase the footpath width and greenery.

The increase in parking at the Kokaribb Road car park is intended to provide for the additional car parking needs of the centre, whilst maintaining existing numbers at Shepparson Avenue. The overall projected change across council-owned car parks is listed below.

	Council-Owned Car Parks	No. of Existing Spaces	No. of Projected Future spaces	Change
A	Shepparson Street	121	121	0
B	Kokaribb Road	67	190	123
C	Child centre	5	0	-5
	Total	193	311	118

Analysis based on future parking numbers (based on structure plan strategies).

The parking shortfall tests noted above have been applied to the future scenario, to ascertain the impact of the proposed interventions. Applying these tests demonstrates that the net increase of 118 spaces across the activity centre will result in an oversupply of car parking spaces.

Total Future Public Parking	Increase	Parking Assessment		
		Land Use	Shared Parking Efficiency	4 Hour Peak Occupancy
1,247	188	17 oversupply	263 oversupply	66 oversupply

KEY ISSUES AND OPPORTUNITIES – MOVEMENT AND PARKING

- Pedestrian movement throughout the centre requires improvement to create better connections, particularly crossing Koornang Road.
- Analysis suggests that the key intersections are currently operating under excellent conditions.
- The draft *Structure Plan* interventions are expected to result in a net increase in car parking.

COMMUNITY INFRASTRUCTURE

EXISTING COMMUNITY FACILITIES

The distinguishing social infrastructure features of the Carnegie activity centre and its 400-metre catchment include the following:

- Ardrie Park and Villiers Square are the main public open spaces with Ardrie also catering for tennis.
- The Carnegie Library and Community Centre.
- One sessional Kindergarten (Carnegie), one occasional child care centre (Carnegie) and two long day child care centres.
- The Carnegie Library and Community Centre, and Carnegie Children's Multipurpose Centre, are also available as Council venues-for-hire. Senior citizens groups operate from Boyd Room at Carnegie Library and Community Centre.
- One school – Carnegie Primary School.
- The Rosstown Community residential aged care facility and Belsize Avenue Carnegie Independent Living Units.
- One emergency service facility - Carnegie Ambulance Station.

AVAILABILITY OF AND ACCESS TO OPEN SPACE

Lord Reserve, Koornang Park and Packer Park are the three major Municipal open space reserves in Carnegie. All these reserves include a combination of sporting facilities and unstructured recreation and informal use with different characters.

Following is a brief summary of the key statistics for quantity of open space in Carnegie, as identified in the *Glen Eira Open Space Strategy*:

- 21.07 hectares of open space;
- 12.2 per cent of the total suburb area is open space;
- 5.7 per cent of the total open space in the City of Glen Eira; and
- 12 sqm of open space per person, based on the estimated population for 2013.

Within 400 metres of the precinct, other major areas of open space include Mallanbool Reserve, Duncan Mackinnon Reserve, Murrumbeena Park and East Caulfield Reserve.

The main gaps in the distribution of open space in the suburb of Carnegie are shown in Figure 22.

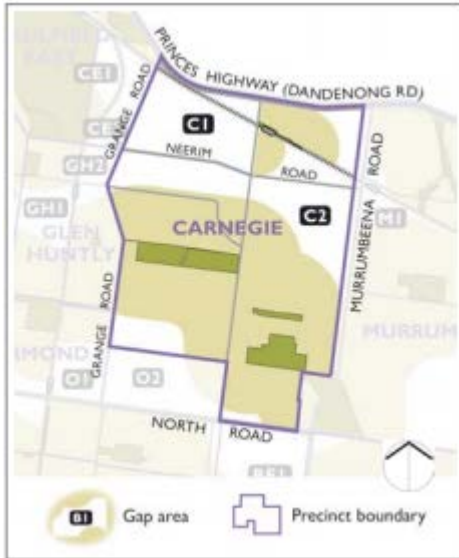


Figure 22 Open Space Gaps (Glen Eira Open Space Strategy)

Both of the identified gap areas are within the activity centre boundary. The *Glen Eira Open Space Strategy* addresses these gaps as follows:

Gap Area	Description	Conclusions for gap areas
C1	Located in the north-west area of Carnegie, this coincides with the catchment of both the Carnegie Urban Village and Glen Huntly Neighbourhood Centre and extends from the Princes Highway in the north down to Glen Huntly Road. Population increase in this gap area is forecast to occur, and already there are some defined areas with a high proportion of multi-unit developments in the catchment.	Provide a new Small Local open space in the catchment of the Carnegie Urban Village on the west side of Koornang Road, north of Neerim Road for both the existing and forecast population. Provide a new Small Local open space in the catchment of the Glenhuntly NC, south of Neerim Road for the existing and forecast population.
C2	This gap area is primarily south of Neerim Road and between Koornang and Murrumbeena Roads. The catchment of both the Carnegie Urban Village and the Murrumbeena NC falls within the gap area. Increased urban densities are forecast within the gap area. Immediately south of the gap area is a sub-precinct with a high proportion of multi-unit developments.	Provide a new Local open space south of Neerim Road within easy walking distance of the existing and forecast population.

The park in the location of the Kokaribb Road carpark (proposed in the draft *Structure Plan*) seeks to address the identified open space shortfall in Carnegie.

CO-LOCATION AND COMMUNITY HUBS

Co-location of community facilities is emerging as the best practice model for the provision of local government services. In this context, development of the Shepparson Avenue carpark may provide opportunities for co-location of facilities in the future.

SECURING SIGNIFICANT COMMUNITY BENEFIT THROUGH DEVELOPMENT

Council commissioned a Discussion Paper to explore the topic of securing significant community benefit through development. Case studies undertaken for this paper identify a number of critical steps to ensure the success of a community benefits scheme:

- Development of a Community Benefit Strategy that provides strategic justification for contributions or provision agreements.
- Detailed economic and property analysis to understand the market and capacity.
- Legal and statutory assessment to ensure legitimacy of mechanisms and translation into statute.

The concept of Community Benefit was included in the draft *Quality Design Principles* and *Draft Concept Plan*. These documents formed the basis of Stage Five of community engagement. Potential categories of community benefit proposed during this stage were:

- greater employment (office or health);
- diverse housing (affordable, aged care, student, short-stay accommodation);
- additional public parking;
- new street connections; and
- community uses.

Following on from the previous stages of community engagement, the draft *Quality Design Guidelines* outline Council's approach to achieving community benefit through development, as follows:

Major new developments should contribute to and enhance local communities. Developers may recognise the value of providing a significant community benefit through new developments; however, there is often no clear framework for when and how this should be delivered. By providing strong guidance from the outset, Council can achieve positive outcomes for our community as part of major developments.

KEY OUTCOMES

- To ensure identified strategic and urban renewal developments deliver a significant community benefit.

APPROACH

The following taller building types (above five storeys) should be applied in identified strategic opportunity areas where developments should provide a significant community benefit:

<i>BUILDING TYPE</i>	<i>PREFERRED HEIGHT</i>	<i>MAXIMUM HEIGHT (IN IDENTIFIED AREAS AND PROVIDING A SIGNIFICANT COMMUNITY BENEFIT)</i>
<i>Strategic site A</i>	<i>6 storeys</i>	<i>8 storeys</i>
<i>Urban renewal A</i>	<i>8 storeys</i>	<i>12 storeys</i>
<i>Urban renewal B</i>	<i>6 storeys</i>	<i>8 storeys</i>

Proposed buildings should not exceed the preferred height. Proposals seeking to exceed the preferred height must demonstrate a significant community benefit (to Council's satisfaction) and must not exceed the maximum height.

Community benefit items may include but are not limited to:

- diverse housing mix that responds to an identified community need (affordable housing, aged care, student, short-stay accommodation — not just a variety of apartment layouts and sizes);*
- additional public parking;*
- new street or laneway connections; and*
- needed community uses and facilities.*

This list does not identify every type of community benefit, but rather notes emerging priority items.

Contributions for each development should be determined in consultation with Council to determine the best strategic outcome and will be clarified through future strategic work.

It is important to note that developments still need to meet basic requirements that are not considered community benefit, including as relevant:

- open space provisions and monetary contributions;*
- development contributions;*
- minimum car parking provisions;*
- canopy tree planting and urban greenery; and*
- minimum commercial floor areas as identified in commercial and mixed-use areas.*

COMMUNITY BENEFIT EXAMPLES

Examples of community benefit may include but are not limited to the following:

- Provide a diverse housing mix that responds to the needs of the local community (needs determined based on relevant Council research, policy or strategies). The mix should include more than just a*

range of apartment sizes and layouts, and may include affordable housing, aged care, student and short stay accommodation.

- *Where identified in Structure Plans and other strategic documents, provide new street or pedestrian connections. This should be undertaken in consultation with Council and landowners of other sites required to complete a through-connection.*
- *Provide community uses and facilities, in consultation with Council, that respond to the needs of the local community.*

KEY ISSUES AND OPPORTUNITIES – COMMUNITY INFRASTRUCTURE

- There are open space gaps in the north east and south west areas of the activity centre. The draft Structure Plan seeks to address the open space shortfall with the conversion of the Kokaribb Road car park into a park.

LIST OF RESEARCH AND CONSULTANT REPORTS

- Assessment of the Economic Impacts of Transformation Concepts on Activity Centres: Bentleigh, Carnegie and Elsternwick, 2017 (Blair Warman Economics)
- City of Glen Eira Analysis of housing consumption and opportunities 2017 (.id)
- Glen Eira Activity Centres Community Engagement Summary Final Report 2017 (Co Design Studio)
- Glen Eira Community Benefits Discussion Paper 2017 (Planisphere)
- Glen Eira Community Profile (online resource) (.id)
- Glen Eira City Council Review of Existing Heritage Precincts 2017 (Glen Eira City Council)
- Glen Eira Open Space Strategy (2014)
- Glen Eira Planning Scheme Review 2016 (Glen Eira City Council)
- Glen Eira Activity Centres Urban Context Report 2017 (Planisphere)
- Glen Eira Draft Urban Design Guidelines 2017 (Planisphere)
- Glen Eira Economic Analysis and Forecasting Study 2017 (Blair Warman Economics)
- Glen Eira Transformational Concepts Draft Report 2017 (Planisphere)
- Glen Eira Transformative Concepts Review 2017 (onemilegrid)
- Glen Eira Transport Analysis and Forecasting Discussion Paper: Carnegie Activity Centre 2017 (MRCagney)
- Glen Eira Urban Design Analysis Report 2017 (Planisphere)
- Parking Analysis for the Bentleigh, Carnegie and Elsternwick Structure Plans (Glen Eira City Council)
- Peer Review of Glen Eira's Draft Quality Design Guidelines and Strategic and Urban Renewal Development Plans Analysis, 2017 (Aecom)
- Plan Melbourne 2017-2050 (State Government of Victoria)
- Planning Strategy Impacts on Housing Opportunity (Glen Eira City Council)
- Southern Sub Residential Zones State of Play, Region State of Play, 2016 (Managing Residential Development Taskforce, Department of Environment, Land, Water and Planning)