

Ringwood Metropolitan Activity Centre Masterplan – Background Report

Working towards an attractive, thriving and well built community







**Attractive, thriving
and well built**

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List of abbreviations

MAC	Metropolitan Activity Centre
CBD	Central Business District
ERP	Estimated Resident Population
VPO	Vegetation Protection Overlay
SLO	Significant Landscape Overlay
MSS	Municipal Strategic Statement
DDO	Design and Development Overlay
DPO	Development Plan Overlay
SBO	Special Building Overlay
DCPO	Development Contribution Plan Overlay
EAO	Environment Audit Overlay
HO	Heritage Overlay
VPA	Victorian Planning Authority
LGA	Local Government Area
TOD	Transit Orientated Development
PB	WSP Parsons Brickerhoff
VITM	Victorian Integrated Transport Model
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
SUP	Shared User Path
DCP	Development Contribution Plan



Introduction

This report contains background information on current trends and emerging issues that are likely to impact on the future of Ringwood Metropolitan Activity Centre (MAC) from now until 2030.

The purpose of this report is to detail why Ringwood MAC is important; how the review of the Ringwood MAC Masterplan was undertaken; and to provide an overview of the key findings of the strategic background work that informed the preparation of the Ringwood MAC Masterplan 2018.



Strategic Context

Plan Melbourne

Plan Melbourne (2017) is the Victorian Government's strategy to guide the growth of metropolitan Melbourne over the next 35 years and is built on a vision for Melbourne to *"continue to be a global city of opportunity and choice"*.

Plan Melbourne recognises Metropolitan Activity Centres (including Ringwood) and Employment Clusters as the cornerstone of establishing more jobs, housing and services in the suburbs. The 'polycentric city' concept encourages planning for more jobs close to where people live and vice versa. Activity centres should be planned to provide good access to a range of major retail, community, government, entertainment, cultural and transport services, with a focus for higher density development.

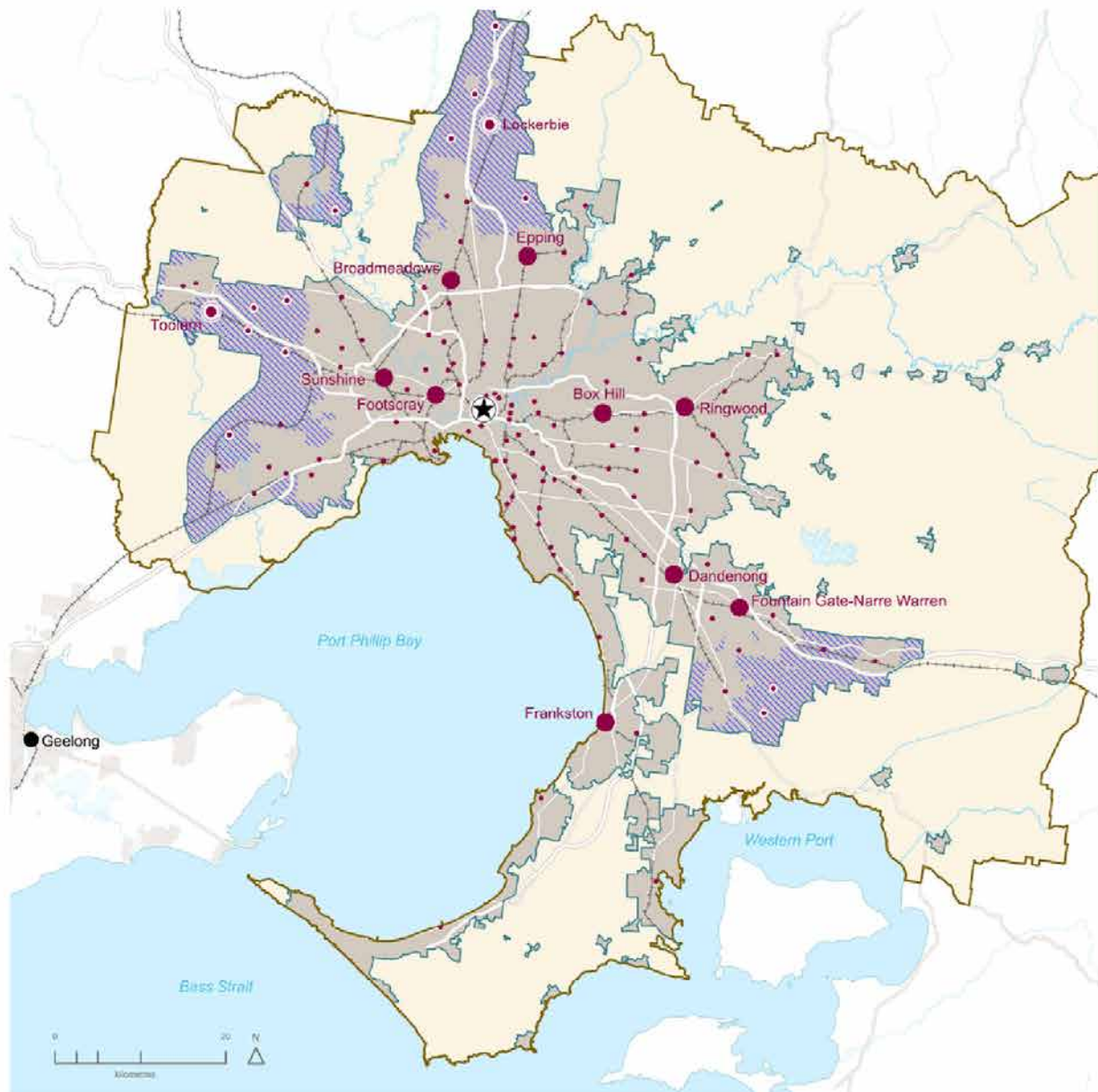
Increased development around these Centres, that focus on public transport and active travel, seeks to provide a more sustainable urban form across the metropolis, reduce trip lengths and environmental impact from greenhouse gas emissions.

Plan Melbourne commits to delivering more housing closer to jobs and public transport (Direction 2.2) and classifies three types of activity centre:

- Metropolitan Activity Centre
- Major Activity Centre
- Neighbourhood Activity Centre.

Ringwood is identified as one of nine Metropolitan Activity Centres (MAC) in Plan Melbourne, and therefore will be a focus for growth (refer to Figure 1 on page 8).





Map 14

Metropolitan and major activity centres

- | | | |
|---|-------------------------|---------------------------------|
| ★ Central city | — Urban growth boundary | — Road network |
| ● Metropolitan activity centre | ■ Urban area | — Rail network |
| ● Metropolitan activity centre — future | ■ Growth area | — Waterway |
| • Major activity centre | ■ Green wedge land | ■ Waterbody |
| • Major activity centre — future | | ■ Metropolitan Melbourne region |

Source: Department of Environment, Land, Water and Planning

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Environment,
Land, Water
and Planning

Figure 1: Metropolitan and major activity centres (Plan Melbourne)

Maroondah 2040: Our Future Together

The **Maroondah 2040: Our Future Together** Community Vision captures the aspirations, desires, dreams and priorities of the community looking ahead to the year 2040 and beyond.

Many of the themes covered in Maroondah 2040: Our future together (refer to Figure 2) are also supported in Plan Melbourne.

This long-term community vision provides a 'roadmap' for the community, Council and other levels of government to partner together and create a future that enhances Maroondah as a great place to live, work, play and visit.

The Vision provides a blueprint for the future and hopes of our community as follows:

In 2040, Maroondah will be a vibrant and diverse city with a healthy and active community, living in green leafy neighbourhoods which are connected to thriving and accessible activity centres contributing to a prosperous economy within a safe, inclusive and sustainable environment.

Figure 2: Maroondah 2040 themes





The relevant key Ringwood MAC directions outlined in Maroondah 2040 include:

A Safe, Healthy and Active Community

- 1.1 Work in partnership to address community safety issues, with a focus on activity centres, public spaces, roads and public transport.
- 1.2 Plan and advocate for the application of community safety principles that facilitate a safe built environment.
- 1.12 Apply healthy by design principles in planning for the development and revitalisation of activity centres and public spaces.

A Prosperous and Learning Community

- 2.2 Promote and leverage the strategic location of Ringwood as the Metropolitan Activity Centre for the outer eastern region.
- 2.3 Promote the diversification and localisation of Maroondah's economy to stimulate job growth and encourage the community to work, shop and live locally.

A Clean, Green and Sustainable Community

- 4.3 Build the capacity of households and businesses to behave more sustainably, reduce waste and minimise consumption of natural resources.
- 4.10 Encourage increased green spaces within activity centres that link the built environment to the natural landscape.
- 4.13 Advocate for increased stormwater harvesting and greywater reuse by households and businesses.

An Accessible and Connected Community

- 5.1 Work in partnership to provide improved accessibility and safety for transport users across all modes.
- 5.4 Work in partnership to provide a safe and efficient integrated transport network that enhances liveability, encourages a shift in travel modes and promotes Maroondah as a 20-minute city.
- 5.6 Advocate for and encourage the use of sustainable transport by enhancing local access to public transport, supporting behavior change initiatives and enhancing the pedestrian and cycling network, including the provision of on-road bicycle lanes.

An Attractive, Thriving and Well Built Community

- 6.1 Encourage high quality urban design that provides for a healthy, attractive and desirable built form.
- 6.2 Work in partnership to ensure development considers urban design principles that enhance the connection between the built environment and the natural environment.
- 6.3 Work in partnership to deliver distinctive and high-quality architecture through the use of urban design guidelines and principles.
- 6.7 Plan and facilitate the development of a community where everyone can live, work and play locally.
- 6.8 Encourage and support the provision of a diverse range of housing across Maroondah, that meets the needs of current and future residents.
- 6.9 Encourage high density development in activity centres where there is access to high quality facilities, services and amenities.
- 6.10 Develop and implement an urban form that enhances the desirable attributes of Maroondah to protect and value ridgelines, vegetation, neighbourhood character, local history and cultural heritage.

Maroondah Strategic Framework

The City of Maroondah covers a land area of 61.4 square kilometres in Melbourne's outer east, 22 kilometres from the Melbourne Central Business District (CBD). The area is a substantially developed residential municipality, with an estimated population of 117,396 residents (2018).

Almost 9,000 businesses operate within Maroondah providing employment for almost 45,000 people. The largest employers are the manufacturing, retail and health care sectors.

Maroondah's Strategic Framework Plan is found in the Maroondah Planning Scheme and illustrates the key land use components and provide a focus for development in the municipality (refer to Figure 3). There are three guiding principles of the Maroondah Planning Scheme:

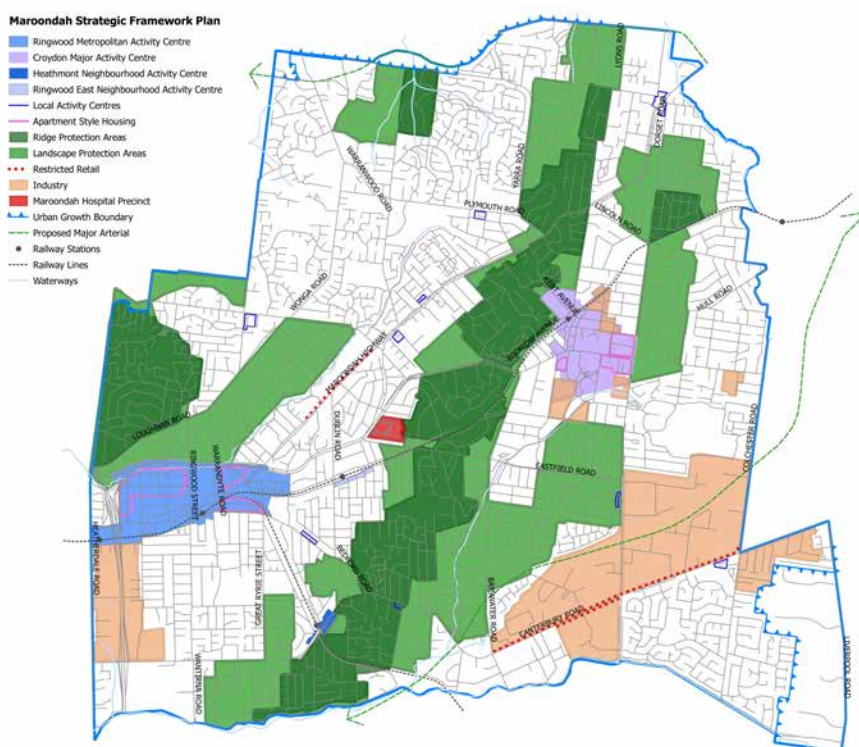
- The hierarchy of activity centres as the focus for growth in Maroondah between 2016 and 2040.
- Protection of areas of ridge lines and landscapes from significant development.
- Protecting and enhancing our environment and neighbourhood character.

Maroondah has major retail centres in Croydon and Ringwood and a further 21 local shopping centres throughout the municipality. The Bayswater North Employment Precinct is a regional economic hub where many national and international firms have established their headquarters.

Maroondah effectively operates a polycentric model of development, whereby the municipality and wider region is served by a hierarchy of centres. Ringwood MAC is second only to Melbourne CBD on the Plan Melbourne hierarchy and serves as a sub-regional catchment and contains much of the high density development in Maroondah.

Following the Ringwood MAC, Croydon, a Major Activity Centre, is next in the hierarchy, followed by Ringwood East and Heathmont, which are Neighbourhood Activity Centres. While these locations will cater for a different market and demographic to Ringwood MAC, the ageing and changing population is creating demand for diverse forms of development, close to existing services.

Figure 3: Maroondah Strategic Framework Plan





Context of the Ringwood MAC

Origins



Club Hotel, Ringwood, from Whitehorse Road. Mt Dandenong Road to old East Ringwood looking south, circa 1900-1910

The first settlers to the area were the Wurundjeri people of the Kulin nation. European settlement commenced in the 1830's with the land used for farming.

The original Ringwood village emerged in the mid-19th Century and flourished as a result of the extension of the railway line from Melbourne to Lilydale through both Ringwood and Croydon in 1882.

Township development increased following the post-war period and the City of Ringwood was declared in 1960. A major new retail centre was established with the construction of Eastland in 1967.

Ringwood has a variety of heritage places dispersed throughout Ringwood MAC.

Demographics

The 2016 Estimated Residential Population (ERP) for Ringwood MAC was 1,865 persons, with a population density of 11.62 persons per hectare. It is forecast to increase by more than 2,000 people to 3,934 by 2026. This is based on an increase of more than 900 households during the period, with the average number of persons per household rising from 1.99 to 2.13 by 2026 (refer to Figure 4).

In 2016, the dominant age structure for persons in Ringwood MAC was ages 25 to 29, which accounted for 15.8% of the total persons.

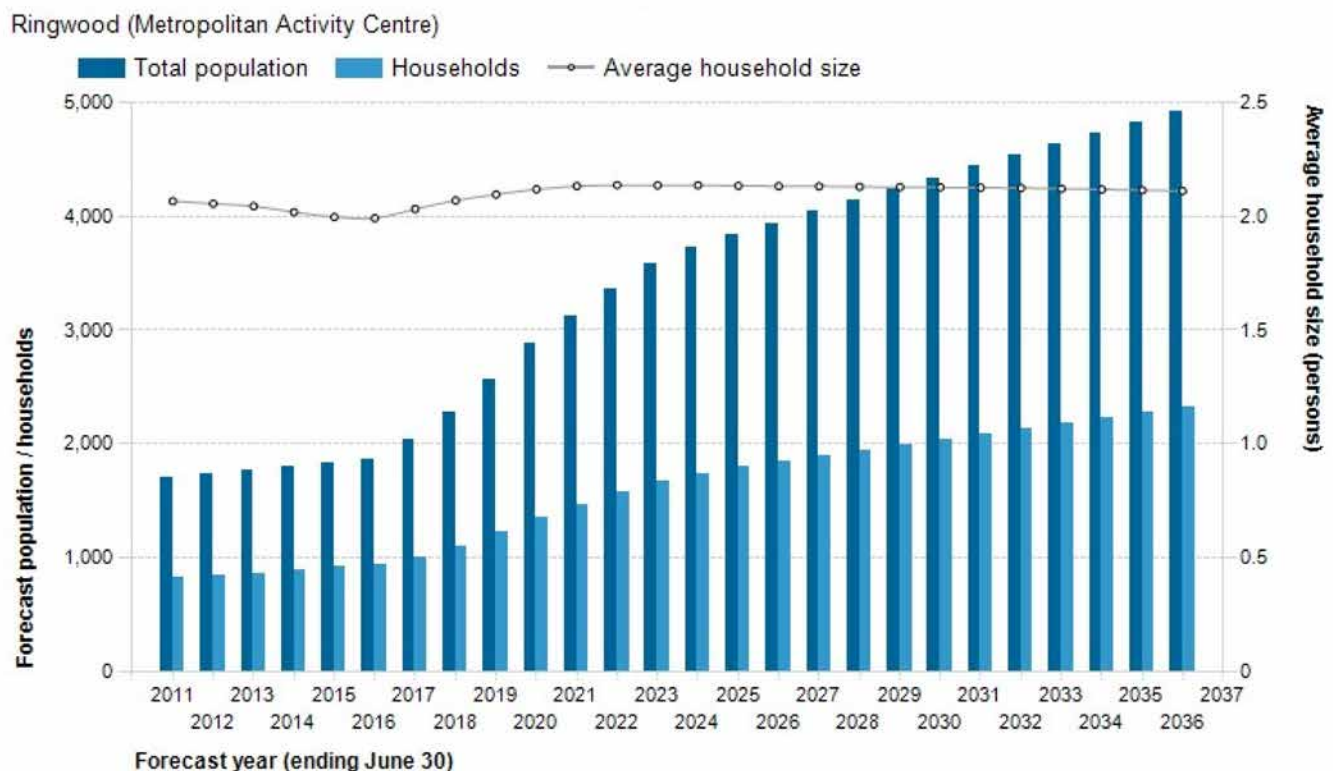
Between 2016 and 2026, the age structure forecasts for Ringwood MAC indicate a 160.1% increase in population under working age, a 158.7% increase in population of retirement age, and a 97.0% increase in population of working age.

The largest increase in persons between 2016 and 2026 is forecast to be in ages 20 to 24, which is expected to increase by 227 and account for 9.2% of the total persons.

The largest 5-year age group in 2026 is 25 to 29 years, with a total of 438 persons.

In 2016, the dominant household type in Ringwood MAC was 'Lone person households', and is expected to continue to be so up until 2026.

Figure 4: Forecast population, households and average household size - Ringwood (Metropolitan Activity Centre)



Population and household forecasts, 2016 to 2036, prepared by .id the population experts, October 2017.

.id the population experts



Vegetation and landscape

Ringwood MAC contains areas of significant remnant indigenous vegetation within open space including Ringwood Lake Park, Bedford Park and Mullum Mullum Creek. Native vegetation is protected by a Vegetation Protection Overlay (VPO) in the Planning Scheme.

Ringwood MAC presents a treed landscape character, consistent with the canopied nature of the entire Maroondah Council area, which is highly valued by the community. A number of areas within Ringwood MAC both residential and commercial in nature, are covered by a Significant Landscape Overlay (SLO) that identifies the importance of canopy trees to the character of Ringwood MAC.

Ringwood MAC is located at the base of the Loughnan Warranwood Ridge adjacent to Mullum Mullum Creek. Ringwood MAC has undulating topography and has many uninterrupted view points to the Dandenong Ranges.

The Mullum Mullum Creek, forms a relatively narrow channel along the north-western boundary of Ringwood MAC. The Mullum Mullum Creek Trail (off-road bike track) extends alongside the length of the Creek and ultimately to the Yarra Trail connecting to the CBD.

The treed and landscaped environment that Maroondah is known for plays a significant role in the character of Ringwood MAC in the form of both street trees and landscaped yards. Maintaining landscape connections including canopy trees that provide links to Mullum Mullum Creek and the broader Loughnan Warranwood Ridge, is also a key consideration to the form of future development and its setting.



The Mullum Mullum Creek Trail

Ringwood MAC Planning Framework

Strategic Statement

Council's Municipal Strategic Statement (MSS) found in Clause 21 of the Maroondah Planning Scheme identifies the Ringwood Activity Centre.

Clause 21.07 Housing and residential land use of the Maroondah Planning Scheme identifies in objective 6:

To encourage the development of additional dwellings within the Ringwood Metropolitan Activity Centre and the Croydon Major Activities Area.

With the strategy:

Encourage a mixture of residential development in identified areas within the Ringwood Metropolitan Activity Centre and the Croydon Major Activities Area at medium or higher densities to make optimum use of the facilities and services available.

Clause 21.08 Retail and commercial land use of the Maroondah Planning Scheme identifies in objective 2:

To consolidate the role of existing individual centres in the retail hierarchy.

With the strategy:

Maintain the hierarchy of commercial centres in Maroondah, based around the Ringwood Metropolitan Activity Centre and the Croydon Major Activities Area.

Local Planning Policy

The objective of Clause 22.05 Retail and commercial development is:

- To ensure that retail and commercial development builds upon existing commercial centres and public infrastructure and contributes to the development of a functional and sustainable urban form.

It is policy to:

- Ensure retail and commercial development reinforces the established pattern and hierarchy of activity centres in which shops, offices, public and community services and entertainment facilities are grouped.

The objectives of Clause 22.06 Ringwood Activity Centre are:

- To establish the Ringwood Activity Centre as the premier activity centre within the outer east of Melbourne, reinforcing its role as the principal retail, commercial, community, entertainment and employment focal point of the region.
- To encourage a range of commercial, civic and residential land uses, including higher density housing, that build on the existing and planned infrastructure of the Ringwood Activity Centre and provide the opportunity for multi-purpose trips.
- To encourage integration of public transport and land use planning.
- To encourage the consolidation of small fragmented allotments in order to create greater opportunities to intensify the level of all forms of development within the Activity Centre.

Zones

The predominant land use zones in Ringwood MAC are: the Commercial 1 Zone, Commercial 2 Zone and the Residential Growth Zone (refer to Figure 5). The Industrial 1 Zone and the General Residential Zone also exist in small pockets within Ringwood MAC, in addition to a number of public use zones related to transport, open space and waterways.



Figure 5: Existing zones in Ringwood MAC



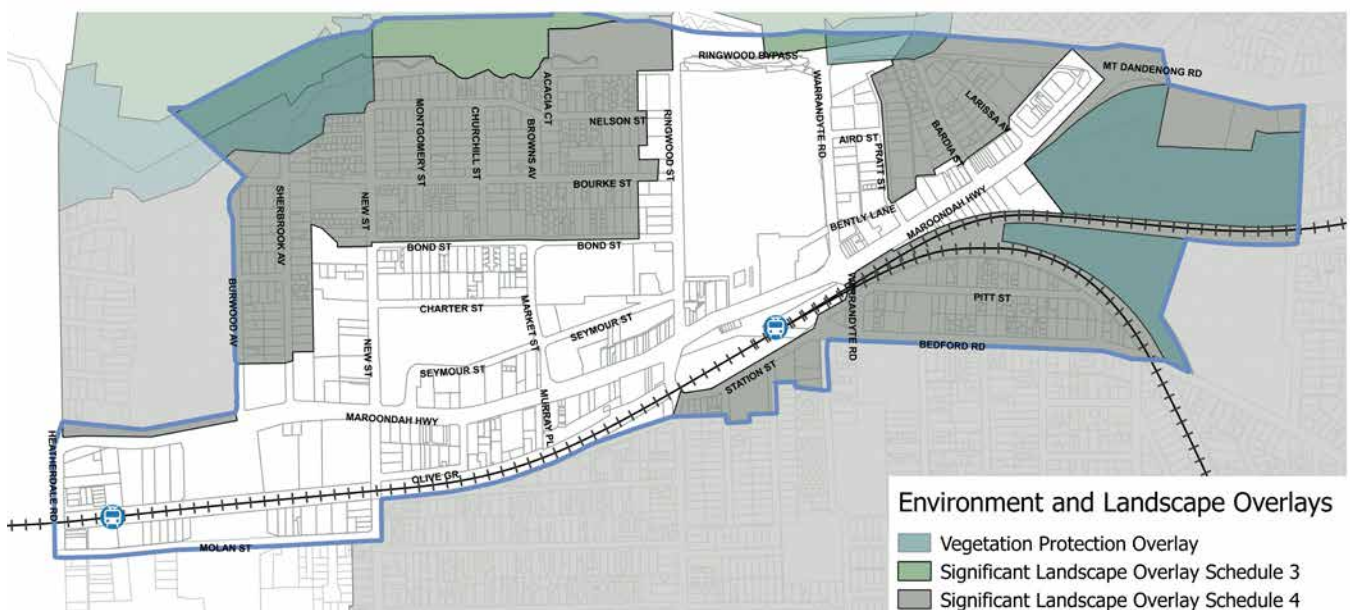
Overlays

The following planning overlays apply to the Ringwood MAC:

Environment and Landscape Overlays (refer to Figure 6)

- Vegetation Protection Overlay - Schedule 1 (VPO)
- Significant Landscape Overlay - Schedule 4 (SLO4)
- Significant Landscape Overlay - Schedule 3 (SLO3)

Figure 6: Existing Environment and Landscape Overlays in Ringwood MAC



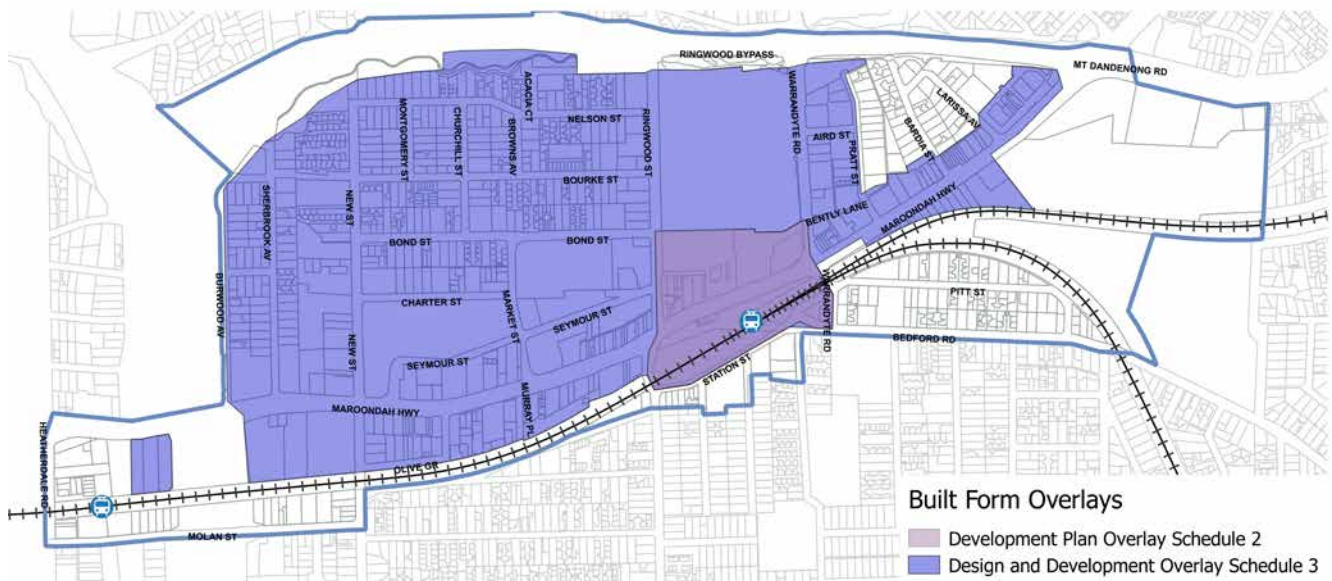
Built Form Overlays

- Design and Development Overlay – Schedule 3 (DDO3)
- Development Plan Overlay – Schedule 2 (DPO2)

Design and Development Overlay - Schedule 3 applies to the majority of activity centre including commercial and residential land and places controls on building heights and overall design objectives for the area.

Development Plan Overlay - Schedule 2 applies an overall development plan to the core of the activity centre including Ringwood Station and Eastland's southern entry facing Maroondah Highway.

Figure 7: Existing Built Form Overlays in Ringwood MAC





Land Management and other Overlays

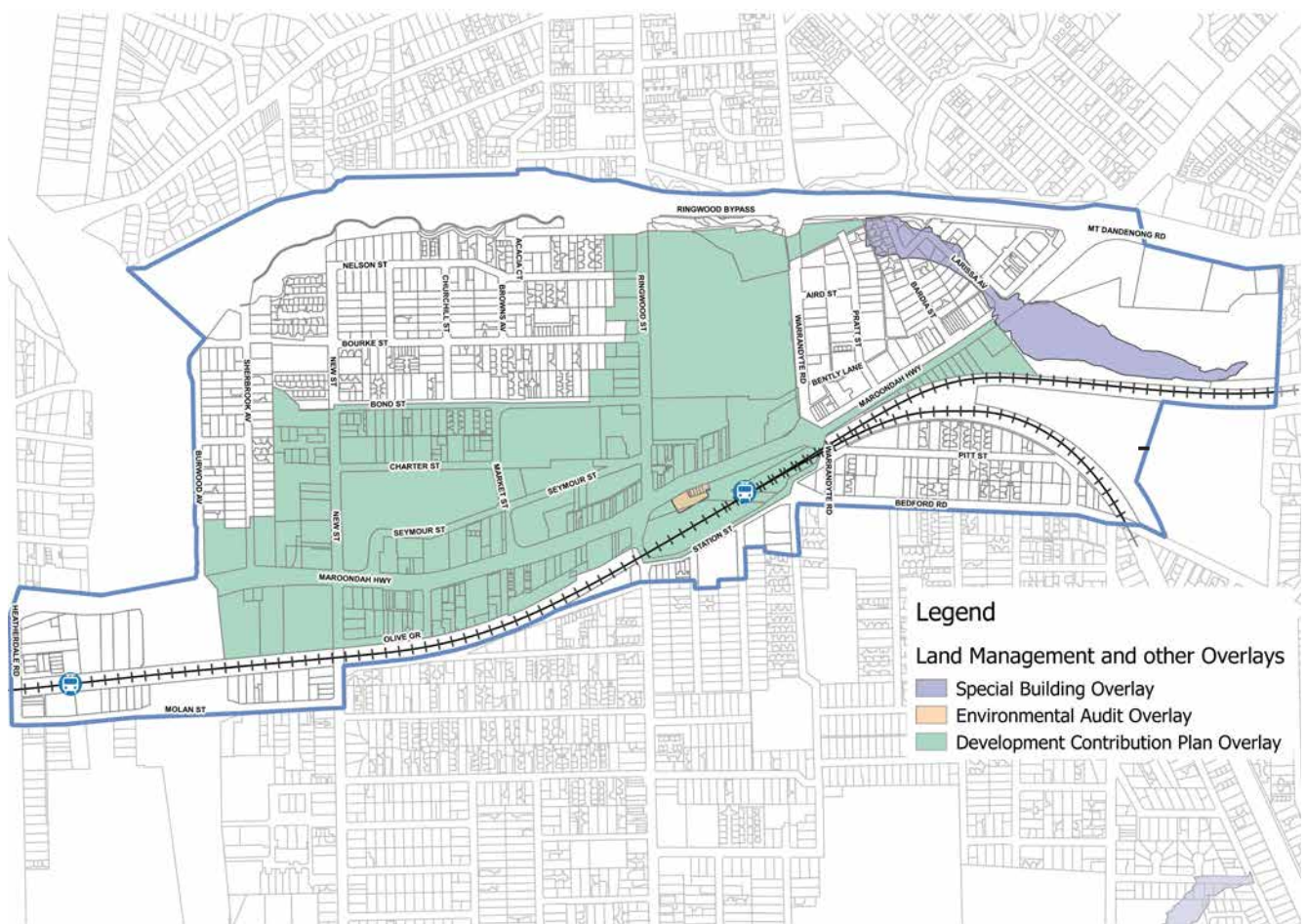
- Special Building Overlay (SBO)
- Development Contribution Plan Overlay – Schedule 1 (DCPO1)
- Environmental Audit Overlay (EAO)

The Special Building Overlay applies to land liable to inundation by overland flows from the urban drainage system.

Development Contribution Plan Overlay - Schedule 1 generally applies to the areas commercially zoned land, within the Ringwood MAC.

Environmental Audit Overlay applies to land at 110 Maroondah Highway, Ringwood as it is land identified as being potentially contaminated as it was previously zoned Public Use for Transport.

Figure 8: Existing Land Management and other Overlays in Ringwood MAC



Heritage Overlays

There are a variety of sites identified within the Ringwood MAC as having heritage significant. They are:

- Ringwood Cellars at 1 Bedford Road (HO5)
- Italianate House 11-15 Bedford Road, Ringwood (HO6)
- Ringwood Scout Hall c1960 located within Bedford Park (HO7)
- Ringwood Railway Station Victorian Heritage Register (HO39)
- Ringwood Memorial Clock Tower World War I Monument (HO40)
- Former Ringwood Fire Station, 253 - 257 Maroondah Highway (HO41)
- Manna Gum Eucalyptus Viminalis, behind 2-4 New Street on the south side of Mullum Mullum Creek (HO50, HO51).
- 10-12, 16 and 18 Warrandyte Road dwellings built c1900 (HO72, HO73, HO74)
- 20, 22 and 24 Pitt Street dwellings built c1900 (HO120).
- Former Ringwood Ambulance Depot, 28 Pitt Street built 1955 (HO121).

Figure 9: Existing Heritage Overlays in Ringwood MAC





Methodology

Ringwood MAC Masterplan was developed in six stages.

Stage 1 – Initial scoping

- Draft vision and objectives
- Community consultation on vision and high-level objectives.

Stage 2 – Background studies and technical work

- Commercial Supply analysis
- Transport and Movement Modelling Assessment
- Housing Review
- Demographics Analysis
- Transport and Movement priorities
- Urban Design Guidelines.

Stage 3 – Preparation of development contributions plan

- Infrastructure contributions investigations
- Update infrastructure costings.

Stage 4 – Preparation of updated Masterplan

- Stakeholder engagement
- Draft Ringwood MAC Masterplan.

Stage 5 – Community consultation

- Council adoption of draft Ringwood MAC Masterplan for community consultation.

Stage 6 – Final Ringwood MAC Masterplan

- Consideration of submissions received
- Formal adoption of Ringwood MAC Masterplan.



Background studies and technical work

Initial scoping

To provide the direction to establish a strategic evidence base for Ringwood MAC, initial scoping work was undertaken in the following areas:

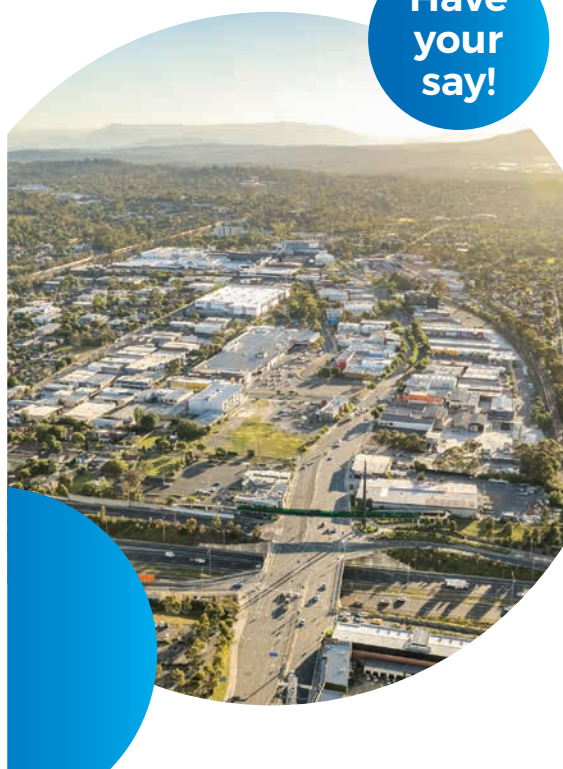
- Housing and Residential Development
- Urban Design
- Transport and Movement
- Community Facilities and Open Space
- Environmentally Sustainable Development.

Ringwood MAC



Ringwood MAC Draft Masterplan

Have your say!



Overview

A Key Issues Paper was prepared by the Victorian Planning Authority (VPA), June 2017, for state agencies and Council consultation. The objectives of this paper were to:

- Provide an overview of Ringwood MAC and place the Masterplan for Ringwood within a wider urban context.
- Discuss the land use changes that have occurred in Ringwood MAC in the last decade and set a clear direction for the future of Ringwood MAC.
- Identify key elements and attributes that differentiate Ringwood's character and place.
- Present key issues and opportunities for development and discuss how Ringwood MAC can accommodate future growth.
- Present a new 'Vision' for Ringwood MAC Masterplan.

A draft Concept Plan was developed by the VPA that sought to define sub-precincts to assist in creating a sense of place with the broader context of Ringwood MAC and highlights where specific land use and built form outcomes are expected (refer to Figure 10).



Figure 10: Draft Concept Plan (VPA)



What did we learn?

The issues raised for Ringwood MAC included the lack of commercial development, poor open space connections, lack of connectivity for modes of transport (walking and cycling) and inconsistent public realm amenity and traffic limitations.

What can the Masterplan do to address the findings?

The Masterplan will need to focus on providing direction in the form of development incentives, resolution of transport options, upgrades and connections, creation of place, landscaping and public realm design solutions and identify infrastructure required to support the existing and future community.

Sociodemographic

A summary of the 2016 census data relevant to Ringwood MAC was prepared by Maroondah Council, December 2017.

What did we learn?

- The 2016 ERP for Ringwood MAC was 1,850, with a population density of 11.62 persons per hectare.
- Ringwood MAC had a similar proportion of pre-schoolers and a lower proportion of persons at post retirement age than City of Maroondah in 2016.
- There were more professionals in Ringwood MAC in 2016 than any other occupation.
- Ringwood MAC households comprised 19% of couples with children in 2016, compared with 35% in the City of Maroondah. The proportion of lone person households in Ringwood MAC was 34.4% compared to 23.3% in the City of Maroondah.
- In Ringwood MAC, 50.3% of the dwellings were medium or high density, compared to 12% in the City of Maroondah.
- Dwellings with 2 bedrooms were the most common housing size in Ringwood MAC in 2016.
- In Ringwood MAC, 28% of households were purchasing or fully owned their home, 0% were renting privately, and 12.6% were in social housing in 2016.
- Analysis of car ownership in 2016, indicates 27% of households in Ringwood MAC had access to two or more motor vehicles, compared to 57% in the City of Maroondah.

Forecasts

- The population of Ringwood MAC is expected to increase by over 2,000 people to 3,934 by 2026, at an average annual growth rate of 7.75%.
- The largest increase in persons between 2016 and 2026 is forecast to be in ages 20 to 24, which is expected to increase by 227 and account for 9.2% of the total persons.
- In 2016, the dominant household type in Ringwood MAC was 'Lone person households', and by 2026 the largest forecast increase is expected in 'Lone person households'.

What can the Masterplan do to address the findings?

Ringwood MAC will continue to be an area for increasing population. Older residents and families are underrepresented within Ringwood MAC, while the 20 to 24 age cohort are forecast to increase in Ringwood MAC.

The Masterplan will need to focus on opportunities to cater for a diverse population with a mix of housing stock and facilities that service attract a broader population.



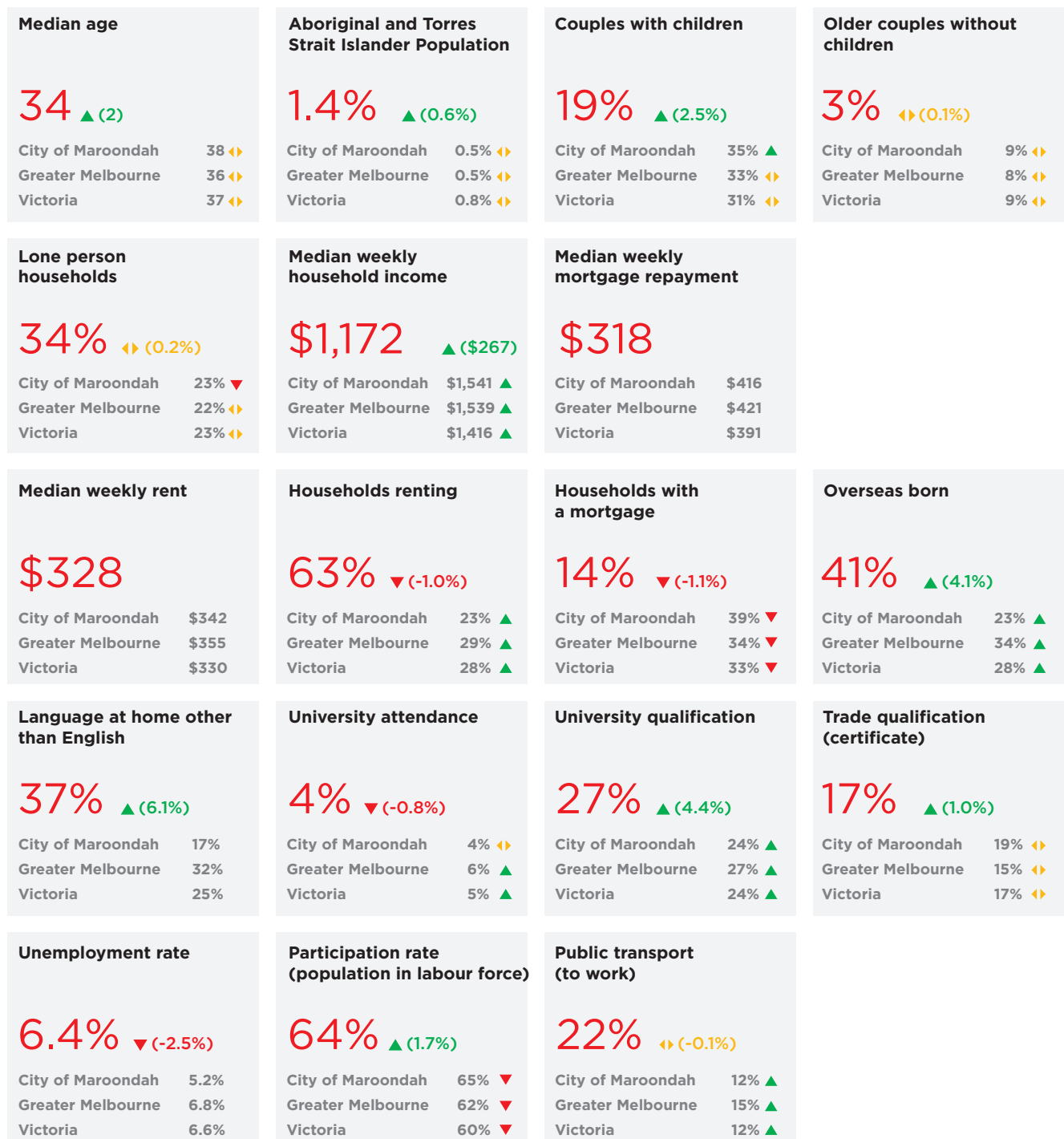
Demographics

The 2016 ERP for Ringwood MAC is 1,850, with a population density of 11.62 persons per hectare. It is expected to increase by over 2,000 people to 3,934 by 2026, at an average annual growth rate of 7.75%. This is based on an increase of over 900 households during the period, with the average number of persons per household rising from 1.99 to 2.13 by 2026.

Population highlights for Ringwood MAC (developed by .id the population experts) (refer to Figure 11).

Figure 11: Demographic Population Highlights for Ringwood MAC 2016

◆ No significant change since previous Census (less than +/-0.5%) ▲ Increased since previous Census
 ▼ Decreased since previous Census



Housing and Residential Development

Appropriate housing in Ringwood MAC is vital to ensure the success of the activity centre. The development of the 2016 Maroondah Housing Strategy provided the housing context for the Municipality and the function Ringwood MAC has in relation to housing. The Maroondah Housing Strategy and the background work undertaken is foundation in exploring Housing for Ringwood MAC.

The ***Ringwood MAC Housing Paper*** was prepared by Maroondah Council (August 2018), to:

- help articulate a vision for housing in Ringwood MAC
- explore the housing issues and challenges facing Ringwood MAC
- suggest a range of housing opportunities that can be explored in Ringwood MAC Key Issues Paper (VPA).

What did we learn?

- The planning controls for Ringwood MAC have been effective enabling an increase in housing development.
- When looking at Ringwood MAC, 98% of development is apartments. This provides an overwhelming indication of the success of current planning policy for Ringwood MAC.
- The drivers for apartment development include transport links, infrastructure, established housing prices and amenity, such as the activity centre of Ringwood and consistent with Plan Melbourne.
- Apartment development occurring in both the Ringwood and Croydon Activity Centres contain the largest projects within the Maroondah LGA.
- Apartment development occurring in Ringwood MAC has seen an increase in smaller one and two bedroom product, when compared to the broader Maroondah LGA.
- The level of apartment activity in Ringwood is increasing the level of housing diversity and affordability for Maroondah LGA.
- The largest amount of purchasers coming into Ringwood MAC originate from Box Hill and Ringwood respectively.
- There is a growing demand for apartments in Ringwood MAC.
- At the broad metropolitan scale, there is choice and diversity of housing stock across a range of sub-regional and local areas. It is this diversity that helps provide accessible housing choices to the general populace. As progressively smaller areas are investigated at the sub regional and LGA, the risk of reduced effective housing choices grows and a conscious policy response to increase the diversity of housing options is crucial in catering for ongoing demand.

What can the Masterplan do to address the findings?

- Continue to encourage apartment development with current planning controls.
- Continue to improve transport links, infrastructure and amenity.
- Continue to provide housing that is diverse and affordable.
- Investigate ways to ensure diversity of housing stock within Ringwood MAC that provides housing diversity to cater for a broader demographic.



Urban Design

Urban Design Guidelines for Ringwood MAC were prepared by Hansen Partnership (April 2018) as a basis to inform future urban design guidelines in Ringwood MAC.

The document seeks to be a concise, graphic document that provides direction for the shape and organisation of development and public space within Ringwood MAC.

The objectives of the Urban Design Guidelines are:

- To define the standard of urban design for Ringwood MAC that will contribute to wellbeing and liveability and ensure that future urban design is consistently high across Ringwood MAC.
- To ensure the future development of Ringwood MAC in both the public and private realm has a focus on human scale, ensuring a positive experience when interacting with any aspect of Ringwood MAC.
- To ensure the design and operation of development has positive environmental impacts.
- To provide clear strategic direction and certainty of future development outcomes to both the local community and to investors.
- To understand and respond to the unique characteristics of Ringwood MAC, the role they play, and how they function to support improved development outcomes.
- To develop precinct-based design guidelines that address Maroondah's 2040 Community Vision with a focus for a 'clean, green and sustainable community' and 'an attractive and thriving and well-built community'.
- To ensure the heritage values of Ringwood MAC are considered as the centre continues to grow.



What did we learn?

Seven precincts were identified (refer to Figure 12) with designated preferred maximum building heights and land use descriptions.

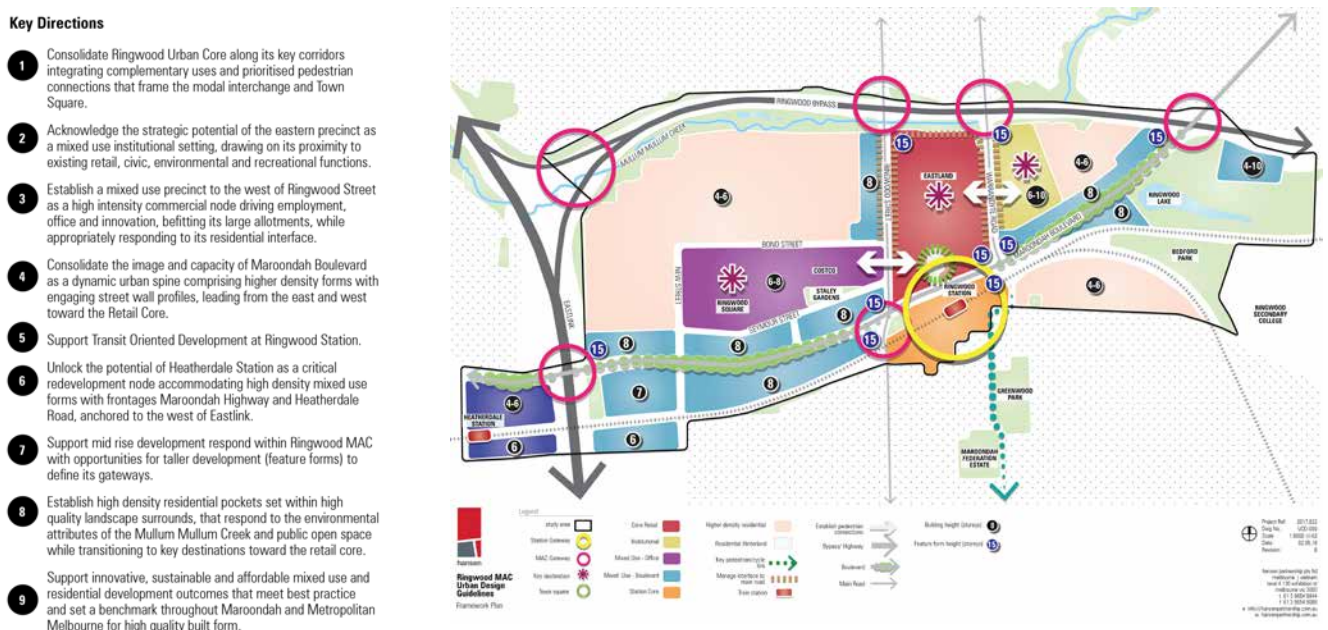
Figure 12: Ringwood MAC Precincts (Hansen Partnership, August 2018)



What can the Masterplan do to address the findings?

- Increase connectivity and integration between retail core across both Ringwood St and Warrandyte Road.
- Further reinforce the civic and transit orientated development (TOD) focus around Ringwood Station and Realm.
- Better define the gateways to Ringwood MAC from north and south at the Centre thresholds (Bypass and Station Street).
- Realise business and employment growth around Eastlink and the Heatherdale Station node.
- Accommodate residential change in the south-east quarter of Bedford Road, in proximity to the station.
- Confirm a consistency of image and profile along Maroondah Highway as a City Spine/Boulevard.
- Unlock opportunities in the transitioning eastern precinct – where mixed institutional focus can be formed.
- Genuine environmental and recreational enhancement of Mullum Mullum Creek and valley floor.
- Ensure a legitimate network of public space emanating from the Town Centre outward to the growing fringe.
- Bring higher amenity, comfort and greening to connector and local streets as they evolve with redevelopment, with emphasis on existing pedestrian environments of low quality.
- Acknowledge evolving site planning and design challenges in commercial 2 precinct adjacent to existing light industrial uses.
- Address the Planning Policy disconnect between Activity Centre designation and application of Significant Landscape Overlay.
- Acknowledge affordable and sustainable housing at forefront of Council's Vision for Activity Centre.
- Further the capacity of North West Sector where strata units constrain progressive redevelopment.
- A Framework Plan to guide future form and opportunity was development (refer to Figure 13) for Ringwood indicates the following:

Figure 13: Urban Design Framework Plan (Hansen Partnership)



Transport and Movement

Transport and Movement Modelling

With an increase in population for Ringwood MAC predicted, it was important to determine how the centre will function with an increase in transport and movement.

Initial capacity and dwelling scenarios were determined by the VPA prior to undertaking the transport and movement work. This testing developed two future year development scenarios (medium and high growth) to be investigated.

As a result, WSP Parsons Brinckerhof were engaged to undertake a transport and movement modelling assessment of Ringwood MAC. The key objective of this assessment was to identify the transport implications likely to result from two possible future development scenarios for the MAC, and to assist in identifying targeted strategies to manage the transport needs as the MAC continues to grow and evolve. This assessment was undertaken using the Victorian Integrated Transport Model (VITM).

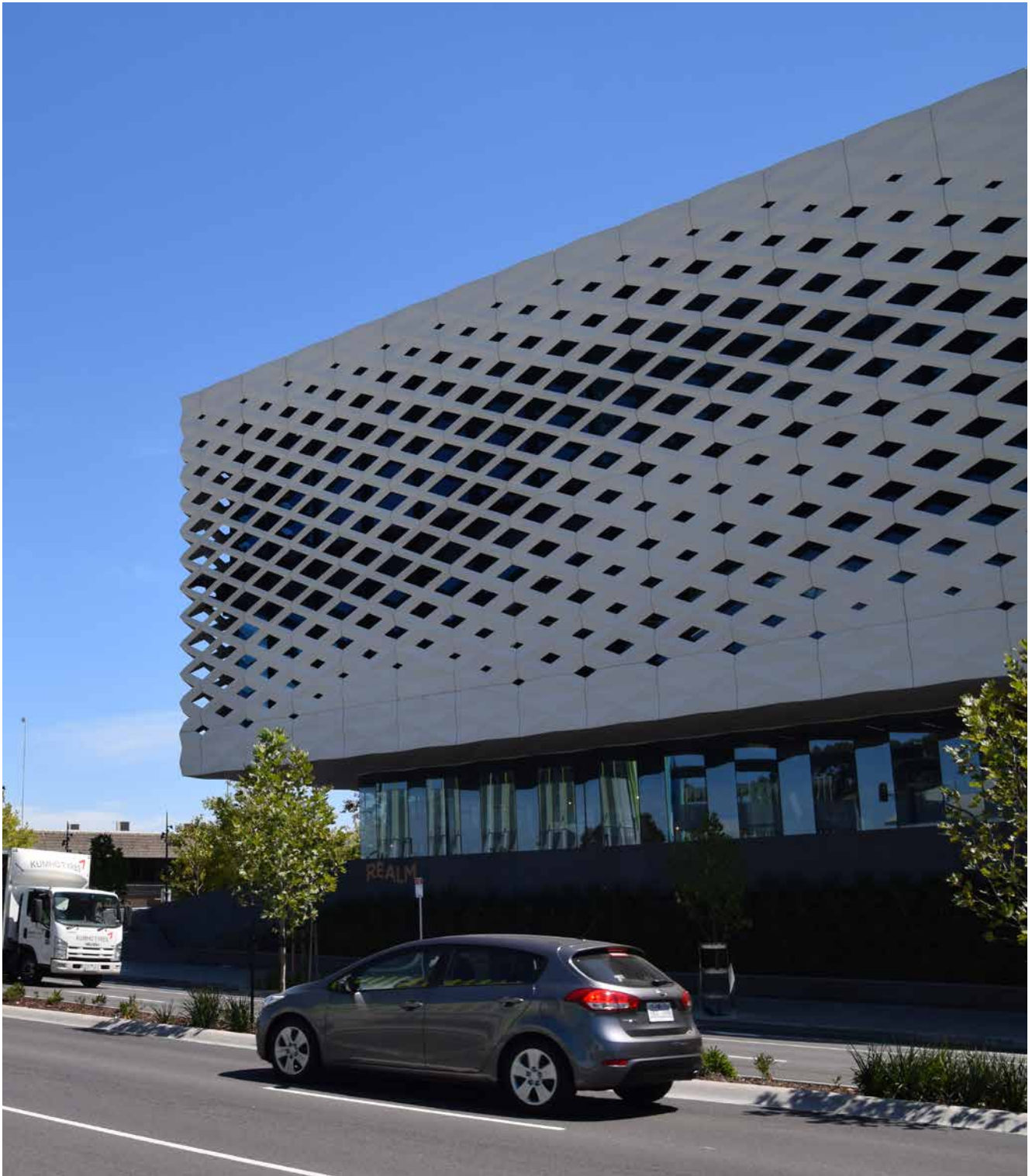
What did we learn?

The key findings from the base year transport analysis included the following:

- Ringwood MAC is currently being accessed predominately by private vehicle, which is causing some capacity constraints.
- Access to and within Ringwood MAC for private vehicles is generally well defined, however there are some areas which have limited vehicle movement.
- Car parking is mainly provided around the stations and Eastland precinct, with station parking at capacity.
- Patronage at both Ringwood Station and Heatherdale Station have remained relatively stable since 2011, with Heatherdale mainly being used for 'city commuting', while Ringwood providing transport for a diverse range of needs.
- The majority of trips to both Heatherdale and Ringwood Station are made by car (54% and 42% respectively), though both stations are also very accessible by foot. Access to both stations by cycling is limited however.
- Buses serving Ringwood MAC travel along all key access roads in the Centre, however there is currently no priority for buses on any of these roads.
- There is a dense coverage of buses north of the study area, while cover to the east and west is low. Similarly, the area within and immediately adjacent to the study area is well covered by bus, except for a large pocket of residential southwest of the study area.
- Commuter cycling is very low in the study area, with limited on-street cycle priority. Recreational/social cycling on off-street paths is high, however.
- Pedestrian movements are highest around Ringwood Station and the Eastland precinct, though there are limited crossing points and inadequate footpaths in some areas.
- The total daily motorised trips (ie: private vehicle or public transport trips) to Ringwood MAC may increase by 54% for the medium development scenario and 71% for the high development scenario, with intra-MAC trips increasing by approximately 16-18% in both scenarios.
- There is a heavy weighting towards vehicular traffic as the main mode of transport in Ringwood MAC (90% private vehicle versus 10% public transport use) and that this trend will continue to grow over time. This is likely due to the fact that the model does not assume a significant improvement in infrastructure and/or services to support sustainable transport (ie: walking, cycling or public transport) to or within Ringwood MAC and therefore private vehicles remain to offer greater flexibility and efficiency in travel time.



- Some Maroondah Highway traffic continues through Ringwood MAC instead of using the bypass in both scenarios, for both the AM and PM peak (approximately half in the AM and a third in the PM), which may be due to the existing infrastructure design encouraging through movements as well as some capacity constraints on the Ringwood Bypass.
 - Ringwood Street and Warrandyte Road carry similar volumes of traffic through Ringwood MAC.
 - Bond Street and Market Street are important internal routes for Ringwood MAC.
- Realm, Ringwood Town Square*



Limitations of VITM

In Part 2 of the Transport and Movement Modelling Assessment, WSP Parsons Brinckerhoff discuss the limitations of Victorian Integrated Transport Model (VITM). VITM is a four-step strategic transport model covering the whole of the Melbourne metropolitan area and is owned and maintained by the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). The model provides road and public transport network forecasts for a series of future years based on an underlying set of land use and demographic forecasts and transport network assumptions. VITM is typically used to assess proposed transport policies and the impact of road, public transport and land use changes and forecast transport demands at the strategic level.

As a strategic-level model, the following limitations should be noted in the use of traffic forecast developed using VITM:

- VITM is calibrated/validated to a base year at the screenline level and does not explicitly model intersections capacities and delays. It is therefore less reliable when forecasting traffic volumes for individual roads and intersections.
- VITM's forecasts across metropolitan Melbourne are based on a series of assumptions regarding how the transport network and land use is forecast to change into the future. As with any demand forecast, inevitably some assumptions used to develop the forecasts will not be realised and unanticipated events and circumstances may occur which could materially change the actual traffic volumes realised.
- The actual travel demand outcome will vary from that forecast and the variations may be material and significant. Assurances cannot be provided that the reported forecasts will be achieved therefore, and therefore forecast results should only be used as an indication of change to assist in the planning process.

What can the Masterplan do to address the findings?

Six initiatives were identified:

1. Maroondah Highway – reducing traffic volumes
2. Ringwood Bypass – increasing capacity
3. Ringwood Street – reducing congestion
4. Bus operations – improving efficiency
5. Bicycles – improving accessibility
6. Pedestrians – improving accessibility.

It was noted in the report that performance of the network under the proposed initiatives cannot be determined without further detailed modelling of Ringwood MAC, which was beyond the scope of the work. It was recommended that a suitable local area model be used to confirm the network performance.

As a result Council deemed it appropriate to engage further Transport and Movement Work to assist in determining appropriate transport and movement improvements for Ringwood MAC.



Transport and Movement Priorities

Maroondah City Council engaged O'Brien Traffic to undertake an assessment of the transport and movement priorities for Ringwood MAC (July 2018).

What did we learn?

The Key Aims for Ringwood MAC Masterplan relating to transport and movement are:

1. Enhancing Ringwood MAC as a 'place to be'
2. Accommodating travel demand from forecast land use changes
3. Keeping through traffic out of Ringwood MAC as much as possible
4. Extending the Maroondah Highway 'boulevard treatment' to the east and the west
5. Enhancing the attractiveness of bicycles, walking and public transport for access to, from and within Ringwood MAC
6. Maintaining acceptable functionality after external major network changes are implemented.

The drivers of future transportation change in and around Ringwood MAC will include:

- Land use change in Ringwood MAC
- External travel demand growth and change
- External transport network changes.



What can the Masterplan do to address the findings?

Base future transport and movement on the '7 Gateways' assessment method. This method recognises that almost all movements into and out from Ringwood MAC need to pass through one of 7 'all-mode' gateways – which are key intersections and/or railway crossings (refer to Figure 14). The exception being several shared path bridge and underpass crossings of Maroondah Highway and Ringwood Bypass.

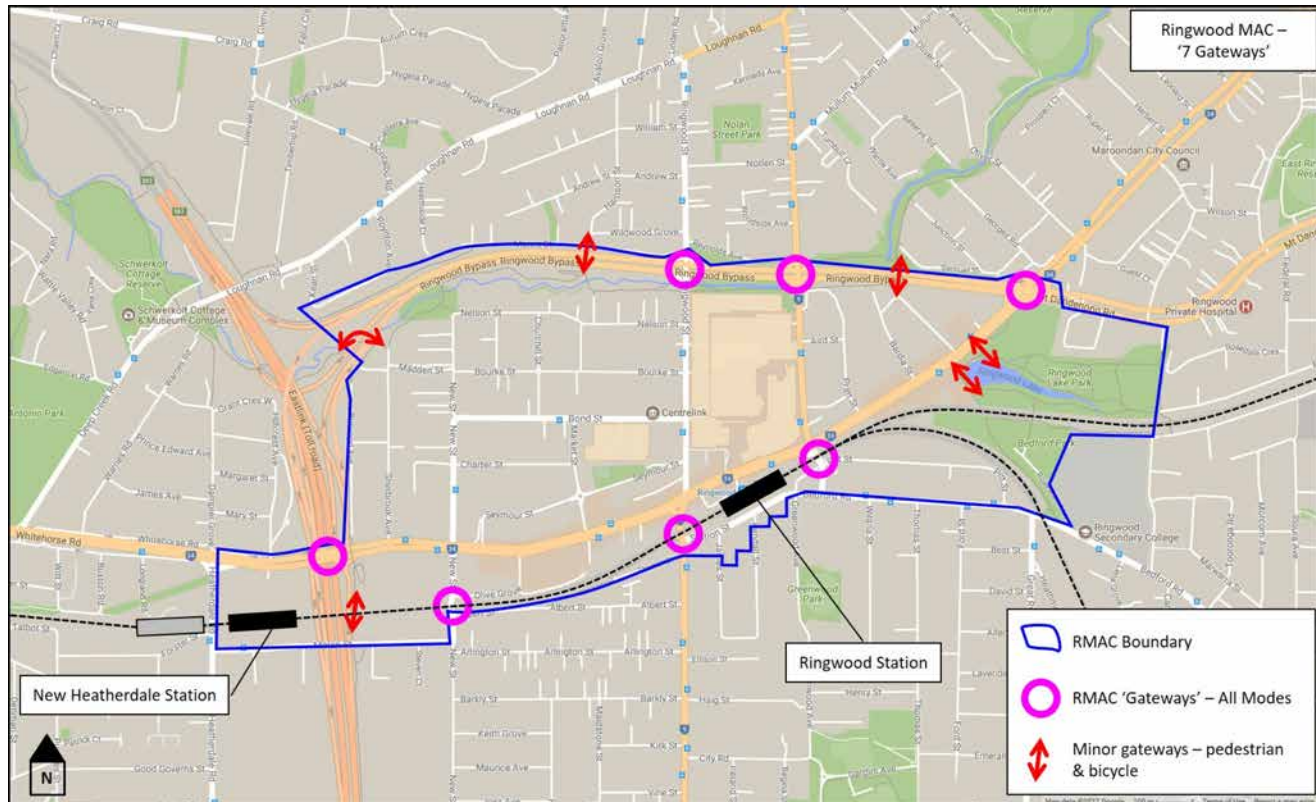
Maximising the utilisation of these gateways is critical for Ringwood MAC to support intensification that is desired.

An effective strategy needs to consider the impact and opportunity presented by major redevelopment sites in order to ensure that planning goals can be translated into facilities that people can use. These sites have the potential to:

- add significant additional travel demand
- offer alternative options for where and how this demand is distributed across the transport network (eg reposition/reconfiguration of site access points); and
- provide land to expand road reserves to accommodate improved transport and movement facilities that would otherwise be unachievable.
- Mode shift opportunities exist for trips to and from Ringwood MAC, but more particularly within Ringwood MAC.

The Masterplan should consider car parking as a land use and travel 'mode'. Addressing such issues as; on-street parking; commuter parking; existing uses with insufficient on-site car parking. Council policy is to assist market mechanisms to address this shortfall.

Figure 14: 7 Gateways (O'Brien Traffic)



The market response to the issue could include:

- Several sites with existing privately held car parking that is under-utilised are offering spaces to casual users for a fee via online applications.
- The potential development of public off-street car parking facility either as a standalone or preferably as part of another major development. Council has previously commissioned studies of the potential sites, features and conditions for a parking facility of this type to ensure that it is ready to act on opportunities that may arise to provide or assist with the provision of the parking facility. The most promising potential sites are likely to lie in the vicinity of Ringwood Station and Eastland where parking demands are highest and existing shortfalls most intensely felt. Two potential sites have been identified including the Murray Place car parking area and the southeast corner land parcel on the Ringwood Station 'supersite'.
- Driver mode shift away from the car for those who are able to practically make the shift (noting that many drivers seeking medium length duration parking may not have viable alternatives for a range of reasons).



Delivery of the Key Aims will be as follows:

Key Aim 1: Enhancing Ringwood MAC as a 'Place to be'

Enhance the sense of place through the following transport and movement improvements:

- Support key urban public spaces and 'axes' in the core of Ringwood MAC, building on the 2004 Masterplan and subsequent developments.
- Provide a more fine-grained pedestrian path network, wider footpaths in busy areas and additional pedestrian crossings that provide pedestrian priority or greater responsiveness to pedestrian demand.
- Reduce unnecessary 'through' traffic through Ringwood MAC.
- Reduce vehicle speeds adjacent to active frontages.
- Enhance bicycle paths and end-of-trip facilities.
- Increasing the benefits from and decreasing the negative impacts of bus service for access to and circulation within Ringwood MAC.
- Provide additional space for recreation in the road reserve (eg footpath dining areas) where desired.
- Be compatible as far as possible with the retention and improvement of street tree canopies.

Key Aim 2: Accommodating travel demand from forecast land use changes

Mode shift opportunities need to be sought wherever possible to reduce the scale and amenity impact of the traffic mitigations needed to accommodate the land use change.

Even if significant gains are achieved in walking, cycling and public transport usage traffic considerations will be critical to the ongoing success of Ringwood MAC.

The 7 gateways can be significantly influenced by major change site locations and access arrangements so these key sites are examined first. The site accesses should be designed to achieve a range of objectives including:

- safe and efficient local access to the site for the required level of demand
- the encouragement of likely approach and departure paths that are most compatible with the successful operation of the 7 gateways and key intersections within Ringwood MAC.
- The preferred approach and departure paths may involve:
- Access to and from the street network via underground or above ground connections between car parking areas to spread traffic demand more evenly onto surrounding roadways from major sites.
- The use of local access streets such as the New Street-Bond Street route or the proposed east-west roadway in the Eastern Gateway Precinct to take traffic to the gateways while minimising travel along Maroondah Highway where a 'boulevard treatment' is desired.

Key Aim 3: Accommodating travel demand from forecast land use changes

The main benefits anticipated from diverting through traffic away from Ringwood MAC roadways include (refer to Figure 15):

- To release road capacity for additional Ringwood MAC generated trips, which is important due to the significant land use intensification desired and the likely ongoing high car travel mode share even with substantial effort to encourage as many new and existing trips to occur via walking, cycling or public transport.
- To release road capacity for improvements for the urban realm, pedestrians, cyclists, buses, car parking and local traffic access.

Key Aim 4: Extending the Maroondah Highway 'boulevard treatment' to the east and the west

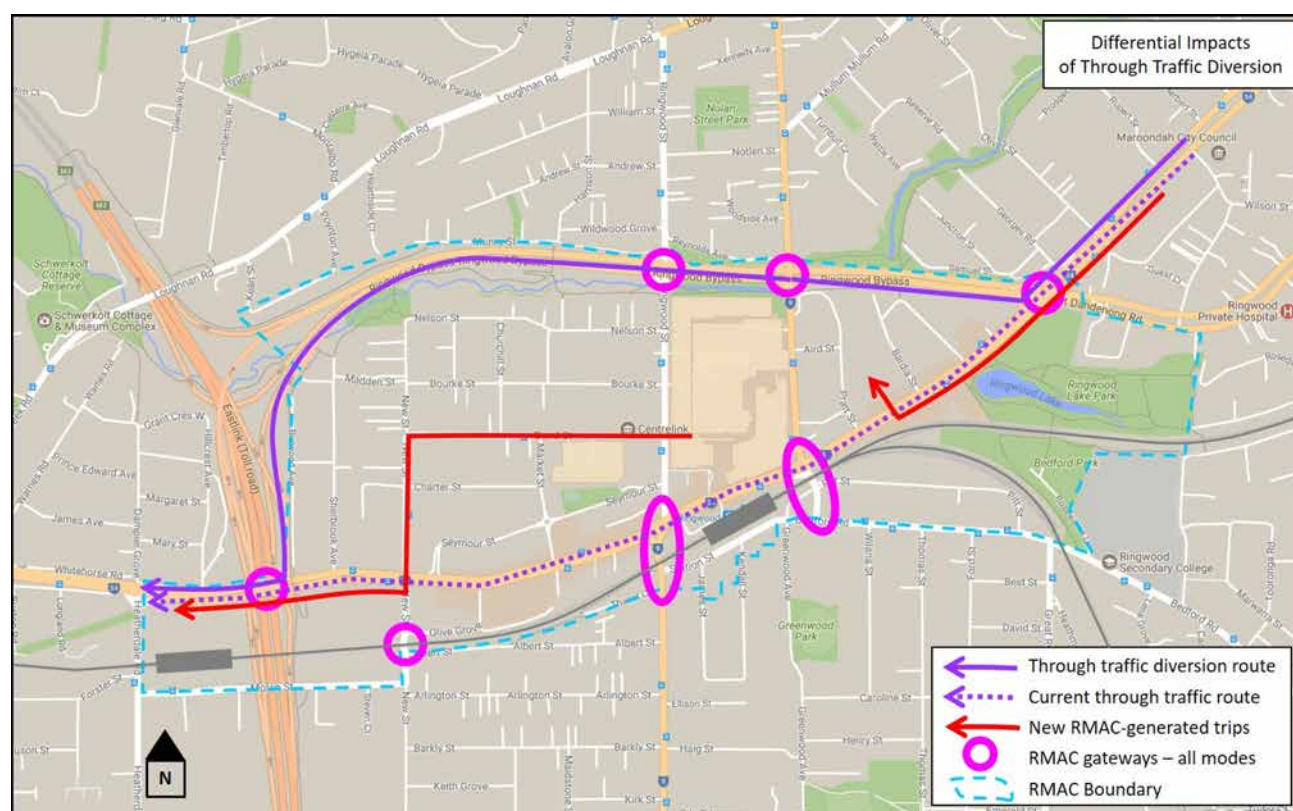
To maintain the boulevard treatment as Ringwood MAC land use intensifies in the future is likely to require:

- Diversion of through traffic to release capacity along much of Maroondah Highway inside of the 7 Gateways
- Measures within Ringwood MAC to manage traffic impacts along Maroondah Highway including:
 - Efficient site access arrangements
 - Local access routes that connect the major uses to the 7 Gateways with a little use of Maroondah Highway as possible.

Selecting the preferred features of the boulevard extension involves consideration of:

- Needs - including for pedestrians, cyclists, buses, on-street parking, traffic access, and the public realm.
- Available space in the existing road reserve - mostly released from existing traffic lanes.
- Ability to re-arrange available space in the existing road reserve.
- The ability to expand the road reserve where desirable or necessary.

Figure 15: Differential impacts of through traffic diversion (O'Brien Traffic)





Key Aim 5: Enhancing the attractiveness of bicycles, walking and public transport for access to, from and within Ringwood MAC

The recommended bicycle improvements actions include:

- Implement the recommended future bicycle network (refer to Figure 16).
- Update or develop designs for the proposed bicycle network improvement (refer to Figure 17) including consideration of on-street and public realm bicycle parking facilities and the commentary.
- Undertake stakeholder consultation with respect to the proposed improvement items – particularly owners of adjacent land – as soon as possible.
- Identify the preferred treatment for each item – possibly carrying forward several variants dependent on land or crossing availability at the time of implementation.
- Pursue the early implementation of recommended initial bicycle network in Ringwood MAC.

Figure 16: Future Bicycle Network (O'Brien Traffic)

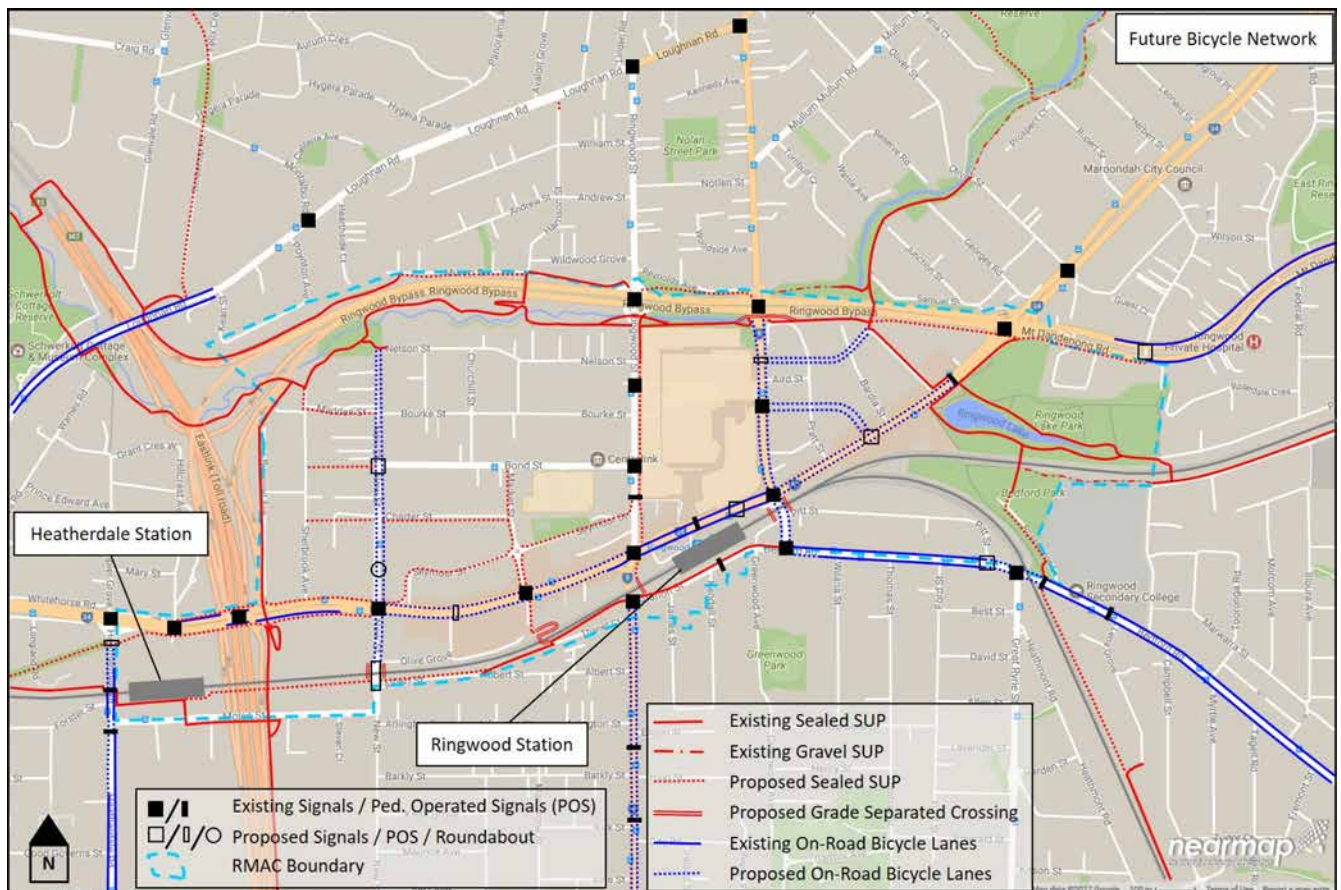
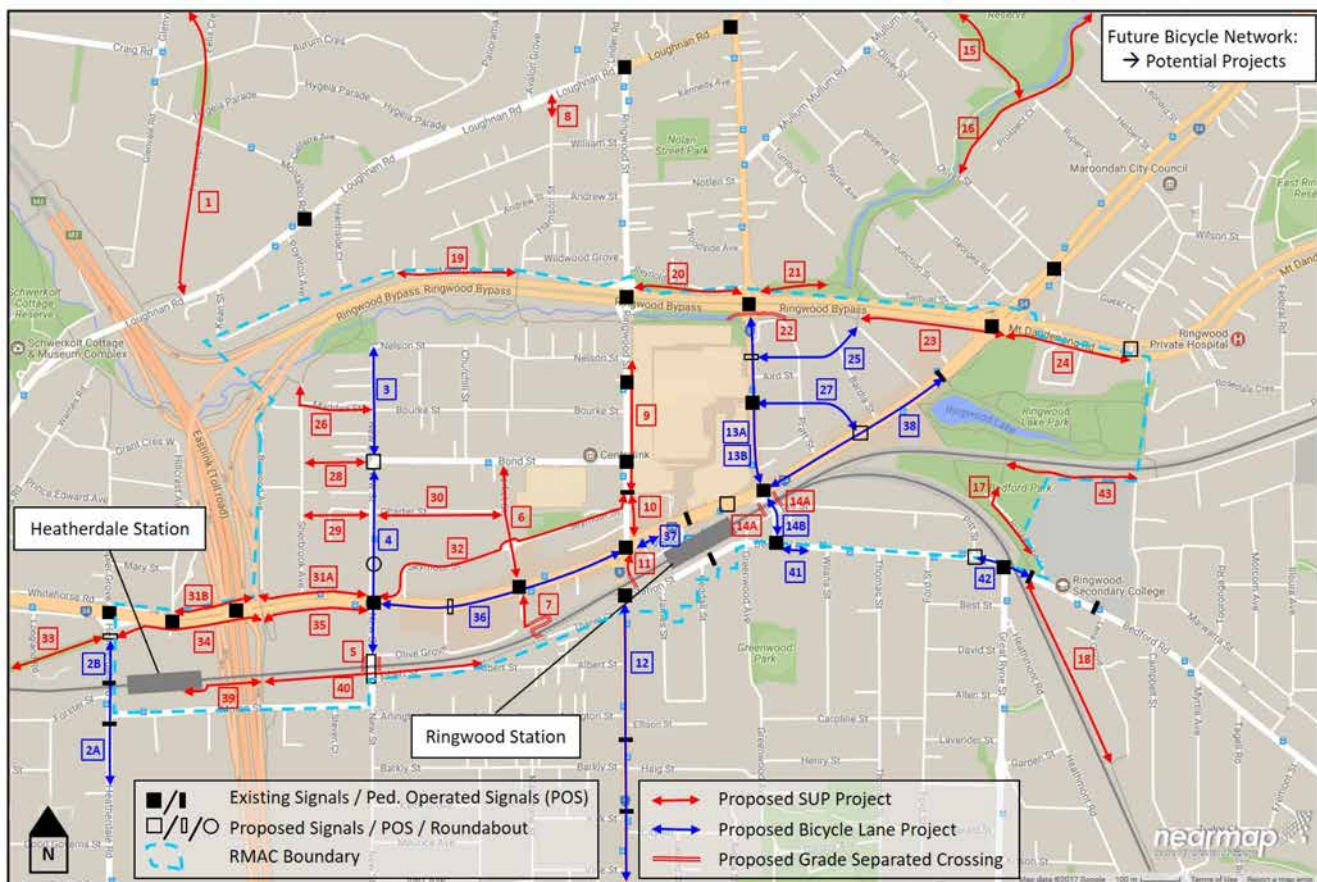


Figure 17: Future Bicycle Network Improvements (O'Brien Traffic)

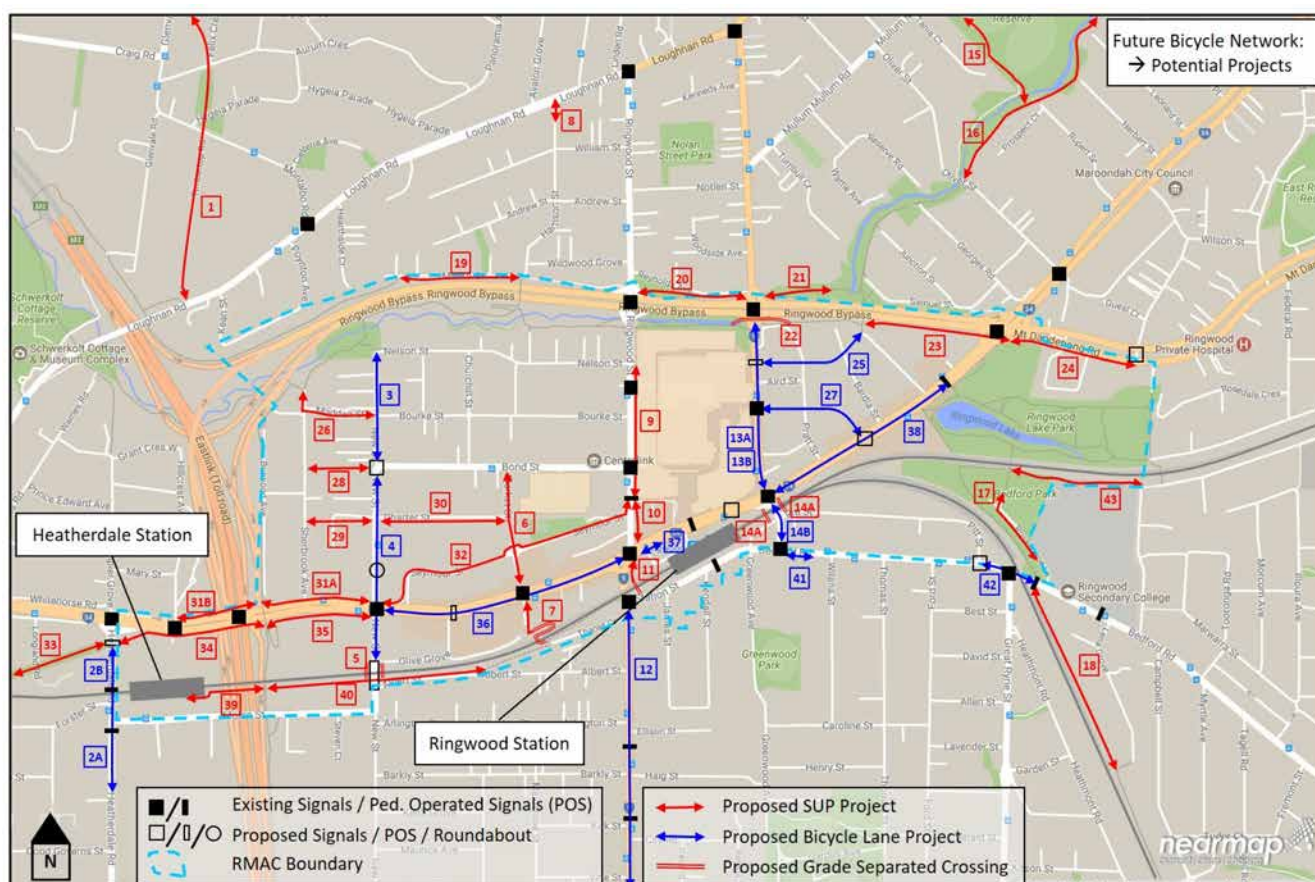


The recommended pedestrian network improvement actions include:

- Develop or facilitate and review designs for the proposed pedestrian network improvement items (refer to Figure 18) including consideration of width, cyclist use and possible conflict, frontage activation, crossing point arrangements, streetscaping and landscaping.
- Undertake stakeholder consultation with respect to the proposed improvement items – particularly owners of adjacent land – as soon as possible.
- Expedite the provision of new POS crossings and intersections (eg traffic signals and roundabouts) with new or improved pedestrian crossing facilities, endeavouring in each case to minimise pedestrian delay and maximise safety and responsiveness to pedestrian demand.
- Pursue the early completion of missing footpaths on existing streets via the DCP, but delay the Pratt Street works until the adjacent site redevelopments occur.
- Ensure that suitable pedestrian facilities (pathways, crossings and intersections) are incorporated into new roadway (eg in the Eastern Gateway Precinct) and other upgraded roadways (eg Maroondah Highway boulevard extensions).



Figure 18: Future Pedestrian Network Improvements (O'Brien Traffic)



- Ensure that new SUP routes include the features necessary to ensure a high level of pedestrian amenity even if the drivers for the route are cycling considerations and while the path may lie outside Ringwood MAC.
- Explicitly consider land requirements for pedestrian facilities when considering development applications along the identified routes to avoid missing opportunities to provide appropriate pedestrian facilities.
- Pursue new pedestrian links through developments on an opportunistic basis using the development application and approvals process to reach negotiated outcomes with developers (as per the process for the proposed connection from Bourke Street to Nelson Street near Ringwood Street).
- Obtain property line setbacks where possible to widen footpaths and/or provide SUP on Market Street, Ringwood Street (west side north of Seymour Street), Ringwood Street (east side between the POS and Maroondah Highway), Bond Street (near Ringwood Street), New Street (west side between Maroondah Highway and Albert Street) from developments and – where possible – include the construction of the widened footpath in the development works.
- Seek to implement pedestrian route widenings as soon as space becomes available noting that discontinuous width increases are generally more useful to pedestrians than cyclists.
- Include adjustments to pedestrian facilities along footpaths being widened or paved to accommodate a SUP route, which will occur largely driven by bicycle considerations.

- In generating, reviewing or approving designs for SUP in Ringwood MAC, seek to maximise pedestrian separation from cyclists and/or total SUP width at new grade separated road or rail crossings and on SUP routes in busy areas to reduce unnecessary conflicts.
 - Identify which recommended items can be funded directly through a DCP, attached to a redevelopment project or require external funding sources.
 - Advocate and seek external funding for the proposed grade separated crossings of roadways and railways and other items that would most likely not be covered by a DCP (due to the costs and importance of the crossings in supporting State level land use goals). Pedestrian priority for the grade separated facilities is different to the bicycle priorities – with the improvements on either side of Ringwood Station the most important for pedestrians.
- The recommended bus network improvement actions include:
- Maintain the westbound bus jump lane on Maroondah Highway at the Mt Dandenong Road signals even if the intersection is upgraded to enhance the capacity of Ringwood Bypass.
 - Seek changes to the access at the Ringwood Station bus interchange.
 - Seek changes to the bus approach and departure paths and associated stop locations within Ringwood MAC – typically requires interchange access changes.
 - Seek changes to simplify existing bus route paths outside of Ringwood MAC to improve travel times.
 - Seek increased bus frequencies on existing routes.
 - Seek funding to through-route buses along Maroondah Highway to link the east and west parts of Ringwood MAC together.
 - Evaluate options for a local Ringwood MAC area circulator bus to improve local access to Ringwood MAC by bus.
 - Include consideration of bus stop relocations and enhancements and provision of bus jump lanes and traffic signal phase extensions by buses in the design process for the Maroondah Highway boulevard treatment extensions and the ‘boulevard transition area’ near EastLink.
 - Exclude consideration of continuous bus lanes from the Maroondah Highway boulevard treatment extension and from potential upgrades of other Ringwood MAC streets.





Key Aim 6: Maintaining acceptable functionality after external major network changes are implemented.

The key recommendations with respect to external transport network changes include:

- To advocate for external transport projects that should have neutral or positive impacts on Ringwood MAC transport network and assist in achieving the goals of Ringwood MAC Masterplan such as:
 - the Northern Arterial
 - increased train frequencies
 - additional major commuter car parking facilities at stations outside Ringwood MAC
 - increased bus frequencies;
 - possible provision of new 'fast' regional bus routes
 - regional bicycle network improvements.
- To advocate for external projects that are likely to have a mostly positive impact on Ringwood MAC transport network and assist in achieving the goals of Ringwood MAC Masterplan such as:
 - A Ringwood 'Southern Bypass' using the Healesville Freeway corridor.
- To seek the release of additional information with respect to the preferred Option A proposal and its impacts in the vicinity of Ringwood MAC including:
 - Clarifications as to the proposed improvements on the Eastern Freeway in the North East Link project as the publicly available information suggests certain improvements without clearly indicating the proposed layout adjustments.
 - Clarification as to the nature, frequency, impacts and exact locations of the existing flow breakdowns that are acknowledged to impact on the EastLink tunnels.
 - An opportunity to review the microsimulation models to understand how the proposed mitigations will resolve or address the anticipated congestion issues.
- To obtain the full range of outputs from the microsimulation and strategic modelling outputs and reports to enable evaluation of the results in the vicinity of Ringwood MAC including existing conditions base modelling, anticipated absolute growth from current traffic demands rather than presentation of differences between future scenarios, clarification of future included projects, etc.
- To advocate for a series of early actions with respect to the proposed North East Link including to:
 - Have refinements made to the modelling undertaken for the North East Link to reflect the anticipated future land use and road network changes in the vicinity of Ringwood MAC – including updates to reflect changes already made in 2017 such as the closure of Plaza Centre Way and the reduction of Maroondah Highway capacity opposite Ringwood Station.
- Undertake liaison with the North East Link Authority, Connect East, VicRoads and the City of Whitehorse with respect to the impacts and possible long-term resolution of issues associated with the North East Link – even if Ringwood MAC area mitigations are not included in the North East Link project.
- To accelerate the development and testing of a range of mitigations to address the likely capacity, safety and operations issues potentially associated with the preferred Option A route for the North East Link to allow to co-exist with the local land use growth, traffic diversions and network capacity changes that are part of the preferred future Ringwood MAC identified by O'Brien Traffic (Transport and Movement Priorities).

Commercial and Residential Capacity

Commercial supply

In September 2015, Jones Lang Lasalle (JLL) provided a report on the status of commercial supply within Ringwood MAC to further understand the lull in investment activity since 2009 and the potential future path for developing employment generating uses.

What did we learn?

JLL's analysis identified that the property investment business case for Ringwood MAC is supported by strong fundamentals, with the activity centre benefiting from:

- Planning policy support for higher order commercial and employment uses.
- Significant activity generators in Eastland Shopping Centre, Realm and Costco.
- A large and established residential base within proximity of Ringwood MAC.
- Good access to wider markets through rail and road linkages.
- Continued momentum in residential and retail development, supporting both long term and short term employment.
- Unique town centre fundamentals including an established boulevard, diverse range of uses, walkable areas and other strong urban design fundamentals.

What can the Masterplan do to address the findings?

- Ensure planning supports traditional office space being centralised in Ringwood, maximising the amenity and also providing a catalyst for sending a positive message to the investor/business market.
- Attract a TAFE/university or multiple small education providers to diversify the daily population.
- Any opportunity to include specific industries such as hospitals and universities can materially influence the demand for occupiers. Such occupiers provide the location with 'identity' which encourages clustering.

- While Ringwood is experiencing high levels of residential activity, this can dilute the 'office' base and can limit the opportunity to develop office stock.
- Build on the exposure to Eastlink, alignment with the established retail core of Eastland.
- Consider how small lot sizes, existing strata product, topography and existing buildings and environmental issues could be inhibitors to office development.
- Office development is more attracted to larger lots, which are available towards the western end of Ringwood MAC.

Capacity analysis

- SGS Economics & Planning undertook a Commercial & Residential Capacity Analysis (March 2018). This work aimed to assess the appropriateness of draft planning controls for Ringwood MAC, to inform this Masterplan. SGS assessed the capacity for residential and commercial development in Ringwood MAC under these draft planning controls under two scenarios and compared this to forecast commercial floorspace and dwelling demand.
- Benchmarking analysis was also undertaken to compare floorspace mix in Ringwood MAC with other significant activity centres.
- The key questions this study aimed to answer were:
- Do the draft controls allow for adequate capacity for commercial, retail and residential growth in Ringwood MAC?
- What is an appropriate mix of residential and commercial land use?



What did we learn?

Commercial floorspace demand

Land use types, totals for commercial floorspace demand were calculated (refer to Figure 19).

Figure 19: Commercial Floorspace Demand by Land Use Type, Ringwood MAC (2016 and 2036)

Land use type	Floorspace demand (sqm)		
	2016	2036	Growth 2016-36
Commercial	69,500	88,500	19,000
Retail	232,100	235,900	3,800
Construction	14,200	14,700	500
Industrial	173,500	176,300	2,800
Institutional	45,400	70,900	25,500
Total	534,700	586,300	51,600

Total commercial floorspace demand in 2036 is anticipated to be 586,300m² in gross floor area (GFA) across Ringwood MAC. This represents an additional 51,600m² from 2016 commercial floorspace demands levels.

Residential dwelling demand

Demand for residential floorspace was derived from Forecast.id dwelling forecasts (refer to Figure 20).

Figure 20: Population Forecasts and Dwelling Demand, Ringwood MAC (2016 and 2036)

	2016	2036	Growth 2016-36
Population	1,870	4,910	3,050
Households	930	2,320	1,390
Average household size	1.99	2.11	2.12
Dwellings	970	2,420	1,450

Total dwelling demand in 2036 in Ringwood MAC is 2,417 dwellings, an increase of 1,446 dwellings from 2016. However, it is important to note in 2016, there were 245 dwellings approved for development in Ringwood MAC and by 2018, there were 1,213 dwellings approved for development.

This highlights how rapidly the environment has changed over the last 2 years in Ringwood MAC. While approvals do not always directly translate to new dwellings, it does indicate that demand for new dwellings will likely exceed those forecast by Forecast.id. The extent and timing is difficult to quantify at this stage, however forecasts will need to be updated to reflect this shift in the market.

Capacity analysis

SGS assessed the capacity for residential and commercial development in the Ringwood MAC under draft planning controls. Capacity was then compared to forecast demand.

To determine capacity the amount of available land was first assessed. Available land represents all land that has the potential to generate additional housing or commercial supply for Ringwood MAC. This does not mean that it is necessarily feasible or that property owners are ready or willing to develop the sites that are identified as available. Typically only a small portion of available lots are likely to be developed in any one year.

Two scenarios were tested to understand the impact on capacity and use mix of enforcing higher minimum commercial floorspace quotas across precincts.

- In the high commercial capacity scenario, it is assumed that zoning controls would regulate for a greater proportion of commercial floorspace, with a lower level of residential floorspace capacity.
- In the low commercial capacity scenario, it is assumed that zoning controls would regulate for a lower proportion of commercial floorspace, with a higher level of residential floorspace capacity.

Capacity for growth

Comparison of the results from the demand and yield analyses reveal that Ringwood MAC has ample capacity to accommodate growth over the next twenty years under both scenarios (refer to Figure 21).

Figure 21: Comparison of Demand and Capacity Analyses of Ringwood MAC (SGS)

	Commercial (GFA, sq.m '000)			Residential (dwelling)		
	Demand 2016-36	Net capacity	Remaining capacity at 2036	Demand 2016-36	Net capacity	Remaining capacity at 2036
High commercial scenario (1)	51,600	1,146,000	1,094,400	1,450	10,590	9,140
Low commercial senario (2)	51,600	558,300	506,700	1,450	14,890	13,440



What can the Masterplan do to address the findings?

There is a need to ensure a balanced land use mix in Ringwood MAC in coming years to promote future liveability and sustainability.

As the only location in Maroondah containing Residential Growth Zone, Ringwood MAC is expected to accommodate a significant proportion of the residential growth forecast for the municipality as a whole. At the same time it will be important to ensure that sufficient land is set aside for uses that are integral to the sustainable functioning of a metropolitan activity centre. These include commercial, retail, health, recreation, education and leisure uses, as well as community services and facilities.

The high level of capacity created through the concept plan and the recent significant investment in the public realm in Ringwood MAC provides Council with the opportunity to emphasise the value of urban design. Strong urban design codes are possible with this amount of capacity and can leverage the existing high-quality public realm core that has been developed within the activity centre.

The newly renewed public realm coupled with the presence of a strong retail core in redeveloped Eastland means that the activity centre is anticipated to become increasingly attractive for both commercial and residential development.

Recent development activity in Ringwood MAC indicates that investment in the public realm has been a success. Maroondah City Council is well placed to build on this.

The two scenarios outlined in the report provide a baseline, or a minimum for commercial development. Given there is ample residential and commercial capacity under both scenarios, Council has the ability to promote higher levels of commercial activity while still allowing for residential development to occur.

When Ringwood MAC is compared with other areas, such as Box Hill, it has less growth forecast, despite covering a significantly larger area. Unlike Ringwood, Box Hill is home to several key institutions, including Box Hill Hospital, Epworth Eastern Hospital, and Box Hill Institute. These institutions generate a large amount of employment, and there is anticipated to be significant growth in demand for health and education services in the future. These institutions also tend to attract complimentary services such as retail to service staff, students and visitors. This represents another opportunity for Council to tailor development in Ringwood MAC to ensure the most desirable outcome for current and future residents and workers.



Conclusion

This Background Report details why Ringwood MAC is important, how the Ringwood MAC Masterplan review was undertaken and the key findings of the strategic background work to inform the Ringwood MAC Masterplan.

The key findings have been taken from the following studies:

- Key Issues Paper (Victorian Planning Authority, June 2017)
- Where have we come from (Maroondah City Council, December 2017)
- Ringwood MAC Housing Paper (Maroondah City Council, August 2018)
- Ringwood MAC Urban Design Guidelines Discussion Paper (Hansen Partnership April 2018)
- Ringwood MAC Transport and Movement Modelling Assessment Part 1 Existing Conditions (WSP Parsons Brinckerhoff, August 2017)
- Ringwood MAC Transport and Movement Modelling Assessment Part 2: Future Transport Analysis and Improvement Options (WSP Parsons Brinckerhoff, July 2017)
- Transport and Movement Priorities for Ringwood MAC (O'Brien Traffic, July 2018)
- Ringwood Commercial Supply Analysis (Jones Lang Lasalle, September 2015)
- Commercial and Residential Capacity Analysis (SGS Economics and Planning, March 2018).

Incorporation of the key findings identified in this Background Report are found in the Ringwood MAC Masterplan 2018. The Ringwood MAC Masterplan will guide the changes required to the Maroondah Planning Scheme.

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- email maroondah@maroondah.vic.gov.au
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City Offices Service Centre
Braeside Avenue
Ringwood

Realm Service Centre
Maroondah Highway
Ringwood

Croydon Service Centre
Civic Square
Croydon


Translating and Interpreter Service
13 14 50

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