Huntingdale Activity centre Background Report: Land Use

City of Monash

Huntingdale Activity Centre background report: Land Use

July 2018



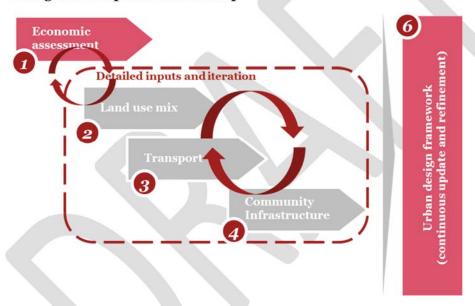
Executive summary

PricewaterhouseCoopers Consulting (Australia) Pty Limited (PwC) has been engaged by the City of Monash to develop a transformative vision for the Huntingdale Activity Centre and embed it in the Precinct Structure Plan. This involves the preparation of 5 background papers which will inform a discussion paper for public consultation.

This report, the Background Report: Land Use, provides a review of the statutory and strategic planning and policy environment, existing land use and market conditions in the Huntingdale Precinct. The report contains recommendations to transform land use to accommodate the economic vision for the Precinct, and support and develop a vibrant community. Analysis in this report is based on inputs provided by the economics assessment – the relationship between the Background Report: Land Use and the other reports is shown in Figure 1.

Figure 1. Relationship between the background reports

Background Reports: relationship



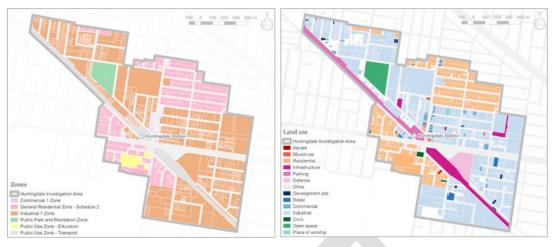
The focus of the report is to understand the land supply available and required to support future economic development, and to provide recommendations that facilitate this development, whilst supporting retail and residential growth that contribute to the overall the vibrancy of the Precinct.

Land use is dominated by industrial uses, which has a poor interface with surrounding uses.

Industrial Zoning and Council Strategy favoured the retention of industrial land, which represents 63% of the land in the Huntingdale Precinct shown in Figure 2. This zoning has prevented the development of mixed use and other transitional land uses. The result, as shown in Figure 3, is a poor interface and harsh abutment between industrial, residential and retail areas.

Figure 2: Current Zoning

Figure 3: Current land use



There are significant opportunities in the future to redevelop excess industrial land to support the economic vision

Whilst the quantity of employment land is still a major asset to the future of the Huntingdale Precinct, this needs to transition to a higher quality industrial use and accommodate a greater offering for commercial use. Rising land prices and lower employee densities will release industrial land that can be used for higher order uses. The current land supply is largely unconstrained, as shown in Figure 4, and represents an opportunity to drive and influence the renewal of a vibrant Precinct.

Figure 4: Total constrained land supply



The interface between land uses needs to be improved to create a vibrant Precinct that attracts industry leaders

A vibrant offering of retail, amenity and residential will be key to attracting major industry tenants that seek a desirable workplace for their business. Interface between industrial and other land uses significantly affects the walkability of the area. This lack of pedestrian activity has hampered the ability to develop a higher quality retail strip that would attract desirable industry tenants.

Catalytic investment in road and community infrastructure is needed to successfully transition land use and achieve the Economic Vision

Improving the road network - High speed-limits, wide roads, and lack of traffic control / pedestrian infrastructure prioritises cars over pedestrians. Investment needs to be made to provide better natural landscaping and street infrastructure that promotes the pedestrian experience and safety. The current conditions discourage people from walking and reduces the potential to activate and revitalise the retail strip. This is epitomised by the complex North Road / Huntingdale Road intersection that is difficult to navigate by car and by foot, and segregates the community south of the rail line.

Open Space – The existing community already has a lack of public open space. This issue will worsen as the residential and employment population grows. Whilst land supply is limited, the forecast surplus industrial land and high turnover will provide opportunities for Council to

- a) acquire cheap industrial land for use as public open space or other community use;
 or
- b) Value capture some of the windfall gains that developers will achieve buying land prior to rezoning for development, to fund the provision of public space and other amenity.

A combination of rezoning and strategically located anchor tenants will support the economic Vision and revitalise the Precinct

The Report proposes two land use strategies to be implemented over the next 10 and 20 years to gradually transition out low value land use to accommodate the Economic projections and support greater retail and residential development. The strategies leverage existing market conditions that will drive growth if planning controls allow. The recommended strategy for the next 10 years is shown in Figure 5.

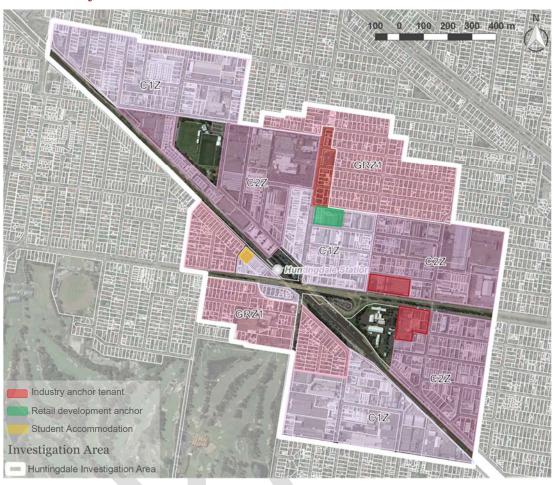


Figure 5: Recommendations for zoning changes and Council interventions, 0 – 10 years

All Industrial 1 Zone areas will change to Commercial 1 Zone and Commercial 2 Zone to encourage a greater mix of employment and enable clean industry to be retained. Higher land values will encourage the transition of low value industries out of the area, releasing land for new anchor tenants. Two sites have been identified that could attract major future warehousing or manufacturing businesses that would signal the area as a new advanced industrial and commercial Precinct. These sites are characterised by North Road frontage, large footprints and quality access to public transport and amenity.

C1Z zoning around Huntingdale Road and the Oakleigh Activity Centre provide room for retail growth, residential density where appropriate, and a greater mix of professional, scientific and technical services. The growth and revitalisation of the retail strip will be catalysed by a major mixed use retail development with a full line supermarket, identified in Figure 5. These changes will improve the transition between retail and residential uses to industrial uses, enable a greater amenity offering to support a growing worker, resident and student population, and help realise the Economic Vision.

Dense residential development is already occurring along Huntingdale Road, and outside the existing planning framework — mixed use zoning along Huntingdale Road will help to direct this growth in the short term, and leverage the density to activate the retail strip.

In the medium to long term, a strong industrial presence will form around North Road and an increased clustering of commercial businesses attracted by the improving Huntingdale Road retail strip. Higher quality employment, residential density and a growing student population will support further growth in the Huntingdale Road retail strip. Our long term land use strategy that accommodates and leverage these factors is shown in Figure 6.

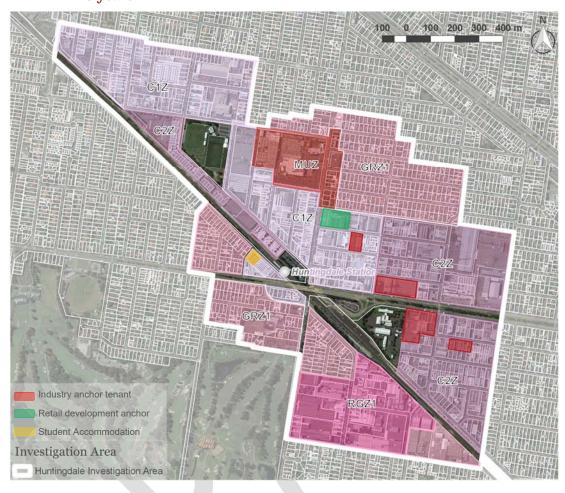


Figure 6: Recommendations for zoning changes and Council interventions, 10 - 20 years

In the long term there will be opportunities for major industrial land holders to capitalise on the Precinct growth and proximity to transport and amenity. The Assa Abloy site has a strong amenity and location offering that would encourage a higher use as a major mixed use development. MUZ on the site would provide for residential density, additional retail, amenity and community facilities, and improve pedestrian flows from Huntingdale Train Station to Jack Edwards Reserve and the Oakleigh Activity Centre.

The continued improvement in quality of industry, retail and amenity will attract other major commercial and industrial tenants. Employment land south of the rail line, being inundated by higher value residential land uses and lacking the attractive attributes of the other industrial land, has a higher use as medium and high density residential stock. An opportunity exists for council to acquire cheap industrial land prior to rezoning to develop affordable housing in this location.

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1 Introduction

PricewaterhouseCoopers Consulting (Australia) Pty Limited (PwC) has been engaged by the City of Monash to develop a Precinct Structure Plan (PSP) for Huntingdale Activity Centre (the Study Area). This report, the Background Report: Land Use (referred to as the Land Use Background report) demonstrates a robust evidence base to support a transformative vision, which will drive the development of the Precinct Structure Plan and form the direction and focus for the other supporting background reports (as shown below in Figure 4).

These five background reports are described below:

- 1. Economics review of economic activity and trends to develop a transformative vision for industry, population growth, and retail
- Land use review of planning controls, land supply and market factors to provide strategies to support the economic growth outlined in the Economics Background Report.
- 3. Transport review of existing transport options (roads, public transport, active transport), consideration of State and Commonwealth Government proposals, recommendations to support the transformative vision
- 4. Community infrastructure review of existing community infrastructure and needs assessment to support the growing residential and employment population
- 5. Urban design changes to access, movement, activity, public realm and the built form to support the transformative vision.

The suite of background reports will be led by the direction set in Economics Background Report, as illustrated in Figure 4. Together they will inform a discussion paper supporting the proposed vision for Huntingdale.

Detailed inputs and iteration

Land use mix

Community
Infrastructure

Continuous and refinement

Community
Infrastructure

Figure 7. Relationship between the background reports

Source: PwC analysis, 2018

1.1 The opportunity for Huntingdale Activity Centre today

The Huntingdale Activity Centre is approximately 283 hectares, predominately industrial estates with traditional manufacturing and warehouse/showroom activity. There are several pockets of residential area on the fringes of the study area, and some medium to high density mixed use development taking place adjacent to the Huntingdale Shopping Strip. The shopping strip contains a diverse range of restaurants and cafes, but the amenity of the strip is poor and the streetscape is dated. Huntingdale is the gateway to Monash University, and there are strong public transport interchange between Huntingdale train station, and the 601 bus (the most frequent and patronised bus service in Victoria).

The Huntingdale Activity Centre is part of the Monash National Employment and Innovation Cluster¹, and has the following long term objectives:

- to become an important gateway, transit interchange and node of activity for Monash University and the local community
- a greatly improved public realm will change the feel of the area as a destination rather than simply acting as a transport interchange
- Renewal of industrial precincts will boost local economic performance and expand the array of jobs in the cluster
- Increased dwelling diversity and density will support a range of successful community, retail and recreational infrastructure

Huntingdale today has the preconditions to achieve these long term objectives —large lot sizes with heavy industrial uses, strong public transport connections, and proximity to the growing activity in the Monash NEIC. It is expected that these factors, left to run their course, will result in rising land values, increasing pressure for residential development and transition of existing land uses in the coming years. The key opportunity is to transition from its current state into a western anchor for the Monash NEIC, providing

- a gritty urban attractor, leveraging its industrial identity as exemplified by areas like Cremorne, Richmond, Parkville, Fishermans Bend, and Port Melbourne
- a high amenity urban centre interspersed with diverse housing stock to accommodate local residents and students alike
- land supply to capture economic activity expected to spill over as development intensifies in the Monash NEIC.

The study area considered across all the background reports is illustrated in Figure 5.

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 $^{^{}m 1}$ Victorian Planning Authority (2016) Monash National Employment and Innovation Cluster Draft Famework Plan



Figure 8. Huntingdale Activity Centre Precinct Structure Plan Study area

Source: PwC analysis (2018)

1.2 Objectives

The aim of the Precinct Plan is to set out a transformative, long term vision for the Huntingdale Precinct through to 2040, developing an overarching framework for urban structure and form that transform's the Activity Centre by:

- improving the attractive of the activity centre as a place to live, work and play to deliver the amenity and accessibility required for a liveable western anchor to the innovation activity centre
- using extensive stakeholder engagement to chart a path to transition of retail, housing and industrial land stock to higher value uses and provides a framework to manage that transition
- incorporating urban design to create a compact activity centre characterised by a variety of mixed uses, designed to serve the needs of workers, students and residents of the area.

1.3 Interdependencies with other work

This report is being developed in parallel with two other work streams related to the Monash NEIC:

- the City of Monash has separately commissioned the Clayton Activity Centre Precinct Structure Plan
- DEDJTR are separately developing a future vision for the Monash NEIC with precinct partners which will include the Huntingdale Activity Centre.

To manage interdependencies, City of Monash and DEDJTR have been consulted throughout the development of this report.

1.4 Report structure

This report is structured into the following sections:

Section 2 is the Land Use Background Report Objectives, which defines how the report addresses the wider Precinct Plan Objectives and the key inputs that the analysis depends on.

Section 3 is the Planning Profile Context assessment, which reviews the existing demographics, statutory and strategic planning documents, and other major policy documents and projects relevant to the Huntingdale study area.

Section 4 is the Land use analysis, which provides a data based analysis of the existing statutory planning environment, constraints to land supply, and opportunities for development relating to land supply. It also performs a Market Attractiveness Analysis to understand the market appeal for the Huntingdale Precinct and it's relation to the quality of land supply.

Section 5 is the Employment Analysis and Strategy development, which identifies the future potential capacity of the employment land and the demand for employment land based on Economic projections. The section proposes solutions and changes to accommodate the projected employment transition.

Section 6 is the Residential Analysis and Strategy development, which identifies the future demand for residential land based on existing residential development supply, and potential supply based on surrounding markets. The section proposes solutions and changes to accommodate the projected residential growth.

Section 7 is the Retail Analysis and Strategy development, which identifies the current capacity for retail growth and future demand for retail growth based on benchmarking performed by PwC Economics. The section proposes solutions and changes to accommodate the projected retail growth.

Section 8 aggregates the proposed solutions from Sections 4, 5 and 6, and provides a scenario analysis of how these solutions could impact land use over time, and how they relate to each other. The section also provides details on key factors relating to the Huntingdale Precinct that will affect the overall land use outcome.

2 Objectives for the Land Use Background Report

The Land Use Background Report will support the wider Precinct Plan objectives by evaluating current land use (including planning and market factors) and providing strategies to achieve the Economic Vision. The report does this by performing the following:

- Analysis of existing land use mix and quality and identifying potential future land use needs
- Propose land use strategies to accommodate potential future land use needs, including
 - Proposing strategic redevelopment opportunities
 - Proposing planning and policy mechanisms to enable change
- Land use strategies should consider and support:
 - Long term economic and employment growth aspirations
 - Retail needs of the centre
 - Enable the provision of community infrastructure as needed

2.1 Key inputs for the analysis

The Land Use Background Report provides an analysis of current land use conditions (including land supply and market factors) and future land use conditions, and suggests strategies to manage and control changes in land use and the associated urban outcomes into the future.

The analysis is dependent on several key inputs provided by the Economic Background Report. These are summarised below:

Projected employment by industry

PwC Economics performed an analysis to identify future industries that should be located in the Huntingdale Precinct. These were defined as industries to ('attract' industries), industries that will transition out of the area over time ('change' industries), and industries that will grow in respect of the population, such as retail ('population' industries). The projections are shown below in Table 1: Employment projections

Table 1: Employment projections by industry

Forecast Industry	2016	2025	2030	2040
Attract (total)	233	654	739	1,599
Manufacturing	30	45	50	478
Professional, Scientific and Technical Services	161	464	520	713
Retail Trade	0	56	56	56
Wholesale Trade	42	89	112	353
Change (total)	2,073	2,405	2,196	1,493
Administrative and Support Services	114	139	136	112
Agriculture, Forestry and Fishing	8	11	11	4
Arts and Recreation Services	16	22	24	11
Electricity, Gas, Water and Waste Services	19	26	28	13
Information Media and Telecommunications	16	16	12	5
Manufacturing	760	796	616	282
Mining	0	0	0	0
Other Services	287	370	378	158
Rental, Hiring and Real Estate Services	45	61	40	14
Transport, Postal and Warehousing	614	683	729	783
Wholesale Trade	194	280	221	112
Population	1,189	1,448	1,554	1,794
Accommodation and Food Services	104	141	149	166
Arts and Recreation Services	49	68	72	83
Construction	511	579	620	712
Education and Training	77	98	108	131
Financial and Insurance Services	8	10	10	10
Health Care and Social Assistance	208	277	305	372
Public Administration and Safety	61	59	55	48
Retail Trade	171	218	234	271

Source: PwC Economics (2018)

As part of the Economic Background Report Analysis, the locations were identified as being currently occupied by tenants that align with high value industries — these are shown in Figure 9. The land use analysis will consider these existing tenancies to ensure that strategies does not adversely impact these locations.

Industry turnover

Huntingdale Investigation Area
Industrial precincts
Recent development application
Non-developable
High value industry
Population serving industry
Industry turnover 2025 - 2030
Industry turnover 2030 - 2040

Figure 9: Existing high value industry tenancies in the Huntingdale Precinct

Projected residential population

PwC Economics have used State Government forecasting (Victoria in Future), residential development activity data provided by the City of Monash, and analysis of employment projections to form a projection of the future residential population for the Huntingdale area. The estimated projection is shown in Table 2.

Table 2: Projected residential population

	2016	2020	2030	2040
Residential Population	1,979	2,739	3,980	4,994

Source: PwC Economics (2018)

PwC also estimated the projected demand for student accommodation beds based on enrolments at Monash University. This was done on the basis that Huntingdale is strategically located to provide accommodation for some of this demand. The projected demand for beds is shown in Table 3.

Table 3: Projected student accommodation demand (beds)

	2016	Potential future demand
Population	58,151	70,000
Beds	5,223	7,000

Source: PwC Economics (2018)

Projected retail needs

PwC Economics have performed a benchmark analysis to identify the potential retail offering that Huntingdale could be expected to develop given the projected employment and population figures. This analysis assumes growth would be supported by appropriate catalytic developments and planning framework.

Based on the Economics Background Report, the Land Use report has assumed that the population would likely demand, and economically support, the development of a retail strip with attributes similar to the Highett Shopping Strip. Key attributes used include:

- Centred around a major mixed use shopping centre development with a floorplate of 11,000 sqm, including:
 - A full line supermarket
 - 17 specialty shops
 - 130 apartments above the development
- Zoning supporting retail development of approximately 40,000 sqm of gross land area (i.e. including streets and public spaces)



3 Context: Planning profile

The objective of the Land Use Background Report is to facilitate the economic, retail and residential Vision identified in the Economics Background report (see Section 2.1 for summary). It is important that any land use strategy employed is cognisant and in harmony with existing contextual issues that have shaped land use outcomes to date, and aligns with the wider strategic planning and policy environment.

The purpose of this section is to identify those factors that have been and will continue to be an influence on outcomes in the Huntingdale Precinct. The section reviews the following key influencing factors:

- State and Regional strategic planning and policy.
- Local Government strategic planning and policy.
- Built form factors including barriers to vehicle and pedestrian flows, urban character, land use transition and interfaces.
- Existing demographics, including age breakdown, ethnic and religious diversity and modes of transport used.

3.1 State & Sub-regional Planning & Policy

Plan Melbourne, 2017

Plan Melbourne is the current strategic planning document that addresses the next 30 years of urban development to 2050 for Greater Metropolitan Melbourne. The document specifically addresses issues around population growth and its associated housing, employment, transport and social challenges, climate change adaptation, and maintaining and growing Melbourne's status as a globally recognised liveable city.

The document seeks to address these challenges by encouraging population and employment densification and, and optimizing the use of existing infrastructure, jobs, services and public transport that are abundant in the middle eastern ring. A main theme of the plan is to do this through urban renewal to create future proof employment clusters close to where people live.

Key aspirations of the plan that specifically relate to Huntingdale and should be considered in its renewal include:

- Affordable and accessible housing: Huntingdale's industrial history means that a large segment of the workforce located here work in lower income jobs. It is important to provide affordable and diverse housing to support this working community.
- Mitigation and adaptation of climate change: Climate change is an ongoing concern and uphill battle for urbanising cities. The concentration of heavy industrial and transport uses in Huntingdale mean it houses many of the major emitting industries. Strategies should be sympathetic of key environmental issues in the area such as water flows that carry pollution and protecting existing urban forest to support biodiversity. This has flow on effects for the wellbeing of the local population.
- Living locally: Despite being well connected with nearby access to the freeways, bus services and rail, there are low levels of amenity within walking distance for residents and

workers. Major road and rail connections create barriers to walkability and access to the existing amenity and should be improved through better land use transitions. Land use strategies should support the provision of amenity to support a growing population.

Huntingdale is strategically positioned to take advantage of its proximity to the Monash national Employment and Innovation Cluster (NEIC). Consideration of the key themes outlined in Plan Melbourne is crucial to create a Precinct with walkable access to amenity and public transport, connectivity to jobs, education and key services, and a healthy and resilient worker-resident community.

Monash National Employment and Innovation Cluster, 2017

The Monash National Employment and Innovation Cluster (Monash Cluster) represents the largest concentration of jobs outside Melbourne CBD and it is anticipated that employment will double over the next 35 years. Development and investment will mainly occur across education, research, health, science and technology sectors, and Huntingdale must consider how it compliments and leverages this development from its current industrial profile.

The Framework Plan outlines five strategic outcomes and details the actions to implement them in the upcoming decade. As the Huntingdale Activity Centre Precinct is situated at the periphery of the Monash Cluster, it is important to consider the strategies and goals of MNEIC to best compliment and leverage them. These include:

- Strategic outcome 1: Grow employment and innovation in health, education and research Precincts

 A major success factors of research and innovation is commercialisation. A history of manufacturing and warehousing strong connectivity with the Monash Precinct position Huntingdale to provide a necessary commercial arm to the goals of the MNEIC. Furthermore improving residential density and amenity in the Activity Centre will create a liveable area if housing to support the Precinct wide growth in employment that is envisioned. The potential for this Precinct to be a major source of housing in the future is identified in the Monash Housing Strategy.
- Strategic outcome 2: Boosting job growth and developing attractive employment areas with business town centres.
 Huntingdale Station is a central intermodal transport hub with connectivity to the Monash Technology Precinct. The MNEIC Framework identifies the need to create vibrant activity centres that provide a range of services and facilities to support local living, and providing supplementary employment land to support the success of the NEIC strategy. Huntingdale is identified as one of three activity centres to provide this due to its large offering of industrial land and connectivity and proximity to the Cluster.
- Strategic outcome 3: Transformation of transport network
 High capacity trains and a potential new light rail alignment are being planned to service
 Monash University and the MNEIC. The growth and development of the Precinct should
 support its role as a major transport interchange for the Caulfield and Clayton Monash
 University Campuses, and the MNEIC, in the context of a rapidly growing transport
 network. In addition to major transport infrastructure, the MNEIC framework also
 suggests improvement in shared paths in the short-medium term to support more active
 forms of transport.
- Strategic outcome 5: Plan and deliver urban renewal projects and strategic sites
 The Framework has identified several long term objectives that the City of Monash is
 expected to incorporate into its structure plan and project scope for the Huntingdale
 Precinct. These include the renewal of industrial Precincts to achieve commercial growth
 and diversity of employment, increase in dwelling diversity and density to support
 community, retail and recreational infrastructure and addressing barriers caused by road
 and rail. Particular mention is made to the identification of the Huntingdale/Oakleigh
 South employment land as a future business park development under the City of Monash
 Industrial Strategy.

Student housing supply

Access to student housing within Huntingdale is a potential strategic advantage given the close proximity and high level of connectivity of the Precinct to both the Clayton and Caulfield Monash University campuses. A review of the wider Monash area has shown that purpose built student accommodation (PBSA) is scarce compared with other student areas, such as Melbourne CBD. This implies that for Monash University students not living at home, the primary source of accommodation is rented private residential properties within the Monash area or in student housing located on campus.

This housing need is primarily driven by international students, whose total enrolment number has grown by 86% in four years across both Clayton and Caulfield campuses. Despite the existing demand, Huntingdale's population currently only consists of approximately 8% of students (ABS Census 2016). Currently there are no known non-Monash University supported PBSAs in the pipeline for development. There are approximately 1,600 new units planned for delivery in the suburbs between the two campuses, however these are available to a broader competitive market, reducing affordability for students.

There is a supply gap within the market that would greatly serve the community and would help to activate the retail and commercial zones of the Huntingdale Precinct. Increasing the supply of student housing in proximity to the University will be important in supporting future demand for the University, and critical to the wider success of the Monash area as an educational hub.

High Capacity Metro Trains (HCMTs)

HCMTs are a \$2.3 billion investment by State Government to add capacity to the metro train network, starting from mid-2019 on the Cranbourne / Pakenham line on which Huntingdale Station sits (the busiest line in the network). Stations on the line will need to accommodate the extra length and capacity of the HCMTs which are expected to carry 11,000 additional passengers in the morning peak on the Cranbourne / Pakenham line and 39,000 additional passengers per day — this is based on an additional capacity of 500 passengers per train. State Government modelling has suggested that by 2031 metropolitan rail average weekday boardings across the network will double to 1.7 million boardings, increasing at approximately 4% per annum (850,000 boardings per day).

The HCMTs are currently planned to enter service in mid-2019 along the Cranbourne / Pakenham line.

Oakleigh Major Activity Centre Structure Plan, 2012

Whilst not directly included within the Huntingdale study area, the Oakleigh Activity Centre directly adjoins the Activity Centre and subsequently will need to consider the existing character, amenity and services within Oakleigh as having significant influence over the development of the north-western end of the Huntingdale area.

The Oakleigh structure plan envisions a vibrant and walkable retail, food and beverage and cultural Precinct with increasingly dense residential developments along the train line. The Oakleigh built form is characterized by single and two-storey buildings of fine grain, and largely protected by heritage overlays.

The core retail and commercial Precincts within the Activity Centre abut the western edge of the Huntingdale Precinct, and include plans for larger retail, medium and low rise residential and commercial mixed uses. If and when undertaking industrial renewal in the land adjacent to these Precincts, the Huntingdale Precinct should consider how it would interface with the Oakleigh Activity Centre, how to leverage of the established residential and retail demand, and the possibility of tensions arising amongst residents whose dwellings face the industrial area.

3.2 Local Government Planning & Policy

Planning Scheme: Municipal Strategic Statement

The Councils Municipal Strategic Statements says:

"Critical common land use issues relate to open space, transport linkages, provision of appropriate housing and industrial uses, drainage catchment health and environmental works both upstream and downstream of the municipality, the interface between conflicting land uses and linkages to key educational facilities."

The Monash Planning Scheme Strategic Statement outlines several key characteristics which the planning controls seek to support, develop and protect. The suggestions proposed by this report should be congruent with the sentiments of the Council planning document. The following key factors were identified that will inform our land use assessment and overall structure plan decision making:

- Regionally, critical common land use issues relate to open space, transport linkages, provision of appropriate housing and industrial uses, drainage catchment health and environmental works both upstream and downstream of the municipality, the interface between conflicting land uses and linkages to key educational facilities. In the Huntingdale area, the Council has communicated existing tensions between residents that interface with the heavy industrial areas. Furthermore Huntingdale is strategically located between both the Caulfield and Clayton campuses for Monash University, and within proximity to the Holmesglen Tafe and thus is placed to benefit from strong transport linkages and student accommodation.
- Key influences on planning for the City of Monash include:
 - Sustainable living conditions.
 - Regional changes in demographics and lifestyle choices.
 - The location of employment and level of economic development.
 - The changing nature of industry and retail.
 - Maintenance of Garden City character, cultural elements and heritage.
- Historically, the residential character of the LGA is defined by Garden City development, with low rise detached dwellings and private gardens built in the 1950s and 1960s. This environmental quality is also prevalent in high quality commercial areas. The land use strategy should consider how Garden City concepts are revisioned in the context of denser living, in creating a feeling of 'greenness'. The importance of this is recognised both by the community and the Council in making areas liveable and commercially competitive.
- Of the industrial and business zoned areas in the LGA, these are significantly concentrated along the Oakleigh Clayton railway axis, which Huntingdale sits in the middle of. It will be important to understand how to balance the preservation of this spine and the associated agglomeration benefits with the transformative initiatives proposed by the Precinct plan.
- The industrial areas within the City of Monash are a significant regional and metropolitan generator of economic activity and employment, of both the high tech and manufacturing sectors. For Huntingdale, this is owing to its historical land zoning tending toward industrial and business, strong connectivity to the Monash Freeway and surrounding economic and employment hubs (i.e. the Monash Precinct), and access to a large catchment of white-collar workers. It will be important to understand how the

Huntingdale plan continues to support this, and encourages these industries to adapt to the changing manufacturing industry and complimentary changes in the Oakleigh and Monash Precincts.

- Currently Monash caters for approximately 90,000 full time workers across 11,500 businesses. Industry is dominated by growth in high tech and service industries, and manufacturing, with significant investment in the growth of Monash area Science, Technology, Research and Innovation. With continued growth and expected wider local benefits to be realized from these growth areas, Huntingdale should respond and compliment this in its structure plan by leveraging its existing role as a manufacturing hub.
- Whilst no significant heritage overlay in the Huntingdale project area, built form should
 consider the goals for Garden City Character, and reference significant heritage character
 in the nearby Oakleigh area. Development should also leverage the 'gritty' industrial
 character of the area that has proven to be an attractive attribute in residential real estate
 markets like Richmond, Cremorne and North Melbourne.

City of Monash Housing Strategy, 2014

According to Victoria in Future 2012, the population of Monash will increase to approximately 200,500 by 2031 and households are anticipated to increase by 10,283 between 2012 and 2031. The strategy identifies infill development and manage expected increase in demand for higher density residential development as priority solutions to accommodate population increase and demand for high-density living. These will be particularly challenging in the current Huntingdale context of low rise detached dwellings, limited residential zoning and potential contamination risks for rezoned land. Other key issues include housing affordability, meeting the housing diversity needs of ageing residents, ethnically diverse groups and tertiary student population and ensuring that development is appropriate to and preserves the highly valued Garden City Character of the municipality.

The Huntingdale to Yarraman (Noble Park) Corridor is expected to become a major source of housing contingent upon proposed infrastructure improvements which includes rezoning for residential and mixed use to create small scale business opportunities — at the time this was delegated to the Metropolitan Planning Authority, and is not currently listed as a project with the VPA. This is attributable to its identification as an Urban Renewal Area for long term future growth opportunities in Plan Melbourne. No specific recommendations have been made regarding housing in the Huntingdale Activity Centre, however it's density of

Diverse forms of housing and mixed use developments are encouraged. Given the density of low economic value adding employment, proximity to major business clusters in the Monash NEIC, and proximity Monash University of the Activity Centre would suggest that housing diversity specifically means dense, affordable and student housing should be provided. Size of allotments, age of existing housing stock and high land value close to transport nodes are recognised as potential barriers to increasing housing diversity in these areas.

Monash Industrial Land Use Strategy, Charter Keck Cramer, (2014)

The report was commissioned by the Council to provide strategic direction to support the future planning and development of industrial land, including zoning changes for other uses. Specifically this strategy was to inform the future employment role of the LGA, identify opportunities and provide Precinct specific visions and strategies, including the Huntingdale area. This document provides key details on the wider industrial future of the LGA to ensure Huntingdale compliments the overall area, and has a sustainable strategic function.

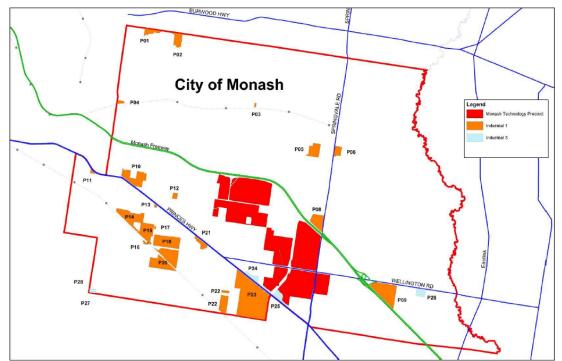


Figure 10: Monash Industrial Land Use Strategy

Source: Charter Keck Cramer, (2014)

Figure 9 shows that at the time of the study, the Huntingdale area accommodates the majority of the industrial zoned area within the Monash LGA, with the other major industrial area being Clayton. The report recommended that:

- All industrial areas retain industrial zoning, with exception to P16 and P17 which is recommended to be rezoned to Mixed Use Zone and appropriate residential zoning respectively, subject to an environmental audit.
- Strategically the Huntingdale Industrial locations would serve a range of functional industrial buildings while offering opportunity for development of more contemporary industrial facilities for higher value activities. Industrial areas may also transition to some lighter uses such as high profile business parks.
- North Road frontage is recognised as an asset to the industrial land that should be developed and leveraged to achieve quality industrial tenants wanting exposure.
- Areas closer to the Huntingdale Road shopping strip could leverage the location and be used for recreational activities.
- The P16 area should be encouraged toward high density residential use to leverage it's proximity to the train station.

3.3 Access & Urban Form

Transport and access

Figure 11: Public Transport routes and barriers to access



The Precinct is well connected by public transport, and advantageously located between the economic hub that is the Monash NEIC, the Clayton and Caulfield Monash University campuses, and the established Activity Centre at Oakleigh, all of which accessible via train. High capacity metro trains (HCMT) are due to be delivered on the line by 2019, which will accommodate an additional 500 passengers on each train. The train also provides access to the University of Monash Caulfield Campus and the Chadstone Shopping Centre. Access to the University of Monash Clayton campus is provided by the 601 shuttle bus that runs every 3 minutes between Huntingdale Station and the university. Whilst this is one of the most frequent bus lines in Melbourne, it inherently faces significant capacity constraints.

However, North Road which has 6 lanes, the rail line, and the complex and grade separation at the Huntingdale Rd / North Rd intersection all create physical barriers reducing walkability and access. Reducing barriers will be important in creating an attractive location for business investment and workable employment zones. Furthermore, heavy industrial areas with little amenity creates perceived safety risks that reduces access for residents to the train station and foot traffic throughout the area. Creating a more vital and walkable neighbourhood creates a positive feedback loop that invites investment into the area, improving access to amenity, and increasing the walkability of the area further.

Figure 12: Major rail and road barriers



Source: PwC (2018)

The poor walkability and abundance of physical barriers is reflected in the typical mode of transport to work, shown in Figure 13.

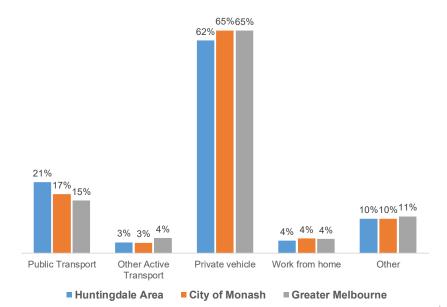


Figure 13: Methods of travel to work

There is a clear dominance of private vehicles in the Area that is in line with wider Melbourne's car dependency. However, due to the proximity of the area to the Huntingdale and Oakleigh train stations, the use of Public Transport is above average. It should be noted however that this data refers to travel to work, and would understate the demand for bus capacity driven by students travelling from Huntingdale Train Station to the Clayton Monash University campus. This is connected via two buses, one of which is a shuttle, and are frequently at capacity (refer to Transport Background Report for detail).

Urban Form and Character

Land Use is significant in influencing built form outcomes and defining urban character. The prevailing land use and planning control to date have resulted in the industrial look and feel of the Precinct today. As such, it is important to consider the built form and urban character that exists in the Precinct to understand what form should aim to be retained and what should be improved as part of the land use strategy. These factors play a significant role in creating the vitality that will attract denser residential development and major industry tenants.

Key observations on built form and character include:

- Interface issues between industrial and residential land uses are significant and detract from the liveability. This presents an opportunity and incentive to encourage increased residential density along these boundaries.
- North Road and the rail line are major barriers to mobility and should be addressed where connected Precincts would be desirable.
- There is very little amenity across the whole Precinct that creates a liveable and vital environment this would need to be improved to support higher density residential and a greater mix of commercial and industrial land use.
- The amenity available in the Oakleigh Activity Centre has demonstrated the markets ability to develop dense residential amongst the existing low rise environment amenity in Oakleigh could be leveraged into those areas of the Huntingdale Activity Centre within walking distance.

Refer below for key images describing the urban issues and existing character and a map showing key sites and features identified.

Figure 14: Key features informing urban form and feel

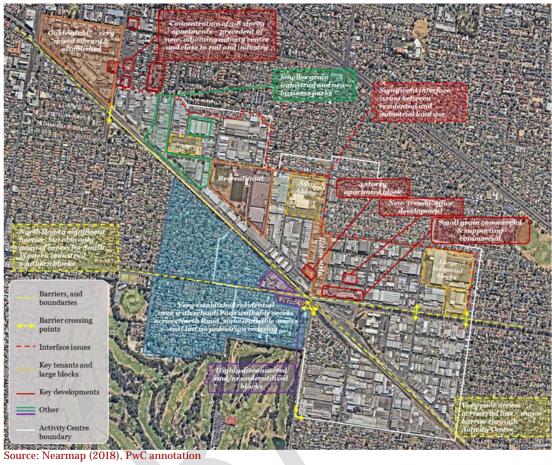


Figure 15: New Commercial Development in South-East industrial block



Figure 16: Established residential with busy and complex road network (south of North Road)



Figure 17: Three to eight storey mixed residential development in Oakleigh, supported by Oakleigh Activity Centre



Figure 18: Poor land use and built form interface throughout Activity Centre, where industrial abuts residential

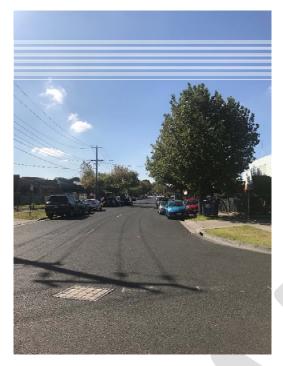






Figure 19: Existing commercial and mixed density along Huntingdale Road retail strip, and close to Huntingdale Train Station







3.4 Demographics

The current demographics should be considered as informing the future demands for retail, community infrastructure and amenity in the area, as well as forming part of the local workforce. These demographics are expected to prevail in context of the forecast population growth summarised in Section 2.1.

The following data has been obtained from Forecast ID (2016 Census) and corresponds to the Small Areas of Oakleigh, Oakleigh East — Huntingdale, and Oakleigh South (collectively referred to here as 'Huntingdale Area'). Whilst these do not align with the study area boundaries, they wholly capture the study area and deemed to be indicative of the demographics in the area and appropriate for the purpose of the analysis.

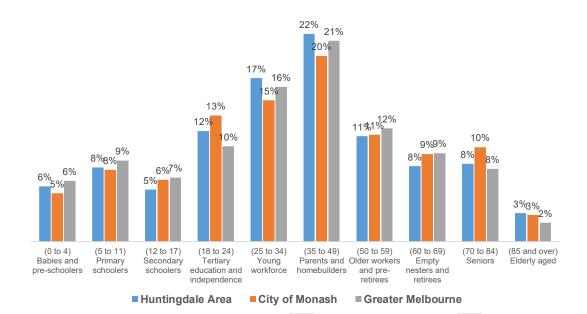


Figure 20: Population breakdown by age

Figure 1 shows the breakdown of the population by age. Relative to Greater Melbourne, the Huntingdale Area has proportionally higher levels of young workforce and parents and homebuilder populations. Alternatively it has relatively lower levels of those aged between 60 and 85. The disparity in these age brackets are even greater when compared to the City of Monash. This implies that whilst ageing is an ongoing challenge for the Council as a whole, this is less profound in the Huntingdale area. Alternatively, higher rates of families, and those that will likely become families in the future, imply that the Precinct should more heavily cater to the needs of these groups, such as the provision of child care, schools, family homes and neighbourhood type retail.

The below two graphs show country of origin and religious diversity. Figure 3 shows that, whilst not as diverse as the wider Council area, the Huntingdale has a high level of representation of non-English speaking backgrounds when compared to Greater Melbourne.

This diversity does not necessarily carry through t0 diversity of religions, which is largely aligned with the Greater Melbourne and Council levels of faith, shown in Figure 4. The one area of particular dominance is a higher representation of persons of Greek Orthodox faith, 13% compared with 7% and 3% of the Council and Greater Melbourne respectively.

Figure 21: Diversity - Overseas representation

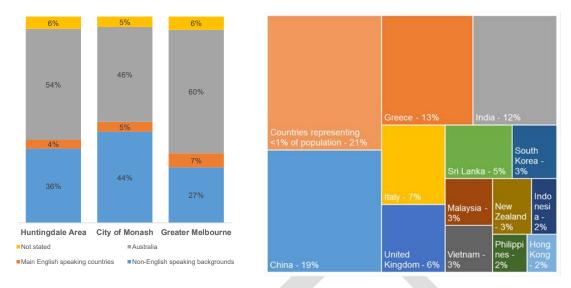
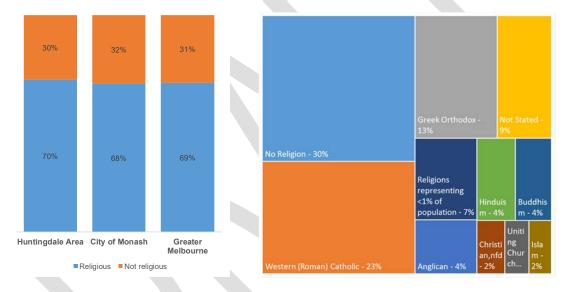


Figure 22: Diversity - Religious representation



4 Land use analysis

The Economics Background Report identified the total land that should be retained as being occupied by tenants that support the future Vision for the Huntingdale Precinct (summarised in Section 2.1). These tenants reduce the total available land that will be available to accommodate new tenants and invest in key infrastructure to support the Huntingdale Community.

The land use analysis aims to use this information to develop a complete view on what land is available to be developed, implement strategies and transition to achieve the Huntingdale Vision. This is based on two frameworks:

- Identifying total developable land area land that is not constrained by existing land use by attract industry tenants, planning and environmental constraints, or land used for essential community purposes.
- Performing a Market Attractiveness Assessment to identify the demand for residential, commercial (including retail) and industrial uses across the precinct.

The results of this analysis will be to identify the total land available for transition, and the key areas that can be invested in to leverage existing market forces and achieve a market led outcome.

4.1 Land use constraints & opportunities

The land use constraints analysis identifies all land that has attributes that would restrict it from any transformative change over time, and should be excluded when considering the total developable land supply. Attributes that have been assessed as constraining the land from development or land use change include:

- Essential civic land (education, health, park land, infrastructure)
- Heritage protection
- Land occupied by attract industries (as defined by Economics Background Report)
- Flood risk
- Environmental Protection Overlay

4.1.1 Current planning and land use

Constraints and opportunities are relative to the existing conditions of the urban environment, and so should be considered as a starting point to understand for whom is development constrained, does opportunity exist, and what is the opportunity that exists. The current zoning for the study area and the land uses that have resulted to date are shown in Figure 13 and Figure 14.

Figure 23: Current zoning



Figure 24: Current land use



Industrial & Commercial

The zoning shows that a significant portion of land in the Precinct is zoned Industrial 1 Zone (approximately 87 hectares, or 63% of total lot area). The significant presence of industrial land and dominating use by industrial businesses in Huntingdale makes it a leading provider of industrial services in the City of Monash, and a competitive industrial area in middle ring suburbs. The extensive industrial use and limited commercial zoning has impacted the ability for a commercial market to emerge in any meaningful or controlled way. Commercial businesses are scattered in a disconnected manner primarily east of Huntingdale Road, which has limited the ability to gather momentum to develop any sort of significant commercial presence or attraction. Greater detail on the commercial and industrial businesses with tenancy in Huntingdale are provided in the Economics Background Report.

Retail

Similarly the strip of Commercial 1 Zone along Huntingdale Road (approximately 1.6 hectares, 1% of the total lot area) supports only a small amount of retail and other amenity. Locationally this is disconnected from much of the residential areas, limiting its ability to service them and affecting the quality of the retail offering. The lack of quality retail available is a detractor from high quality industrial and commercial tenants whom seek locations with vibrant amenity and service offerings. This lack of retail amenity along the activity centre also limits its ability to support dense residential development.

Residential

General Residential Zoning has resulted in the prevailing residential form of detached single and double storey dwellings. This is primarily low density, with some medium density housing existing in the form of subdivided blocks with additional detached single and double storey dwellings. There is a small offering of high density apartments and mixed use buildings. These predominantly occur along Huntingdale Road, drawn by proximity to Huntingdale train station and the Huntingdale Road retail strip.

Throughout the Precinct there is a harsh interface between the industrial and residential uses, which has been primarily driven by the abutting zoning for these areas that does not allow for appropriate transition. Zoning that supports the development of medium-high density residential, mixed use and commercial land uses would help to create a buffer between residential neighbourhoods and heavy industrial uses.

Public Open Space and Civic land uses

The Precinct has very limited open space, primarily provided by the Jack Edwards Reserve. Whilst Council owned land, Jack Edwards Reserve is leased to the Oakleigh Cannons Football Club which limits its availability for broader public use and emphasis the lack of public open space provision. Public open space is considered in greater detail in the Community Infrastructure Background Report and the Urban Design Background Report. There is also a notable number of Places of Worship that have arisen in the north-east industrial area servicing the wider Catholic, Hindu and Muslim communities beyond the boundaries of the study area.

4.1.2 Land supply constraints

Key constraints to development and/or changes in land use are shown in Figure 15 and Figure 16. These constraints are either due to a need to protect the existing land use which would be essential to the future needs of the area, or due to flaws in the land that render the land unable to be developed or changed.

Figure 25: Planning overlays



Figure 26: Other sensitive uses



Planning overlays

The planning overlays in the Precinct show there is very limited heritage protection that would restrict development or change, covering three small lots. However there is a significant Special Building Overlay that covers approximately 33 hectares of the Precinct — these overlays relate to areas of the Precinct that are at risk of flooding and may impose additional costs or constraints on development.

Notably there are no lots covered by an Environmental Protection Overlay or requiring an Environmental Audit. From site visits attended and review of detailed land use data it is highly likely that land within the industrially zoned areas may be contaminated due to older construction of buildings containing asbestos and hazardous materials from historical uses, such as automotive industries.

Other sensitive uses

Figure 16 shows other sensitive uses that we believe should be protected to service the ongoing needs of the community, or represents other uses that would not likely be available for land use change. This is primarily represented by the Huntingdale Primary School, the Germain Street Pre-School, and the Jack Edwards Reserve, all of which are community services in limited supply that will serve an essential and ongoing need for the area. The analysis also identifies the Oakleigh Barracks — this is owned by the Department of Defence, a branch of Federal Government, and represents a higher order strategic asset that is beyond the ability of Council, or the market, to change or develop (without the engagement of the Department). Other lots excluded include land use for infrastructure and the rail corridor.

Based on the analysis above, the total land supply that is constrained and should be excluded from the total land (in terms of site area) for development and change is 56 hectares (approximately 41% of total land area) across 62 blocks. This is primarily relating to the Special Building Overlay. Refer to constrained blocks in Figure 17.

TO UPDATE WITH NEW MAP INCLUDING ANCHOR TENANTS

100 0 100 200 300 400 m

(Muntingdale Station

Constrained land

Huntingdale Investigation Area

Constrained Land Supply

Figure 27: Total constrained land supply

4.1.3 Land supply opportunities

The land supply opportunities analysis identifies inherent attributes in the land supply that reduces barriers to developability and encourages market led development on a site. The following land attributes are considered to be opportunities for developability:

- Clustered ownership
- · Industrial land not supporting priority industries
- Government land where the use is not specific to the location and/or serving the needs of the community
- Significantly aged building stock
- Other unconstrained land

Clustered ownership

Figure 18 shows clusters of lots that are owned by the same owner. This indicates those areas where initial perspectives of fine grain and fragmented ownership do not necessarily represent a barrier to development or change, and should be included as an opportunity in the same way that a single large block is.

Other opportunities

The other development opportunities shown in Figure 19 identify land holdings that are readily available for significant change (in use) or intervention by Council to initiate change. One of the more significant land holdings is under Department of Health and Human Services ownership. These assets are not significant to the Huntingdale location and could be relocated elsewhere without significant loss to enable alternative land uses that would add greater value to the transformation of the Precinct.

Other major opportunities shown are an amalgamation of sites, where a consortium of local land owners have approached Council with the prospect of a zoning amendment to their industrial land holdings to allow mixed use development. The future development of the Precinct needs to be contained within a planning framework. If Council do not implement changes in zoning in line with a controlled and coordinated framework, then the demand for mixed use development will result in the market dictating and facilitating changes in land use based on the highest and best use.

Figure 28: Clustered ownership

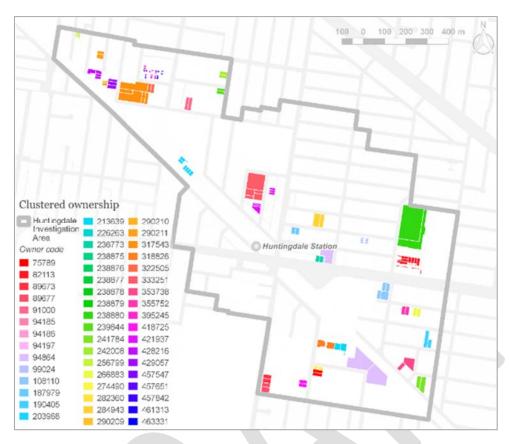


Figure 29: Other development opportunities



4.2 Market Attractiveness Assessment

The market attractiveness of an area is determined by two factors, as measured by the Market Attractiveness Assessment:

- **Market appeal**; factors that create demand for a particular area or site and would encourage a developer to enter a particular market for commercial or residential development.
- **Supply of developable land;** the degree to which land is available and easy to be developed for residential or commercial uses.

Market appeal is measured by those attributes of an area that create demand for a particular land use there, such as high levels of amenity encouraging residential density demand. The MAA uses metrics that are indicators of demand in an area to measure market appeal, such as high land value. Market appeal attributes include:

- Access to retail, amenity and services
- Surrounding land values (by land use)
- Scale, type and location of planning application activity.
- Building age, both as an indicator of need for renewal and potential risk of asbestos contamination
- Urban grain and parcels of continuous ownership

Total supply of developable land has been defined in Section 3.1 – this excludes the land that may be constrained by current use by anchor industries, planning and environmental factors, or being used for essential community services.

Where market appeal factors and land supply factors are sufficiently high, the market would be attracted to develop (in relation to a particular land use type) without any further intervention. Where these factors are insufficient and do not stimulate market led development, the Council role is twofold:

- To facilitate change within a planning framework that enables controlled development and achieves Council objectives.
- Where market attractiveness is insufficient, to intervene more significantly to increase the market attractiveness of the area and encourage new development.

The output of the MAA tool is an indicator of the scale and type of intervention that the Council would take to stimulate a particular kind of development, for example a catalytic intervention to release significant amounts of land for residential development where there is high levels of market appeal but no land supply.

4.2.1 Market appeal factors and indicators

Building Age

The building age analysis in Figure 20 shows that the industrial building stock is significantly aged, with 49% of buildings being aged greater than 50 years. Aged building stock means that land owners are looking to repair or rebuild the stock, a trigger point for potential renewal for higher and better uses. New building stock also represents an opportunity to create mixed use industrial and business parks that feature modern workplace facilities and attract higher quality tenants.

There are a significant number of buildings constructed between the 1950s and 80s when the use of asbestos was prevalent. This represents a potential deterrent to renewal as there would be additional costs associated with safe disposal and remediation of contaminated buildings. This represents approximately 26% of the industrial building stock. Whilst both these factors increase cost and reduce market appeal, they do not necessarily constrain land supply. In addition this would only represent a risk where the land use of the site required appropriate remediation.



Figure 30: Building Age

Planning application activity

Figure 21 shows planning application activity (over approximately two years). Majority of planning applications in relation to industrial and commercial properties have occurred to the east of Huntingdale road, showing there is appetite for change in proximity to the retail strip. Highlights of development in the area that reflect market sentiment include:

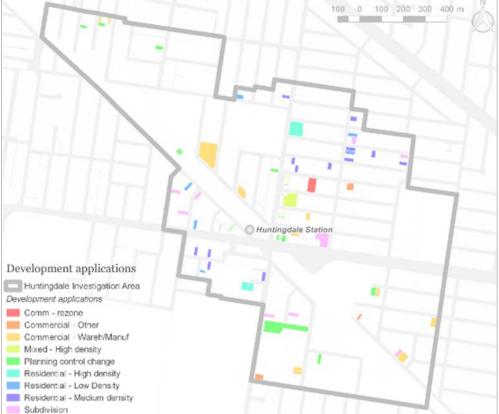
- 1 Stafford St 5 storey mixed use development, with basement carpark and retail shops at the base, and 32 residential dwellings on the 4 storeys above. Current use as a General Purpose Factory.
- 302 Huntingdale Rd 3 storey mixed use development, with retail shop and carpark on ground floor and 4 two bedroom dwellings on the storeys above. Current use as single storey retail.
- 256-262 Huntingdale Rd 4 storey residential apartment development, consisting of 82 dwellings and two basement levels of car parking. Current use as office space.
- 2-4 Grange St two 3 storey residential apartment development, consisting of 34 dwellings with a basement carpark. Current use as detached residential dwellings.

- 30 applications for subdivision and construction of two and three detached dwellings were approved.
- 38 planning permits were issued relating to commercial and industrial development, though none were of notable density or land use change.

Figure 31: Examples of mixed-use developments approved in the area (left to right; 1 Stafford St, Huntingdale, 256-262 Huntingdale Rd, 2-4 Grange St)







4.2.2 Market attractiveness analysis results

Using the land supply analysis and understanding various indicators of market activity and appetite for development in the area, we have performed the market attractiveness analysis. Market Attractiveness is defined in relation to specific uses, such as an appeal for development of residential property. While an area may be attractive for a particular use the analysis does not necessitate that change should occur, and may indicate that pressure for other uses requires planning controls in place to retain or protect a particular use.

The market attractiveness analysis has been performed across multiple areas in the Precinct to reflect the differing attributes of that area that would define its market attractiveness, such as proximity to public transport and access to amenity.



Figure 33: Market attractiveness of the north-west area

Appeal for both commercial and residential developments is high in the north-west sector of the Precinct, primarily driven by the strong amenity and service offering available at the nearby (walkable) Oakleigh Activity Centre. The potential for change is limited by the land supply constraints that exist, including a relatively high risk of contamination as indicated by the average building age of the area, Special Building Overlay, and current industrial zoning and use. The existent of market attraction means that this area could potentially change toward either of these uses by facilitating greater land supply.



Figure 34: Market attractiveness for the central area

The central corridor and surrounding area of the Precinct has the highest market appeal relative to the rest of the Precinct due to the existing amenity along Huntingdale Road, high level of access to Huntingdale Train Station, and existence of commercial and residential activity in the area. The area is constrained from being market led due to the lack of land supply available for commercial and residential development, and could be improved by releasing more land through zoning changes amenable to this kind of development. The market attractiveness is reflected in the planning application activity shown in Figure 21.

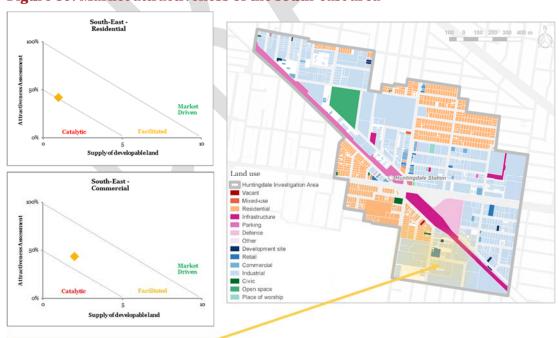


Figure 35: Market attractiveness of the south-east area

The south-east sector is heavily constrained for development due to the high risk of contamination (based on building age) and flooding risk per the Special Building Overlay. The area is disconnected from amenity and the wider commercial and industrial zones by the rail line further reducing appeal. Residential appeal is improved by surrounding residential

uses of higher average land value, creating a value trough in the industrial area with no meaningful connectivity to the wider industrial / commercial areas.



Figure 36: Market attractiveness for industrial core

Due to the prevalence of surrounding industrial use and lack of amenity and services beyond the Huntingdale Road strip, residential development appeal is low relative to the rest of the sectors. This is emphasised by land constraints including contamination risk and zoning not allowing residential development. The potential for commercial use is relatively strong however, with a high market appeal and land supply offering. This is driven by the existence of commercial businesses increasingly present within the area, shown by recent planning activity for commercial development (Figure 21). There is good opportunity to facilitate commercial development through increasing land supply for commercial uses, most likely through zoning changes.

5 Employment Analysis & Strategies

5.1 Demand and capacity analysis

Based on the employment analysis performed within the PwC Economics Background Report there are three industry types which are anticipated to locate within Huntingdale, which include:

- **Attract** industries: these are industries that the Precinct should try to attract based on their value and role within the Precinct and the Monash NEIC.
- **Change** industries: these are industries that have no long term value to the Huntingdale Precinct. They typically have an existing presence in the industry and so any future strategy should encourage the transition of the industry to a higher and better land use.
- **Population** industries: these are industries that are driven by the growing employment and residential population in the area. These industries typically include providing quality retail and amenity offerings that enhance the liveability and vibrancy of a Precinct. This is critical to providing a desirable work environment that will support the attraction of anchor tenants.

It should be noted that retail demands are discussed in greater detail in Section 5.2. Community infrastructure needs (broadly including health, education and community services) are addressed in greater detail in a separate Community Infrastructure analysis and not discussed here.

Projected capacity of land supply for employment uses

Using the economic projections summarised in Section 1.3, future demand for land for particular employment uses has been estimated. This is defined by building typology that each industry type typically is attracted to, and Huntingdale should seek to provide or develop to attract the desired industries.

Table 4 and Table 5 show the anticipated demand for GFA for employment uses according to the respective building types that each industry demands. This is also differentiated by attract industries, and change industries, as circumstances may arise where industries transitioning out may make available building stock for attract industries, thus not requiring any action from Council. Refer to Appendix B for assumptions used to calculate projected GFA demands.

Table 4: Projected demand for 'attract' industry development

Building typology	2016 (sqm GFA)	2025 (sqm GFA)	2030 (sqm GFA)	2040 (sqm GFA)	Change (2016 – 2040)	Industries demanding building type
Commercial	4,000	11,600	13,000	17,800	13,800	Professional, Scientific and Technical Services
Industrial	3,100	4,700	5,300	50,000	46,900	Future Manufacturing
Wholesale	1,400	3,000	3,800	12,000	10,600	Wholesale Trade
Retail	0	1,700	1,700	1,700	1,700	Retail Trade

Table 5: Projected demand for "change" industries development

Building typology	2016 (sqm GFA)	2025 (sqm GFA)	2030 (sqm GFA)	2040 (sqm GFA)	Change (2016 – 2040)	Industries demanding building type
Commercial	31,400	39,900	39,900	20,100	-11,300	 Administrative & Support Services Arts & Recreation Services Information Media & Technology Rental, Hiring & Real Estate Services Financial & Insurance Services Public Administration & Safety
Industrial	134,900	146,400	132,100	105,200	-29,700	 Electricity, Gas, Water and Waste Services Traditional Manufacturing Construction
Wholesale	74,800	83,300	88,800	95,400	20,600	Wholesale Trade
Warehousing	14,500	19,700	17,900	8,100	-6,400	Transport, Postal & Warehousing
Retail	14,600	19,300	20,600	23,200	8,600	Retail, Food & Accommodation services

A description of these building typologies is provided below in Table 8 and Table 9.

Projected capacity of land supply for employment uses

The employment land supply capacity analysis uses the existing land supply for employment uses to understand the future potential capacity of this land for forecast uses. While building type may transition, the analysis assumes that existing industry mix (and consequently building type) will prevail, and land will be fully developed within the existing planning framework. This analysis also takes into consideration any land identified as being constrained in the land supply constraints analysis in Section 3.1.2.

The results of the capacity analysis are shown in Table 6. Assumptions used in the projection are detailed in Appendix B.

Table 6: Projected capacity of land supply for employment uses

Projected capacity	Estimated land supply capacity (sqm GFA)	Lot Area (sqm)
Commercial	21,000	7,700
Industrial / Wholesale	860,200	603,600
Warehousing	74,300	156,500
Retail	45,700	21,100
Other - to transition to employment use	266,700	141,100
Constrained and other N/A uses	0	61,100

Source: PwC Analysis (2018)

Projected surplus / deficit in future employment land supply

Based on the analysis, there is a deficit of land supply for commercial, warehousing and health care uses. Overall, however, there is a significant surplus of employment land due to the potential for greater floorplates and additional height on existing industrial land. The results of the analysis are shown in Table 7.

Table 7: Projected surplus / deficit in future employment land supply

Building typology	Estimated future demand (GFA sqm)	Estimated future capacity (GFA sqm)	Deficit / surplus	Reason for deficit / surplus
Commercial	37,900	21,000	-16,500	Existing zoning favours industrial activity.
				 Current environment is not environment attractive for single purpose commercial facilities.
Industrial / Wholesale	179,800	860,200	677,200	Large existing quantum of land supply appropriate for industrial / wholesale uses.
				 Existing small floor plates and low-rise development means there is latent potential for growth in land offering.
				 Inflow of demand for land in attract industries is offset by low value wholesale and manufacturing industries transitioning out, resulting in a marginal increase in land demand.
Warehousing	95,400	74,300	-21,100	Modest growth in industry in Precinct will increase demand.
				 Deficit in supply easily serviced by other building stock, due to low construction cost of warehouse facilities.
Retail	25,000	15,200	-9,800	Low quantity of zoned land supporting retail development
				• 65% of existing C1Z land is used for retail, giving limited growth potential.
				 Future capacity limited by low potential for vertical growth of retail.
Other	0	266,700	266,700	Relates to other land vacant or used for uses not expected to exist in the area (e.g. brothels)
				260,000 sqm of this relates to IN1Z land and would transition to uses suitable to that zoning (unless changes are made)

Based on the results above, Table 8 and Table 9 define the typical building demands for the future. This informs the recommendations and strategies provided in Section 4.2, and where excess land supply may be used to satisfy those industries that will face deficits in supply. It is important to note that the projections are indicative, and building types and recommendations should be flexible to accommodate variations in projections and unforeseen market forces.

Table 8: Projected building typology demands for 'attract' industries

Building typology	Key characteristics of this building typology	Industries that demand this typology	Example of building
Commercial	 High quality internal fitout and internal amenity, such as end of trip facilities Close proximity to local retail and amenity Medium floorplate supporting open plan office 	Information Media & Telecommunications Financial and Insurance Services Rental, Hiring & Real Estate services Professional, Scientific and Technical services Administrative & Support Services Public Administration & Safety	
Industrial	Large floorplate for factory / manufacturing function Freight & logistics access (loading bays and access to arterial roads) Front end office and administrative space + some amenity Arterial road exposure for advertising opportunities	Manufacturing Electricity, Gas, Water & Waste services Construction	GRED SIEMENS
Wholesale	Large floorplate for warehousing Front end showroom space Small amount of office space + some amenity Freight & logistics access (loading bays and access to arterial roads)	Wholesale Trade	

Table 9: Projected building typology demands for 'change' and 'population' industries

Building typology	Key characteristics of this building typology	Industries that demand this typology	Example of building
Commercial	As above		
Industrial	As above		
Wholesale	As above		

Warehousing

- Large floorplate for warehousing
- Basic level of office space
- Freight & logistics access (loading bays and access to arterial roads)

• Transport, postal and warehousing



Health

- Small closed office space or suites
- Quality fitout and internal amenity
- Can equally be housed in residential buildings or commercial office space

• Health Care and Social Assistance



Retail

Discussed in Section 6.

5.2 Employment land use strategies

Attract Industries

The five industries that were identified to attract anchor tenants into the Precinct demand primarily warehouses and commercial office spaces. These industries deliver value when they are collocated and so strategies should enable this to occur.

Table 10: Proposed anchor tenant site recommendations and actions

Site Option A (i): 1340-1352 North Road Site Option A (ii): 1313-1327 North Road

Site A(i) Area: 14,000 sqm 125m North Road frontage Potential Use: End-to-end manufacturing / warehouse / head office facility Indicative height & GFA 2 – 3 storeys 15,000 – 22,000 sqm GFA





Site Advantages

- Large multi-site block allowing for single tenant or multiple complimentary tenants
- North Road frontage providing business exposure and direct access to an arterial road
- Large site allows colocation of warehousing, logistics, head office for end-t0-end businesses
- Protected from residential areas reduces risk of community opposition or unfavourable land use change
- Current industries on site expected to transition

Site Challenges

- Low walkability to Huntingdale retail strip and train station due to traffic conditions on North Road – no supplementary retail / amenity offering available in area
- Fragmented ownership increases the cost of land consolidation – 2 owners
- Existing zoning would likely not accommodate professional and technical services businesses

Site A(ii) Area: 12,000 sqm 175m North Road frontage Potential Use: End-to-end manufacturing / warehouse / head office facility Indicative height & GFA 2 – 3 storeys 12,500 – 18,800 sqm GFA

Site A(ii)



Site Advantages

- Large multi-site block allowing for single tenant or multiple complimentary tenants
- North Road frontage providing business exposure and direct access to an arterial road
- Large site allows colocation of warehousing, logistics, head office for end-t0-end businesses
- Protected from residential areas reduces risk of community opposition or unfavourable land use change
- High level of walkable access to Huntingdale retail strip and train station
- Current industries on site expected to transition

Site Challenges

- Fragmented ownership increases the cost of land consolidation – 3 owners
- Existing zoning would likely not accommodate professional and technical services businesses

Next steps to realise site opportunities

- Facilitate re-zoning to allow change of use on the site (further consideration on whether change of zoning should be undertaken prior or after securing a tenant/owner for new development)
- Undertake commercial feasibility analysis to understand the potential commercial opportunities on the site and to assist in negotiations with two owners
- Market sounding with the private sector to understand what will encourage development and what support
 infrastructure is required to make the site attractive for future tenant
- Assess the merits of the different potential sites to locate an anchor tenant
- Assess the ancillary services it will rely on to service the new users of the site and impact it will have in the immediate
 area by changing the density of the site.

Site Option C: 22-30 Fulton Street

Site Area: 3,700 sqm

Potential Use: Wholesale / Specialised Manufacturing with some office Indicative height & GFA 2 – 3 storeys 4,200 – 6,300 sqm GFA



Site Advantages

- Medium multi-site block allowing for single tenant or multiple complimentary tenants
- North Road frontage providing business exposure and direct arterial road access
- Large site allows colocation of warehousing, logistics, head office for end-t0-end businesses
- Protected from residential areas reducing risk of community opposition or unfavourable land use change
- One block currently relates to 'attract' industry and could provide potential for growth.

Site Challenges

- Low walkability to Huntingdale retail strip and train station due to traffic conditions on North Road – no supplementary retail / amenity offering available in area
- Fragmented ownership increases the cost of land consolidation – 3 owners
- Existing zoning would likely not accommodate professional and technical services businesses

Next steps to realise site opportunities – as above

Site Option D: 38 Railway Avenue

Site Area: 3,400 sqm Potential Use: Commercial office space Indicative height & GFA 6 – 10 storeys 14,000 – 23,000 sqm GFA



Site Advantages

- Single owner of medium multi-site block
- Protected from residential areas reduces risk of community opposition or unfavourable land use change
- High level of walkable access to Huntingdale retail strip and train station
- Colocation opportunity with other 'attract' industries in a location providing high levels of amenity
- Opportunity for denser commercial development for larger tenant

Site Challenges

 Existing zoning would likely not accommodate professional and technical services businesses

Next steps to realise site opportunities

- · Facilitate re-zoning to allow change of use on the site
- Undertake commercial feasibility analysis to understand the potential commercial opportunities on the site and to drive the DDO (and determine suitable heights for new development)
- Assess the ancillary services it will rely on to service the new users of the site and impact it will have in the immediate
 area by changing the density of the site ie. does it require retail frontage on the ground level, carparking requirements
 on the site

Other industries

Other industries primarily relates to 'change' industries identified as being of low value to the future Vision of the Huntingdale Precinct and should be encouraged to transition out as demand for 'attract' industries grow. Other industries also includes 'population' industries which are expected to grow in relation to the demands of the growing residential population.

The other industry strategy broadly aims to transition 'change' industries to be replaced by 'attract' industries. This is done by zoning changes that promote more desirable outcomes (e.g. prohibit 'dirty' industry and encourage a greater comingling of commercial, industrial and wholesale business) and increase land value (providing economic incentive for low value businesses to exit the Precinct). The strategy also recognises the significant excess capacity of Industrial / Wholesale land that can be released for higher and better uses.

The zoning strategy support this transition and the growth of 'population' industries is provided in two stages to ensure that transition is gradual.

Figure 37: Proposed planning control changes to support employment growth and transition

0 - 10 years

Gross land area zoned C1Z Gross land area zoned C2Z



Approximately 485,000 sqm Approximately 490,000 sqm

Proposed Changes

- Expansion of Commercial 1 Zone to Croft Street/Hargreaves Street, Warner Street, Shafton Street and North Road / Railway Avenue
- Change to Commercial 1 Zone of block bordered by Haughton Road, Moroney Street and North Road
- Change to Commercial 1 Zone of block bordered by Haughton Road, Clarendon Avenue and North Road
- Change to Commercial 1 Zone of block bordered by Burlington Street, Edward Street, John Street and the rail line
- Change to Commercial 1 Zone of block bordered by Huntingdale Road, Valley Street, Coora Road and the rail line
- Change to Commercial 2 Zone of block bordered by Hargreaves Street / Beauford Street, Franklyn Street, North Road and Shafton Street
- Change to Commercial 2 Zone of block bordered by Colin Road, Carinish Road and North Road
- Change to Commercial 2 Zone of block bordered by Edward Street, Huntingdale Road and the rail line, excluding the Jack Edwards Reserve.

Rationale and desired outcomes

- Commercial 1 Zone surrounding Huntingdale Road will encourage a greater mix of uses that complement the dense
 retail and residential anticipated to develop along the Huntingdale Road corridor. This will transition toward more
 commercial uses further back from Huntingdale Road and improve the transition toward the heavier industrial uses.
- Commercial 2 Zones will help to facilitate ongoing warehousing, wholesaling and appropriate manufacturing and transport in the area that is consistent with the forecast employment needs from the PwC Economics Background Report. This will also enable greater colocation of complimentary commercial and retail space to enhance the offering of the industrial land. This zoning will transition the industrial areas to 'clean' industrial that is consistent with the economic future of the area and does not impede on surrounding neighbourhood areas.
- Commercial 2 Zones east of Huntingdale Road retain access to North Road as a connection to Melbourne's road
 network and minimises the need for businesses to access employment sectors via neighbourhood roads. The
 proximity of these blocks to the Monash NEIC remains to enable the development of strong networks and
 relationships with the wider NEIC strategy and direction.
- Commercial 2 Zones east of Huntingdale Road are where majority of existing businesses in 'attract' industries are located, and zoning should ensure they retain their location in Huntingdale.
- Commercial 2 Zone west of Huntingdale Road will retain existing uses whilst enabling a transition to 'clean' industrial and alternative long term uses. This will not displace existing businesses and avoiding shocks to the local economy (such as high employment Assa Abloy) however encourage their transition out of the area over time, and preventing new heavy industrial uses from entering the Precinct. This is consistent with development in the area in recent history, which has primarily been for light storage facilities and new business parks.
- Commercial 1 Zoning south of the rail line is to encourage are more rapid transition from the existing industrial use. The lack of access to other industrial areas and road network (such as North Road), and inundation of established residential uses mean that this land may have greater strategic value in providing residential area for the Precinct.
- Commercial 1 Zoning in proximity to the Oakleigh Activity Centre enables market led development to occur due to
 the strong amenity offering available. Market analysis and development activity beyond the Huntingdale boundary
 but in similar locations show high density residential will be developed amongst mixed commercial use if planning
 controls allow.

10 - 20 years

Gross land area zoned C1Z Gross land area zoned C2Z



Approximately 369,000 sqm Approximately 429,000 sqm

Proposed Changes

- Change of Assa Abloy site to Mixed Use Zone (not shown here as not supporting core employment use, with exception to 'population' use)
- Change of Commercial 2 Zone land west of Huntingdale Road to Commercial 1 Zone.
- Change of Commercial 1 Zone land south of rail line to general residential and residential growth zones (not shown here as not supporting employment use)

Rationale and desired outcomes

- Assa Abloy will likely transition out of the Precinct due to higher land prices. Development of enhanced retail
 offering and unique land offering makes the site attractive for a major mixed use development. Zoning change is to
 support this outcome. This will also support improved connectivity and access from Huntingdale Road to Jack
 Edwards Reserve and the Oakleigh Activity Centre.
- Continuous Commercial 1 Zone land west of Huntingdale Road will soften the street level experience and improve
 pedestrian flow from the Train Station to Jack Edwards Reserve and further to Oakleigh Activity Centre.
- Strategies detailed in Section 7.1 will transition industrial uses from industrial land south of the rail line. Zoning change to Residential Growth Zone will enable the development of medium to high density apartments and townhouses
- High turnover of cheap industrial land offers Council an opportunity to purchase land for later use for community purposes, prior to rezoning e.g. affordable housing, public open space, and community facilities.
- Higher residential population may encourage some local amenity to develop, such as café's and convenience stores in addition to the Huntingdale retail strip which is less accessible.

6 Residential Analysis & Strategies

6.1 Demand and capacity analysis

Projected demand for private residential development

The projected demand for residential property is based on the existing development activity of surrounding, similar markets to Huntingdale. This data, normalised by the existing development activity data in Huntingdale, is an indicator of the potential demand for areas similar to Huntingdale where planning framework and market appeal enables a larger supply of dwellings to be provided.

Market data for new residential dwellings being supplied, under application, or undergoing presales between the areas of Caulfield and Clayton have been considered. The trends have been projected to define the total potential residential demand (as reflected by supply of new dwellings) as operating within the current planning controls environment. The projected supply based on current activity is shown in Table 11.

Table 11: Projected potential demand for residential development – Market data (Refer to Appendix A for detailed market data)

		2016	2020	2030	2040	2050	Total
**	Dwellings	780	1,160	1,760	2,260	2,680	-
cas	Population	1,980	2,820	4,220	5,360	6,280	-
Forec	Assumed household size	2.54	2.45	2.39	2.36	2.54	-
	Dwellings	-	380	600	500	420	1,900
lal d	Population	-	840	1,400	1,140	920	4,300
4dditiona demand	Assumed household size	-	2.27	2.27	2.27	2.27	2.27
₹ ,	GFA of residential demand	-	44,000	66,000	50,300	32,300	192,600

Source: City of Monash Rates Database, Analysis by PwC (2018)

Projected demand for student accommodation

Literature review and understanding of the role of Monash University in the wider Monash LGA identified that there is significant demand for additional student housing based on anticipated growth of student enrolments at both the Caulfield and Clayton campus. This housing demand is driven by rising student enrolments based on Monash's international competitiveness in tertiary education. PwC's knowledge of student accommodation needs and existing market conditions in Monash identified that Huntingdale has a strategically advantageous position to provide housing to meet this demand. The Huntingdale Precinct is centrally located between the two campuses, has high levels of public transport connectivity, and relatively low residential prices. The projected student accommodation needs are shown in Table 13 below, and are considered in addition to the residential demand in Table 12. These are based on the assumption of providing beds for 10% of student enrolments.

Note that this analysis reflects the Monash LGA student accommodation demand and supply and is not specific to Huntingdale. This represents an opportunity for Huntingdale to enter this market, capture the demand and help stimulate local retail activity. It also would create a tangible relationship between the University, the Monash NEIC and the Huntingdale Activity Centre.

Table 12: Projected demand for student accommodation

		2016	Projected Growth (not relating to a specific time)	Total
sast	Beds	5,200	7,000	-
Fore	Enrolments	58,151	70,000	-
onal	Dwellings	-	1,800	1,800
Additiona demand	GFA of PBSA	-	54,400	

Source: Huntingdale Activity Centre Economics Background Report, PwC (2018)

Projected capacity of residential development

The residential demand figures are based on Victoria in Future (VIF) population forecasts interpreted by PwC for the purpose of residential projection in the Huntingdale Study Area. The forecasts and associated additional dwellings for this population are shown in Table 11.

Review of the development application data for the Huntingdale study area revealed that the supply of dwellings (as measured by approved development applications) over the past two years far exceeded the VIF forecast. This implies that market activity in response to demand is greater than VIF forecasting.

The data shows private residential development occurring as additional detached dwellings on subdivided properties, and intermittent high density developments of 1, 2 and 3 bedroom dwellings. These trends have been projected to define the total residential supply as operating within the current planning controls environment. These trends have been projected to understand potential future demand within Huntingdale, shown in Table 12.

For the purpose of this analysis we have used development activity as an indicator of future capacity as it shows the residential supply that is coming onto the market under the current planning framework.

Table 13: Projected demand for residential development - VIF

		2016	2020	2030	2040	2050	Total
*	Dwellings	780	800	860	1020	1180	-
cas	Population	1980	2060	2200	2540	2900	-
Fore	Assumed household size	2.54	2.54	2.53	2.50	2.47	-
	Dwellings	-	20	60	160	160	400
nal d	Population	-	80	140	340	360	920
4 <i>dditiona</i> demand	Assumed household size	-	2.40	2.35	2.35	2.30	2.33
Ą,	GFA of residential demand	-	3,700	7,000	16,200	15,400	42,300

Source: Economics Background Report, PwC (2018)

Table 14: Projected supply for residential development - Development Applications trend

		2016	2021	2031	2041	2051	Total
<u>+</u>	Dwellings	780	1,120	1,660	2,100	2,480	-
cas	Population	1,980	2,740	3,980	5,000	5,820	-
Forec	Assumed household size	2.54	2.46	2.40	2.37	2.35	-
	Dwellings	-	340	540	440	380	1,700
d d	Population	-	760	1240	1020	820	3,840
Additiona demand	Assumed household size	-	2.27	2.27	2.27	2.27	2.27
Ą o	GFA of residential demand	-	39,300	58,900	45,000	28,900	172,000

Source: City of Monash Rates Database, Analysis by PwC (2018)

It is assumed that under the current conditions, the supply of student accommodation in the area (excluding private market residential properties) would be unchanged without targeted incentive to have more stock delivered within Huntingdale.

Projected deficit in residential development

Based on the analysis, there is a deficit of residential floor space of approximately -20,600 and opportunity to provide up to 1,800 beds for student accommodation. The results of the analysis are shown in Table 14 and Table 15.

Table 15: Projected private dwellings deficit

Building typology	Estimated future demand (dwellings)	Estimated future supply (dwellings)	Deficit / surplus	Reason for deficit / surplus
Private residential	1,700	1,900	-200	Deficit is primarily due to the restrictive planning controls which have limited
GFA (sqm)	172,000	192,600	-20,600	development to low rise residential subdivision, and occasional multi-residential development. In addition this development has occurred ad hoc and is not spatially organised.

Table 16: Projected student beds deficit

Building typology	Estimated future demand (beds)	Estimated Future Supply (beds)	Deficit / surplus	Reason for deficit
PBSA	7,000	5,200	-1,800	Deficit primarily due to directive from Monash University for off-site developments. Consequently there is not expected to be any additional supply to the market.

The building typology typical of the categories of residential stock needing to be provided has been described in Table 16. This analysis only differentiates between private residential building stock and PBSA stock, and has accounted for the diversity of housing typologies that could be provided based on average household size and dwelling size.

Table 17: Projected residential building typology demands

Building typology	Key characteristics of this building typology	Example of building
Private residential development	Detached dwellings	
аечеюртен	 1 or 2 detached single and double storey dwellings built on subdivided lots 	
	Mixed-use apartments	
	 Mixed use apartment developments of 1, 2 and 3 bedroom dwellings 	
	 Sometimes including ground flood retail or other commercial uses 	
Purpose-built student	High-density apartments	
accommodation (PBSA)	High levels of shared amenity and facilities	
	 Mix of studio apartments, 1 2 and 3 bed shared apartments 	
	Regulated requirement to have proximity to public transport connecting with university	

6.2 Residential land use strategies

Private residential

Market factors show that the appeal for the Huntingdale area for residential use is high despite its retail offering and heavy industrial use. This is demonstrated by the development application data, as well as market conditions in the immediate surrounding suburbs. With appropriate zoning Huntingdale can densify in a controlled and positive way that helps to support the development of the retail strip, provide higher numbers of dwellings close to jobs and public transport, and activate the Huntingdale Precinct at more times of the day. Furthermore by accommodating the demand and strategically allowing the development of residential density, this can be used to act as buffers between heavy industrial land uses and lower density neighbourhood areas which are currently at tension where Industrial and General Residential zoning abut.

Currently residential density is being dictated by market factors and occurring outside of the existing planning framework, as shown in Section 3.2.1. The result is medium to high density developments occurring on an ad hoc basis that reduces that ability for these developments to enhance the area and may only serve to add pressure on existing infrastructure.

Development principles suggest that allowing density to develop in areas close to amenity and public transport will enable a high quality of living for those residents and provides the ability to activate areas by leveraging the denser populations. The recommendations below reflect the need to accommodate an increased density to enhance the Precinct.

Figure 38: Proposed planning control changes to support residential growth

0 - 10 years

Gross land area zoned C1Z Gross land area zoned GRZ1 Gross land area zoned MUZ



Approximately 306,000 sqm Approximately 282,000 sqm Approximately 13,000 sqm

Proposed Changes

- Expansion of Commercial 1 Zone to Croft Street/Hargreaves Street, Warner Street, Shafton Street and North Road / Railway Avenue
- Change to Commercial 1 Zone of block bordered by Haughton Road, Moroney Street and North Road
- Change to Commercial 1 Zone of block bordered by Haughton Road, Clarendon Avenue and North Road
- Change to Commercial 1 Zone of block bordered by Burlington Street, Edward Street, John Street and the rail line.
- Addition of Mixed Use Zone along
- Huntingdale Road east from Hargreaves Street to Greville
 Street

Rationale and desired outcomes

- Rezoning of areas around Huntingdale Road will enable the controlled development of existing market activity within a controlled planning framework. Mixed Use Zoning and Commercial 1 Zoning both enable the development of medium and high residential density located closely to retail and other commercial uses.
- Commercial Zoning surrounding Huntingdale Road will encourage dense residential development to occur closer to retail offering on Huntingdale Road, and gradually transition to heavier industrial uses further east from Huntingdale Road.
- Encouraging density along Huntingdale Road will build support for development of a full line supermarket and enhanced retail offering by facilitating a larger retail catchment.
- Commercial 1 Zoning in proximity to the Oakleigh Activity Centre enables market led development to occur due to the strong amenity offering available. Market analysis and development activity beyond the Huntingdale boundary but in similar locations show high density residential will be developed if planning controls allow.

10 - 20 years

Gross land area zoned C1Z Gross land area zoned GRZ1 Gross land area zoned RGZ1 Gross land area zoned MUZ Approximately 369,000 sqm Approximately 310,000 sqm Approximately 150,000 sqm Approximately 74,000 sqm





• Change of Industrial Zoned land south of Rail Line to Residential Growth Zone



Rationale and desired outcomes

- Assa Abloy will likely transition out of the Precinct due to higher land prices. Development of enhanced retail
 offering and unique land offering makes the site attractive for a major mixed use development. Zoning change is to
 support this outcome. This will also support improved connectivity and access from Huntingdale Road to Jack
 Edwards Reserve and the Oakleigh Activity Centre.
- Strategies detailed in Section 7.1 will transition industrial uses from industrial land south of the rail line. Zoning change to Residential Growth Zone will enable the development of medium to high density apartments and townhouses.
- High turnover of cheap industrial land offers Council an opportunity to purchase land for later use for community purposes, prior to rezoning e.g. affordable housing, public open space, and community facilities.
- Higher residential population may encourage some local amenity to develop, such as café's and convenience stores in addition to the Huntingdale retail strip which is less accessible.

Student accommodation

Huntingdale is location advantages to tap into the unserved demand for student accommodation arising from student attending the Caulfield and Clayton Monash University campuses, estimated to grow to 1,800 beds. PwC recommend that the Precinct should engage with the opportunity to provide student accommodation to address the lack of supply — this will serve the Precinct by leveraging the increased student population to activate the Huntingdale Road retail strip and forge connections and networks with the Monash Cluster.

The City of Monash Student Housing Policy identifies the following attributes of preferred student accommodation locations:

- within 1,500 metres of a tertiary institution
- within 800m of a Railway Station
- within 800m of a neighbourhood activity centre
- within 400m a bus route providing access to a tertiary institution

Huntingdale satisfies the public transport and activity centre conditions. Whilst being further away from the university, it is in a central location between the Clayton and Caulfield Monash University conditions and so can provide accommodation on both. Based on our analysis and the above prescriptions, Table 17 provides several options for student accommodation development to occur.

Table 18: Proposed student accommodation development recommendations and actions

Site Option A: 144-154 Haughton Road

Site Area:35 m x 28 mSuggested storeys: 6Estimated beds: 125980 sqmSuggested storeys: 10Estimated beds: 210



Site Advantages

- · Immediate proximity to train station and retail offering
- Single owner block

Site Challenges

- · Current zoning does not allow PBSA use
- Surrounding residential zoning does not permit necessary height
- Not government owned, not accessible for immediate development
- Shadowing may prevent development and/or cause community opposition

Recommended Council delivery plan

- Immediately (i.e. 0-5 years) rezone entire block from Industrial 1 to Commercial 1 Zoning (C1Z) to support existing commercial use but allow development of retail and community uses and residential uses are densities complimentary to the scale of the commercial centre.
- Schedule to the zoning should define student housing as the preferred use of the blocks, and provide a height restriction limit aligned to the preferred built form outcome (e.g. 6 or 10 storeys for student accommodation developments).
- As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention for the Precinct to become part of the Monash University network of student housing and that the Precinct Plan is designed to provide the amenity, services and access to transport to support a dense student population.
- Wider Precinct planning should consider the needs of a dense student population when making recommendations, and rezoning should align with timelines on other relevant changes in use (e.g. retail). This has been considered throughout this report.

Site Option B: 1269 North Road

Site Area: 36 m x 50 m x 63 m Suggested storeys: 6 Estimated beds: 115 900 sqm Suggested storeys: 10 Estimated beds: 190



Site Advantages

- Immediate proximity to train station and retail offering
- Single owner block

Site Challenges

- Current zoning does not allow PBSA use
- Surrounding residential zoning does not permit necessary height
- Not government owned, not accessible for immediate development
- Shadowing may prevent development and/or cause community opposition

Recommended Council delivery plan

Immediately (i.e. 0-5 years) rezone entire block from Industrial 1 to Commercial 1 Zoning (C1Z) to support existing
commercial use but allow development of retail and community uses and residential uses are densities complimentary
to the scale of the commercial centre.

- Schedule to the zoning should define student housing as the preferred use of the blocks, and provide a height restriction limit aligned to the preferred built form outcome (e.g. 6 or 10 storeys for student accommodation developments).
- As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention for the Precinct to become part of the Monash University network of student housing and that the Precinct Plan is designed to provide the amenity, services and access to transport to support a dense student population.
- Wider Precinct planning should consider the needs of a dense student population when making recommendations, and rezoning should align with timelines on other relevant changes in use (e.g. retail). This has been considered throughout this report.

Site Option C: 1306-1312 North Road

Site Area:33 m x 70 mSuggested storeys: 6Estimated beds: 3002,310 sqmSuggested storeys: 10Estimated beds: 490



Site Advantages

- Immediate proximity to train station and retail offering
- Single owner block

Site Challenges

- · Current zoning does not allow PBSA use
- Current residential use may be difficult to change without compulsory acquisition
- Fragmented ownership increases the cost of land consolidation
- Shadowing may prevent development and/or cause community opposition Shadowing may prevent development and/or cause community opposition
- Road conditions make site difficult to access by car
- · Road conditions reduce walkability and safety of immediate surroundings, making it less attractive to students

- · Engage with current land owners to discuss potential for transitions opportunities and Council led consolidation
- Engage with VPA (representing State Government) to explore opportunities for compulsary acquisition as part of larger Monash NEIC objectives around student accommodation
- Establish and execute acquisition strategy may be led by Council, State Government or private developer in coordination with Government
- Upon successful acquisition and consolidation, (i.e. 0-5 years) rezone entire block from General Residential to Commercial 1 Zoning (C1Z) to allow development of PBSA and potential for supporting retail or other amenity on remainder of block.
- Schedule to the zoning should define student housing as the preferred use of the blocks, and provide a height restriction limit aligned to the preferred built form outcome (e.g. 6 or 10 storeys for student accommodation developments).
- As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention for the Precinct to become part of the Monash University network of student housing and that the Precinct Plan is designed to provide the amenity, services and access to transport to support a dense student population.
- Wider Precinct planning should consider the needs of a dense student population when making recommendations, and rezoning should align with timelines on other relevant changes in use (e.g. retail). This has been considered throughout this report.

Site Option D: 38 Railway Avenue

Site Area: 50 m x 125 m Suggested storeys: 6 Estimated beds: 400 6,250 sqm* Suggested storeys: 10 Estimated beds: 670

*it is unlikely that entire site would be delivered as PBSA and would likely be a mixed use development - we have assumed 50% of the site would be used for PBSA



Site Advantages

- Large site with opportunity to meaningfully contribute to student housing agenda
- · Immediate proximity to train station and retail offering
- Government owned block
- PBSA development could coincide with existing use as Station car park and bus interchange
- Surrounding commercial uses less likely to oppose multistorey development

Site Challenges

- Current zoning does not allow PBSA use
- · Complex development environment due to proximity to train station and operating bus interchange

- Engage with developers (incl. VicTrack) to identify party to deliver PBSA development
- Upon successful engagement with developer, rezone block from General Residential to Commercial 1 Zoning (C1Z) to allow development of PBSA and potential for other mixed use development
- Schedule to the zoning should define student housing as the preferred use of the blocks, and provide a height restriction limit aligned to the preferred built form outcome (e.g. 6 or 10 storeys for student accommodation developments).
- As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention for the Precinct to become part of the Monash University network of student housing and that the Precinct Plan is designed to provide the amenity, services and access to transport to support a dense student population.
- Wider Precinct planning should consider the needs of a dense student population when making recommendations, and rezoning should align with timelines on other relevant changes in use (e.g. retail). This has been considered throughout this report.

7 Retail Analysis & Strategies

7.1 Demand and capacity analysis

Projected demand for retail development

Retail demand was estimated using a benchmark analysis undertaken as part of the PwC Economics Background Report. This analysis identified several comparable areas based on residential and employment population and key attributes of the area and retail development. Common characteristics of comparable and successful retail strips and retail developments include:

- Mixed-use retail developments with footprints ranging from 11,000 to 25,000 sqm, including a full line supermarket, specialty retail and residential development on the upper storeys.
- · Adjoining retail strips with access to public transport and major road arteries
- Proximity to competing retail offerings similar to Oakleigh and Clayton nearby the Huntingdale Precinct.

Based on this, a neighbourhood centre similar to the Highett Shopping Centre was identified as being likely to develop in Huntingdale given location and projected populations, if the planning framework allowed. For the purpose of this analysis, attributes of the Highett Shopping Centre inform the projected demand for retail space in the Huntingdale Precinct. The projected demand for retail development is shown in Table 18.

Table 19: Projected retail demand (based on Highett Shopping Centre)

	Mixed-use development site area	Supermarket GFA sqm	Speciality, retail and hospitality GFA sqm	Dwellings	Dwellings GFA sqm	Gross land area supporting adjacent retail growth
Demand metrics	11,000	3,500	4,300	130	9,750	40,000
Defining characteristics	17 retail, spe130 apartment	ne supermarket (W cialty and hospital nts above shoppin d mixed-use deve	ity businesses g centre	. ,	er retail strip	

Projected supply for retail development

Future supply is estimated with reference to the current planning control environment, development applications data provided by the City of Monash, and estimated employment and residential population projections that would support retail growth. Projected supply of retail development and associated residential and commercial development is shown in Figure 29.

Figure 39: Projected supply of retail development

		2016	2020	2030	2040	Total
+-	Supermarket GFA	570	570	570	570	-
orecas	Gross land area supporting adjacent retail growth	21,900	21,900	21,900	21,900	-
щ	Upper level dwellings	50	79	136	194	-
	Supermarket GFA	-	0	0	0	0
litional mand	Gross land area supporting adjacent retail growth	-	0	0	0	0
Addı	Upper level dwellings	-	29	58	58	144
	Upper level dwellings GFA	-	2,300.00	4,600	4,600	11,520

The analysis shows that given current conditions there is little opportunity for retail growth outward without additional land being released through changed planning controls. Retail related development would likely occur upward in the form of additional dwellings above existing ground floor retail.

Projected deficit for retail development

Based on the demand analysis above and estimation of land supply for retail development (considering current offering, planning controls and other land supply constraints) the retail offering deficit is shown in Table 19.

Table 20: Projected retail GFA deficit

Building typology	Estimated future demand (GFA sqm)	Estimated Future Supply (GFA sqm)	Deficit / surplus	Reason for deficit
Supermarket	3,500	570	-2,930	Retail catchment is limited by surrounding heavy industrial land use, which prevents easy
Gross land area supporting adjacent retail growth	44,300	21,900	-22,400	walkable access for residential population. Limited zoning has restricted larger sites in the area to be developed for retail uses.

The retail building typologies that are seen in the Highett shopping strip and could be expected to be accommodated in the Huntingdale Road retail strip are detailed in Table 20. Land use recommendations and strategies in Section 6.2 are based on the need to accommodate development of this kind.

Table 21: Projected retail building typology demands

Building typology	Key characteristics of this building typology	Example of building
Mixed Use retail development	 Ground floor supermarket Additional retail, specialty and hospitality businesses Apartments on 2-3 storeys above 	
Small shopfront	 Local businesses offering amenity, food and beverage, retail, entertainment Small shopfront and footprint On street car parking Small scale commercial and residential development on storeys above 	9553 3540

Retail land use strategies

The Highett Street Shopping Centre and adjoining retail strip reflects the scale and quality of retail that could reasonably be supported in Huntingdale given location, population and employment forecasts, and surrounding competing retail offerings (specifically the Oakleigh Activity Centre).

Based on the analysis, the delivery of a mixed use retail development offering a full line supermarket, speciality, retail, hospitality and residential floor space would be significant in addressing the poor offering that currently exists along the Huntingdale retail strip. This would also help to improve the overall quality of retail offering along Huntingdale Road and support further growth of the strip that would be necessary to serve an increasing population in the Precinct.

On this basis PwC recommend that the City of Monash identify several potential development locations for this style of development and areas for potential retail activity growth in Table 21 and Table 22.

Table 22: Proposed mixed-use retail development recommendations and

Site Option A: 2-18 Hargreaves Street

Street Frontage: Estimated dwellings: 85 Site Area: 110 m x 65 m 7,150 sqm

Huntingdale Rd - 65m

Other - 200m

Estimated NLA for supermarket; Suggested storeys: 3 + basement Estimated GFA for residential: 6.750 carparking 2,000 sqm

Estimated NLA for other retail uses. 3,100 sqm



Site Advantages

- · Immediate proximity to residential catchment to north
- Proximity to approved major developments (1 Stafford Street - 32 dwellings and ground floor retail, 256-262 Huntingdale Road - 82 dwellings)
- Proximity to Assa Abloy site high employment providing retail catchment and future potential for major development
- Single ownership

Site Challenges

- · Current zoning supporting retail use is limited to Huntingdale Road property and does not allow large developments
- Not government owned, not accessible for immediate development
- Distance from station (approximately 200m) reduces convenience and potential retail catchment (i.e. students interchanging between train and university shuttle bus)
- Distance from residential areas south of train line have less access

- · As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention to support the development of a mixed use retail and residential building with a full line supermarket. Providing signalling prior to rezoning will attract developers to enter the market prior in land value increase.
- · Following publishing of Precinct Plan, rezone entire block from Industrial 1 to Mixed Use Zoning (MUZ) to support existing commercial use but encourage transition to retail and residential use at appropriate densities. Schedule to the zoning should define intended use as a mixed use residential and retail development with the desired built form controls (e.g. height limits, parking etc.).

Site Option B: 1279-1303 North Road & 2-16 Hume Street

Estimated dwellings: 130 Site Area: 170 m x 65 m Street Frontage: 11,050 sqm Huntingdale Rd - 65m

Other - 320m

Suggested storeys: 3 + basement Estimated NLA for supermarket: Estimated GFA for residential:

carparking 2,000 sqm 10,400 sqm

Estimated NLA for other retail uses:

5.800



Site Advantages

- · Direct access train station, capturing transient retail catchment (i.e. students interchanging between train and university shuttle bus)
- · Visible from and easy access to North Road, improving catchment
- · Equal access for northern and southern residential catchments and employment catchment
- · Existing hospitality use on side streets indicate support for retail development

Site Challenges

- · Current zoning supporting retail use is limited to Huntingdale Road property and does not allow large developments
- · Not government owned, not accessible for immediate development
- · Fragmented ownership increases the cost of land consolidation
- Community opposition may occur due to displacement of religious institutions located on the site (Specifically Hindu and Muslim places of worship).

- · Engage with current land holders to determine feasibility of land consolidation. If feasible, develop strategy in response to this and execute - potential for Council or State led delivery or engagement with private developer to
- · As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention to support the development of a mixed use retail and residential building with a full line supermarket. Providing signalling prior to rezoning will attract developers to enter the market prior in land value increase.
- Following publishing of Precinct Plan, rezone entire block from Industrial 1 to Mixed Use Zoning (MUZ) to support existing commercial use but encourage transition to retail and residential use at appropriate densities. Schedule to the zoning should define intended use as a mixed use residential and retail development with the desired built form controls (e.g. height limits, parking etc.).

Site Option C: 38 Railway Avenue

ground floor and podium parking

Site Area: 50 m x 125 m Street Frontage: Estimated dwellings: 150

6,250 sqm Huntingdale Rd - 20m

Other - 100m

Suggested storeys: 6 including Estimated NLA for supermarket: Estimated GFA for residential:

ground floor retail frontage + 2,000 sqm 11,800 sqm

Estimated NLA for other retail uses: 5,550 sqm

*Figures assume PBSA accommodation is not provided under this scenario, however this remains an option



Site Advantages

- Large site with opportunity to meaningfully contribute to student housing agenda
- Direct access train station, capturing transient retail catchment (i.e. students interchanging between train and university shuttle bus)
- Visible from and easy access to North Road, improving catchment
- Equal access for northern and southern residential catchments and employment catchment
- Government owned block
- Development could coincide with existing use as Station car park and bus interchange

Site Challenges

- · Current zoning supporting retail use is limited to Huntingdale Road property and does not allow large developments
- Complex development environment due to proximity to train station and operating bus interchange

- Engage with developers (incl. VicTrack) to identify party to deliver mixed-use retail development
- Upon successful engagement with developer, rezone block from General Residential to Commercial 1 Zoning (C1Z) to allow development and potential for other complimentary uses (e.g. student accommodation)
- Schedule to the zoning should define student housing as the preferred use of the blocks, and provide a height restriction limit aligned to the preferred built form outcome (e.g. 3 to 4 storeys based on comparable developments).
- As part of the Precinct Plan Strategy and Vision, Council should definitively signal its intention to support the
 development of a mixed use retail and residential building with a full line supermarket. Providing signalling prior to
 rezoning will attract developers to enter the market prior in land value increase.
- Following publishing of Precinct Plan, rezone entire block from Industrial 1 to Mixed Use Zoning (MUZ) to support existing commercial use but encourage transition to retail and residential use at appropriate densities. Schedule to the zoning should define intended use as a mixed use residential and retail development with the desired built form controls (e.g. height limits, parking etc.).

Table 23: Proposed planning control changes to support retail growth

0 - 10 years

Gross land area zoned C1Z Gross land area zoned MUZ



Approximately 117,000 sqm Approximately 13,000 sqm

Proposed Changes

- Expansion of Commercial 1 Zone to Croft Street/Hargreaves Street, Warner Street, Shafton Street and North Road / Railway Avenue
- Addition of Commercial 1 Zone to blocks bordered by Haughton Road, Moroney Street and North Road
- Addition of Commercial 1 Zone to blocks bordered by Haughton Road, Clarendon Avenue and North Road
- Addition of Mixed Use Zone along Huntingdale Road east from Hargreaves Street to Greville Street

Rationale and desired outcomes

- Commercial 1 Zoning will enable the co-locating of retail, office, entertainment and dense residential (where complimentary). This will provide room for the retail offering to grow, without displacing existing businesses and high value industries. Development of mixed-use retail development with a full line supermarket will anchor the retail strip and increase the foot traffic in the area, as well as setting a precedent of retail offering on side streets beyond Huntingdale Road.
- Population growth will increase demand for retail, which will extend down the side streets from the core Huntingdale
 as low value businesses transition out of the area. Changing population demographic driven by growing student
 population and reduced household size will result in higher numbers of couples, share-houses and a younger
 population, which will support development of entertainment and food and beverage offering, activating the strip at
 night time.
- Smaller convenience and local retail will develop south of the rail line in response to growing southern population.
- Addition of Mixed Use Zone will capitalise on improved retail offering and greater density of higher income
 employment opportunities to deliver high quality residential developments with quality ground floor retail.

8 Conclusions & Recommendations

8.1 Land Use Strategy

The overarching strategy for the Land Use Report is to provide changes that support a transition of the Huntingdale area to the Precinct envisioned in the Economics Background Report. This means land use strategies aim to:

- **Support industrial transition** of historically heavy industrial uses to more future oriented industries serving the area such as manufacturing and wholesaling, and enable the location of growing professional and technical services in the Precinct.
- **Facilitate anchor tenants** to enter the Precinct by enabling a more significant and vibrant retail and amenity offering, building on the existing Huntingdale Road retail strip, and providing an attractive workplace for employers.
- **Improve land use mix and transition** through changes in zoning to enable greater mixed use developments, assisting in the transition of the area from heavy industrial with predominantly 9-5pm activation, to a Precinct with full time residents, office workers and visitors attracted to the area due to its retail and food & beverage offering.
- Manage high demand for residential land use by accommodating and directing
 residential density in desired and appropriate areas. This includes leveraging additional
 residential population to activate the growing retail strip and provide accommodation for
 the growing local workforce.
- Engage with the wider Monash challenge to provide student accommodation for a
 growing international student cohort for the Monash University providing a strategy for
 student accommodation and appropriate amenity to service this growing population.

Key success factors

In this section we have identified a number of attributes that will be critical to supporting a vibrant liveable and workable Activity Centre. These attributes are important for attracting both residential and commercial investment to the Precinct. Whilst not necessarily relating to land use change, the impact and outcomes that would result of land use change may be dependent on addressing key issues and success factors described here.

Improving the road network

Site visits to the area highlighted the significant impact and dominance of traffic and roads on the liveability and attractiveness of Precinct. The impact of traffic flow and roads in the area can be characterised by:

- High speed limits (a dominance of 60 km/hr speed limits, including in Huntingdale Road retail strip) with minimal traffic control infrastructure (e.g. pedestrian crossings, speed bumps, roundabouts).
- Wide roads previously used for freight movement through the Precinct to serve industrial uses – these will become less relevant over time and Council should consider the future relevance and alternative use of wide streets.
- Lack of natural landscaping and pedestrian infrastructure on footpaths that harshen the
 pedestrian environment and reduce walkability.

 Complex junctions and intersections that make it difficult to navigate through the Precinct.

This is most significant along the Huntingdale Road shopping strip, the Huntingdale Road and Haughton Road intersection, and the Huntingdale Road and North Road interchange. All of these represent major barriers to movement and access that physically segment the different areas which make up the Precinct and reduce the ability to share street space with other users like pedestrians and cyclists.

Improving street level infrastructure

The lack of street infrastructure and hazardous road conditions further emphasize the poor pedestrian experience throughout the Precinct. Things such as cycling infrastructure, clean and well maintained pedestrian paths, footpath landscaping, seating, bicycle racks, and street art improve the quality and experience of pedestrians at street level and encourage users to engage with the Precinct by foot. Currently this is lacking across the Precinct and impacts the overall vibrancy and activation of Huntingdale. It also diminishes the connectivity of the Precinct with adjoining Monash areas like Clayton, Oakleigh and the Monash NEIC. Investment in street level infrastructure to improve pedestrian and cycling networks helps to build relationships with surrounding areas and increase accessibility to public space.

Open space

There is currently a deficit of public open space available to serve the existing community. With a projected growing density of residents in the Huntingdale study area, the existing open space provision will worsen over time. The only major public open space is the Jack Edwards Reserve - this is partially leased to a local football club which limits access to the public and does not effectively serve the broader community. There are no other major public open spaces within the study area and few within the Precinct's catchment. As land transitions there is an opportunity to provide the necessary open space through:

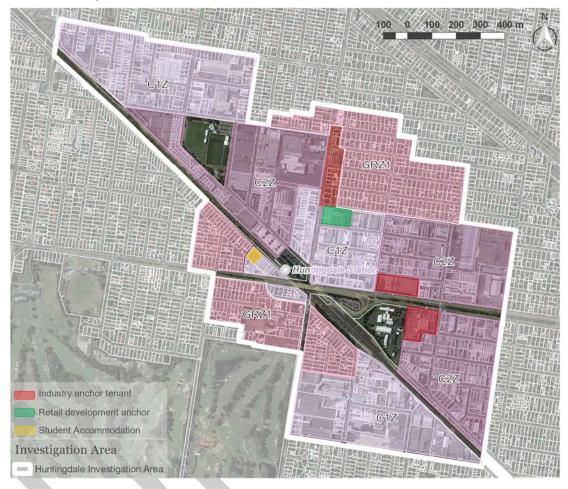
- Developer contributions on new developments and zoning changes, capturing some of the windfall gains to be achieved by developers as land use and land value changes.
- Council acquisition of transitioning sites for use as urban parks and open space.
- Utilisation of other street space to add to the public realm, such as wide footpaths.

These challenges are explored in greater detail in the Community Infrastructure Background Report and the Urban Design Background Report.

8.2 Recommendations & Outcomes

0 – 10 years

Figure 40: Recommendations for zoning changes and Council interventions, 0 - 10 years



The release of the Precinct Plan and strategic directions clearly signpost the intention for the new Huntingdale Precinct to be a densely developed and vibrant Precinct anchored around the Huntingdale Road retail strip.

Changes to mixed use zoning along the strip have captured existing residential demand and encouraged mixed use development along the Huntingdale Road corridor, where access and amenity is highest. The increase in residential density and future prospect of the area have supported the development of a new mixed-use retail and residential development with a full-supermarket. Speciality shops adjoining extend the retail strip east into the employment areas.

The Huntingdale Road retail strip has also improved in quality. The developed of student accommodation nearby has created demand for more food and beverage facilities increased the use of the area at night time. The presence of the students has also supported the development of a small convenience and café offering south of the rail line, which also serves the surrounding neighbourhood and school.

Widening of C1Z toward the east has capitalised on existing interest in more commercial businesses taking location in the Huntingdale Precinct, and has helped to improve the transition from the more traditionally heavy industrial areas of Huntingdale. Removal of IN1Z and changes to C2Z have enabled the gradual transition of some of the heavier

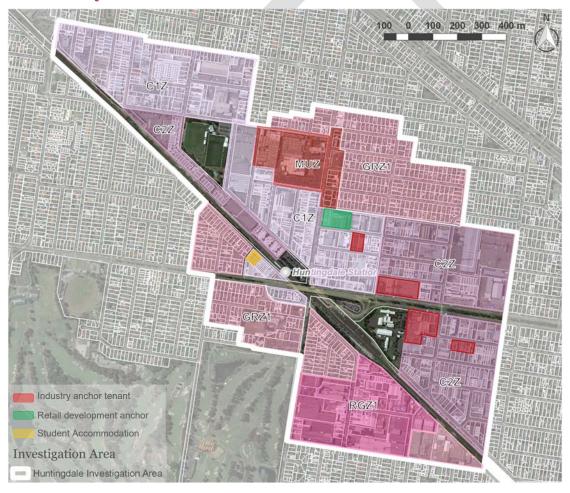
industrial businesses to seek cheaper land in other industrial areas, such as Dandenong South. The overall growth in Monash, and relatively cheaper real estate in Huntingdale has meant that new industries have entered the Precinct where businesses have transitions, with major tenants being attracted to large North Road locations offering high levels of amenity, transport access, exposure and direct access to the road network.

Transition of the industrial land south of rail line has been more aggressive, with C1Z zoning commanding a higher land value forcing existing industrial businesses out. Zoning has meant that new businesses coming in are not industrial and some blocks have been used for residential development.

A change to C1Z in the north-west of the Precinct, closer to Oakleigh, has enabled demand for high density residential to be developed, due to the high quality of amenity offered within Oakleigh. This has also transitioned out heavy industrial uses, and been replaced by a mix of commercial, retail and wholesale businesses attracted by the Oakleigh amenity offering.

10 – 20 years

Figure 41: Recommendations for zoning changes and Council interventions, 10 - 20 years



Attracted by the existance of other major organisations, supporting complimentary businesses and a strong offering of public transport access and amenity have attracted new kinds of manufacturing, wholesaling and professional and technical services businesses to locate in Huntingdale. Strong growth in the Monash cluster has meant that high value businesses seeking lower land values complimentary to the Monash industries have located in Huntingdale, such as advanced manufacturing industries. There is a much lower demand

for traditional industrial land, and businesses favouring high amenity and colocation populate the Huntingdale employment land.

The C1z closer to Oakleigh is a dense mix of professional, scientific and technical services, high density residential, and supporting retail and food and beverage. The connectivity with the Monash cluster, density of businesses seeking value, and students has meant that several of the vacant warehouses and manufacturing facilities have become shared work spaces. High levels of amenity along the Huntingdale Road retail strip, access to green open space, and access to public transport has created strong demand for residential development.

Assa Abloy, having occupied a major site in the area, have relocated to a different industrial Precinct due to the high price of holding land in the area and potential sales value of their parcel. This will be redeveloped into a major mixed-use industrial Precinct that reflects the industrial heritage of the site. Improved street level amenity and land use condusive to pedestrian activity have increased accessibility for residents to the Jack Edwards reserv. A new cycling infrastracture that connects with Monash University and the wider Monash cycling network via the Skyrail shared path and improved pedestrian flow across the Precinct support an active and healthy community.

South of the rail line, land previously used for heavy industrial has transitioned to a large offering of townhouses, supporting convenience food and beverage, and some commercial businesses. The major transition and realisation of land value on the previous industrial site has meant that affordable and social housing has been delivered as required as part of new developments in the area. Many of the new residential developments have retained elements of the industrial history of the area, providing Huntingdale a unique character and feel.

Improved accessibility across the rail line and north road have meant that the community south of the rail line are well serviced by the Huntingdale Road retail strip, and many residents work locally.

8.3 Conclusions

Huntingdale is strategically positioned to take full advantage of the dramatic growth and change that is due to occur across the Monash NEIC over the next 30 years. Its proximity to the Monash Cluster, large amounts of undeveloped industrial land, and relatively low land value mean it is ripe for renewal.

However, the current conditions do not exist for this to occur. To date, the current planning framework has not been responsive to market demand, resulting in one-off permits being granted for dense residential developments, resulting in the market determining highest and best use. A better framework would empower the Council to leverage the market activity to activate the Precinct and drive outcomes.

Market appeal is limited by the poor pedestrian conditions which constrain the ability to develop vibrant retail and amenity that would attract high quality tenants. The dangerous traffic conditions, the major barrier created by the rail line, and the complicated North Road / Huntingdale Road intersection will limit any future development, particularly for outcomes south of the rail line.

The land use strategies proposed will facilitate this transformation of the Precinct to be a vibrant activity centre that plays a crucial role to the economic development of the cluster. As employment and residential populations grow, competition for land will intensify and the Council needs a clear framework and strategy to ensure that development is controlled.

The highlights of our strategy is to transition out 'dirty' industrial in lieu of cleaner, future focussed industries like professional and scientific services or advanced manufacturing. Increasing employment density means there will be a surplus of land supply that can be used to accommodate a growing commercial district around Huntingdale Road, densifying residential market, and vibrant student community. This will all support the growth of the

current Huntingdale Road retail strip into a vibrant neighbourhood centre that provides night and day activity for the local community.

The character of the area will be defined by its industrial history. Excess industrial land will remain cheap, enabling the attraction of start-up communities and co-working locations. Redundant industrial land will gradually transition to residential warehouse conversions. The planning strategies and recommendations offered is underpinned by data and a sound economic foundation to manage these land use tensions and deliver a new economic future for the Huntingdale Precinct.



Appendices

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Appendix A Market evidence

Table 24 Proposed Residential Dwellings

		•		
Ref	Project Address	Туре	Project Stage	Total Units
1	19 Rotschild Street, Glen Huntly	Units (low-rise)	Under Construction	23
2	23 Rotschild Street, Glen Huntly	Units (low-rise)	Under Construction	23
3	29 Rotschild Street, Glen Huntly	Units (low-rise)	Approved	16
4	116-118 Grange Road, Carnegie	Units (low-rise)	Approved	31
5	143 Neerim Road, Glen Huntly	Units (low-rise)	Under Construction	30
6	1240 Glen Huntly Road, Carnegie	Units (mid-rise)	Under Construction	117
7	1254-1258 Glen Huntly Road, Carnegie	Units (mid-rise)	Approved	79
8	360 Neerim Road, Carnegie	Units (low-rise)	Approved	16
9	401 Neerim Road, Carnegie	Units (low-rise)	Under Construction	63
10	90 Mimosa Road, Carnegia	Units (low-rise)	Registration and Sales	41
11	247-251 Neerim Road, Carnegie	Units (low-rise)	Under Construction	48
12	253 Neerim Road, Carnegie	Units (low-rise)	Registration and Sales	30
13	247-251 Neerim Road, Carnegie	Units (low-rise)	Under Construction	48
14	259-261 Neerim Road, Carnegia	Units (low-rise)	Planning Assessment	45
15	178 Koornang Road, Carnegie	Units (low-rise)	Under Construction	25
16	316 Neerim Road, Carnegie	Units (low-rise)	Under Construction	52
17	11-13 Tranmere Road, Carnegie	Units (low-rise)	Approved	23
18	8 Elliot Avenue, Carnegie	Units (low-rise)	Registration and Sales	40
19	67 Poath Road, Murrumbeena	Units (mid-rise)	Under Construction	37
20	115-125 Poath Road, Murrumbeena	Units (low-rise)	Registration and Sales	40
21	 37 Warrigal Road, Hughesdale	Units (low-rise)	Registration and Sales	72
22	 59-63 Warrigal Road, Hughesdale	Units (low-rise)	Under Construction	46
23	91 Warrigal Road, Hughesdale	Units (mid-rise)	Planning Assessment	30
24	93 Warrigal Road, Hughesdale	Units (low-rise)	Approved	22
25	11 Chester Street, Oakleigh	Units (mid-rise)	Approved	22

Ref	Project Address	Туре	Project Stage	Total Units
26	19-21 Oxford Street, Oakleigh	Units (low-rise)	Planning Assessment	25
27	89 Atherton Road, Oakleigh	Units (mid-rise)	Registration and Sales	89
28	1443 Dandenong Road, Malvern East	Apartments (low-rise)	Planning Assessment	21
29	10-12 Camira Street, Malvern East	Apartments (low-rise)	Planning Assessment	27
30	807-811 Warrigal Road, Oakleigh	Units (high-rise)	Registration and Sales	348
31	83 Drummond Street, Oakleigh	Units (mid-rise)	Under Construction	54
32	16-18 Dalgety Street, Oakleigh	Units (low-rise)	Approved	34
33	1 Stafford Street, Huntingdale	Units (mid-rise)	Approved	32
34	302 Huntingdale Road, Huntingdale	Units (mid-rise)	Approved	4
35	256-262 Huntingdale Road, Huntingdale	Units (mid-rise)	Approved	82
36	2-4 Grange Street, Huntingdale	Units (mid-rise)	Approved	34
Total				1,769

Source: Urban Melbourne (2018)

The below table provides further detail on the developments noted above and the status of development.

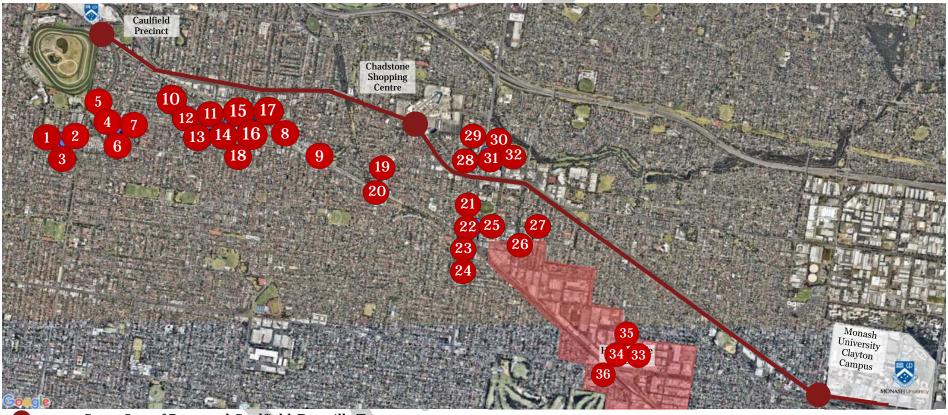
Development Stage	Total Units	% of Total
Under Construction	566	32%
Registration and Sales	660	37%
Approved	395	22%
Planning Assessment	148	8%
Total	1,769	units

Source: Urban Melbourne (2018)

New Supply - Private Residential

- Included in the analysis are all developments of 20 units or more that surround Huntingdale between Caulfield and Clayton.
- The development applications in Huntingdale include 152 number of units to be delivered in the next two years. In unconstrained environments such as Oakleigh there is an oncoming supply of 550 units, this indicated market demand for medium and high density developments in the nearby areas. If the planning environment in Huntingdale changes we anticipate that similar supply will flow into Huntingdale given its proximity to public transport and demand for residential developments that also service the student accommodation needs.

Figure 42: Map of proposed residential dwellings



Stage One of Proposed Caulfield-Rowville Tram

Appendix B Demand and capacity assumptions

The development demand and capacity analysis in Sections 4.1, 5.1 and 6.1 use a number of assumptions to project Council and third party data to form a view of future demand and capacity for residential, employment and retail land supply and building stock. The assumptions used and source are described below.

1 Employment capacity analysis

The employment analysis uses Council data to determine the existing quantity and mix of industry (by building type) in the Huntingdale Precinct. The data was used to project total potential employment land capacity for the area. This projection estimates the total land supply for employment uses (less any amounts that are constrained as identified in Section 3.1.2) if the existing land was fully developed under the current planning framework and prevailing land use. Key data

Table 25: Employment analysis key data

Existing IN1Z use	GFA	Lot Size
Total GFA of Commercial use	1,600	4,400
Total GFA of Industrial / Wholesale use	376,400	603,600
Total GFA of Warehousing use	83,200	156,500
Total GFA of Retail Use	2,200	9,300
Total GFA of Other	4,400	137,800
Total Constrained and other N/A uses	5,900	58,800
Total employment GFA	473,800	970,500
% of Commercial use	0%	0%
% of Industrial / Wholesale use	79%	62%
% of Warehousing Use	18%	16%
% of Retail use	0%	1%
% of Other use	1%	14%
% of Constrained and other N/A uses	1%	6%
Existing C1Z use	GFA	Lot Size
Total GFA of Commercial use	2,700	3,300
Total GFA of Industrial / Wholesale use	0	0
Total GFA of Warehousing use	0	0
Total GFA of Retail Use	7,500	11,900
Total GFA of Other	500	3,500
Total Constrained and other N/A uses	1,700	2,300
Total employment GFA	12,400	20,900
% of Commercial use	22%	16%
% of Industrial / Wholesale use	0%	0%
% of Warehousing Use	0%	0%
% of Retail use	61%	57%
% of Other use	4%	17%
% of Constrained and other N/A uses Source: Rates Database, City of Monash (2018)	14%	11%

Source: Rates Database, City of Monash (2018)

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Table 26: Employment analysis assumptions

Building type	Average floorplate (as a % of lot size)	Average building height
Commercial	80%	6
Industrial / Wholesale	60%	3
Warehousing	60%	1
Retail	90%	1
Constrained and other N/A uses	NA - relates to other uses that would not be used for industrial in the future, e.g. infrastructure	

Source: PwC Analysis

Table 27: Estimated future employee density

Building type	GFA (sqm) / Employee
Industrial	98
Wholesale	34
Retail	31
Accommodation	89
Transport, Postal and Warehousing	122
Commercial	25
Other	55

Source: PwC Analysis & CLUE data, City of Melbourne (2016)



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