7.1.7 PARKING MANAGEMENT REVIEW

Responsible Manager:	Ross Evans, Manager Engineering
Responsible Director:	Peter Panagakos, Director City Development

RECOMMENDATION

That Council

1. Notes the Parking Management Review Framework and Recommendations and adopts it as a draft document for consultation.

2. Directs officers to consult with the wider community on the Parking Management Review Framework and Recommendations including:

a) Consult directly on the identified parking changes, the recommended approach for the improvement of parking restrictions, the introduction of paid parking in selected streets in Clayton, Glen Waverley and Oakleigh and suggested fees ($2 per hour with exemptions for accessible (disability) parking permit holders), with property owners, occupants, traders and trader associations in areas where paid parking has been identified for consideration.

b) Review the results of the engagement process to refine the final Framework for adoption by Council.

c) Report to Council on the feedback of the consultation to inform the next steps on the Parking Management Review Framework and Recommendations.

3. Notes that the more detailed parking changes as identified in the plan will be further investigated and consulted on as changes to restrictions are considered. The cost of any changes, be it new signage (parking restriction and wayfinding) or dynamic signage (that are not associated with the introduction of paid parking) will be considered as part of Council's annual budget program as needed.

INTRODUCTION

On 29 August 2023, Council resolved:

That Council

1. Directs officers to undertake a comprehensive review of the provision and management of car parking in and around activity centres and other areas of high demand to:
   a. Understand the current parking provision and the demands for parking in each location.
   b. Identify a range of tools to optimise availability and distribution of parking.
   c. Consider contemporary best practice parking management strategies.
   d. Identify recommended solutions, staging and estimated costs for implementation, specific to each location.
   e. Report to Council on the outcomes of this notice of motion no later than the March 2025 Council meeting.

COUNCIL PLAN STRATEGIC OBJECTIVES

Sustainable City
Ensure an economically, socially, and environmentally sustainable municipality.

BACKGROUND

Monash's population and commercial growth has resulted in an increased demand for parking. Users expect convenient parking spaces will always be available at commercial and busy activity centres.

Building new car parks is not sustainable, is costly and does not always resolve a problem that may exist in a certain location. The utilisation of parking spaces has also been unbalanced in activity centres. Users often favour premium parking spaces in the heart of the centre while greater parking availability may be located a short walking distance away on the periphery. This leads to vehicles circulating in search of a premium space, illegal parking practices such as overstaying time-limits, and user frustration.

The Parking Management Review aims to understand how the City of Monash can better manage today's demand on the existing parking supply and improve parking access and availability for those most in need.

The Parking Management Review will also address the following:

Annual Community Satisfaction Surveys

Parking consistently ranks as one of the highest issues for the City of Monash. The 2024 Metropolis Annual Community Satisfaction Survey found that parking issues are notably more nominated in Monash than the metropolitan Melbourne average (13% compared to 7%). Better parking management will support improved community satisfaction.

Monash Integrated Transport Strategy

Improving parking management was a key recommendation in the Monash Integrated Transport Strategy adopted in 2017. The 20-year transport strategy was developed to ensure that as Monash's population grows, our area remains an accessible and vibrant place with sustainable transport choices. The Parking Management Review can address the following actions identified in the Integrated Transport Strategy including:

- Implement a street space management strategy to include roadside kerb space priority.
- Continue to research demand and potential for paid parking/demand responsive pricing.
- Apply consultative approach to parking management with:
    - Traffic and parking conditions assessed against Parking Demand Management Framework principles (to be developed)
    - Facilities which generate specific traffic and parking issues addressed with systematic approach
    - Specific management around schools and narrow streets.
- Investigate incrementally modifying 24-hour permit parking signage to time-based restrictions where resident parking permit holders are exempt. This will improve the efficiency of on-street supply & improve accessibility for other users in times when parking demand from residents is lower.

- Prepare parking database to collate information on total number, location and occupancy of parking spaces in Activity Centres to assist with future planning and assessment.
- Investigate the impacts of paid kerbside car parking in Activity Centres to manage demand and enhance amenity of the street, consistent with best practice.
- Consider policies to reduce the impact of car parking in the future, including within Activity Centres and around key land use hubs within Monash.
- Continue to investigate and invest in new technologies and car parking best practice to promote the most efficient use of space allocated to car parking within Monash.

DISCUSSION

The engineering firm Wallbridge Gilbert Aztec (WGA) was engaged to undertake the Parking Management Review in June 2024. Two reports were produced that can be found in the attachments:

- Parking Management Framework
- Parking Management Review Recommendations for 11 key activity locations.

1. Parking Management Framework

The Parking Management Framework provides a decision-making tool for managing parking in a consistent manner across Monash and achieving the best utilisation of parking space. The Framework also identifies controls to manage parking, how emerging technologies can support parking management and how to deliver efficient operations.

Key areas identified in the Parking Management Framework that are most applicable for Monash are discussed below.

1.1 Establishing Parking Occupancy Targets

A peak parking occupancy of 85% represents an optimum relationship between the supply and demand of the parking facility. An occupancy rate of 85% equates to approximately one in seven parking spaces being available.

It is not unreasonably difficult to find a parking space, and spaces are occupied at a level that justifies the supply. This means the parking facilities are well used, while limiting user frustration and congestion caused by vehicles circulating in search for a parking space.

In areas where parking occupancy is regularly above 85%, parking management tools can be employed to reduce the occupancy and improve parking availability.

Similarly, consideration should also be made to increase the parking occupancy in underutilised areas near to activity locations. This may include easing or removing existing parking restrictions to improve parking options and reduce pressure in high demand areas. This is particularly relevant when the peak parking occupancy consistently remains below 50%, or when user-based restrictions are no longer required.

1.2 Establishing a Parking User Hierarchy

Parking space is a limited resource that cannot be guaranteed. It is important that the space is appropriately managed to meet the expectations of the community. A parking user hierarchy has been developed to inform the prioritisation of parking spaces where conflicting demands exist. Different hierarchies will apply based on the area, surrounding land use, housing density, access to public transport and other factors.

Table 1 shows the different user groups and uses when considering the allocation of parking space.

Table 1: Parking space allocation by user group description

USER GROUP	DESCRIPTION
Safety	Car parking is prohibited for the safety of all road users such as No Stopping zones at intersections and crossings
Pedestrians	Pedestrian areas, crossing and paths are provided with a higher priority to car parking spaces
Public Transport Zones	Public transport parking for buses and rail replacement services
Accessible Spaces	Accessible parking spaces designed in accordance with the relevant Australian Standards
Bicycles	Bicycle infrastructure primarily on Principal Bicycle Network or Strategic Cycling Corridor
Loading Zone	Parking for the loading and unloading of goods
Drop-off / Pick-up	Short term designated drop-off/pick-up spaces including taxi and ride share zones
Patrons / Customer Parking	Short term parking provided for customers
Car Share	Car share parking spaces only
Local Employees	Longer term parking for employees
Commuters	Long stay commuter parking for those transferring to another mode of transport
Residential / Visitor	Long term parking for residential parking and their visitors

Figures 1 and 2 show the parking space hierarchy for Council managed parking in activity centres and residential areas, respectively.

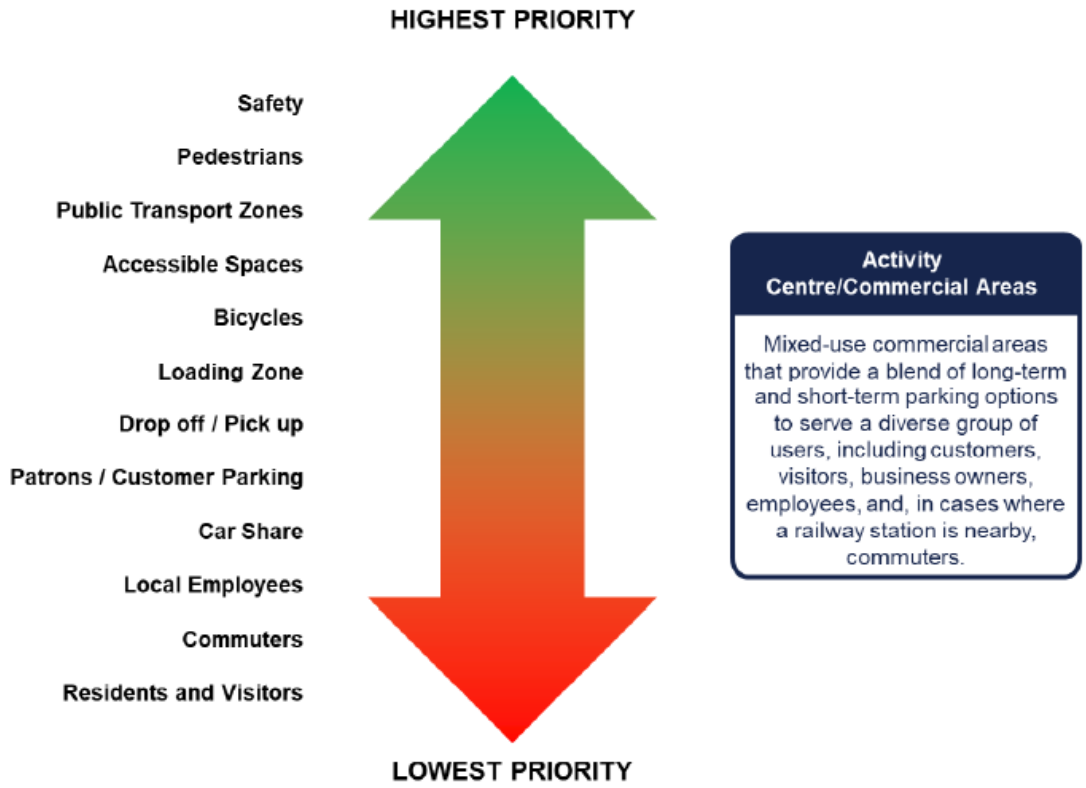

Figure 1: Parking space hierarchy in Activity Centre and Commercial Areas

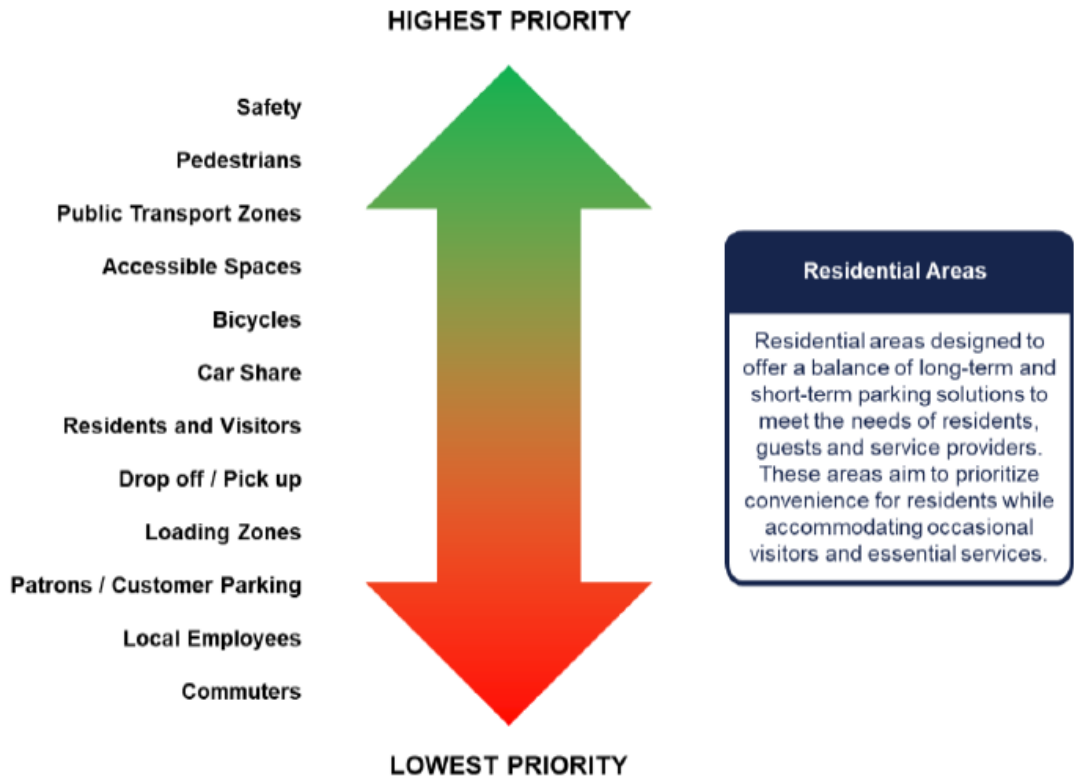

Figure 2: Parking space hierarchy in Residential Areas

It is important to recognise that a street or car park may consist of multiple parking user needs. An example may be a street with commercial business on one side and residential properties on the other side. Consideration of the respective parking space hierarchies would therefore apply.

Safety is identified as the highest priority in all hierarchies. While not a user group per se, it is important to establish that safety is considered paramount and should not be compromised by the provision of parking. For example, No Stopping restrictions to support sight lines and traffic turning areas.

1.3 Applying Parking Restriction Controls

Parking restriction controls are used to manage parking based on the demand and surrounding land use.

There are four types of parking restrictions available. As demand increases, the next level of parking restriction is applied as per below:

1. **No Restrictions**
   - No restrictions or unrestricted parking refers to parking spaces that have no time limits, designated user controls or fees.
   - This type of parking is generally appropriate in areas and at times of low demand.
   - No restrictions should generally apply when parking occupancy is below 50% at all times.

2. **User-Based Restrictions**

- Where restrictions are applied to specific spaces for uses such as loading, bus stops and accessible parking.
- The provision and allocation of these spaces should be based on demonstrated demand and the needs of nearby land uses.
- Prioritisation of these designated spaces should align with the parking user hierarchies.
- User-based restrictions typically apply for certain times of day and days of the week and will remain unrestricted at times of low demand.

3. **Time-Based Restrictions**
    - Time-based restrictions are used to balance different user needs, such as short-term parking for shoppers and visitors.
    - The parking duration permitted is set to encourage appropriate turnover based on the needs of nearby businesses and facilities, and promotes specific areas for different user groups.
    - When parking occupancy is consistently above 85%, we introduce or adjust the time-based restrictions. These typically only apply at times of the day and week when availability is low.
    - Discretion may also be applied to introduce time-based restrictions where one user type, land use, business or development dominates public parking space.
    - Residential parking permits allow parked vehicles to be exempt from time-based restrictions (½P and longer). Residential Permit Zone restrictions may supplement time-based restrictions at some locations and times, particularly residential streets in the evening.
4. **Fee-Based Restrictions or Paid Parking**
    - When time-based restrictions have been introduced and parking occupancy remains consistently above 85%, we introduce fee-based restrictions.
    - As fee-based restrictions apply, they will apply for certain times of day and days of week and will remain time-restricted or unrestricted at times of lower demand.
    - The fee-based restrictions will require a payment with applicable fees priced to target achieving the optimum parking occupancy of 85-95%.

The levels of intervention for applying parking restriction controls are shown in Figure 3. The levels of controls are increased when the peak occupancy consistently exceeds 85%, and parking controls are removed/eased when peak occupancy is consistently below 50%. The framework ensures that areas with high parking availability have fewer controls, while areas that have low availability will have controls applied to ensure there are spaces available.

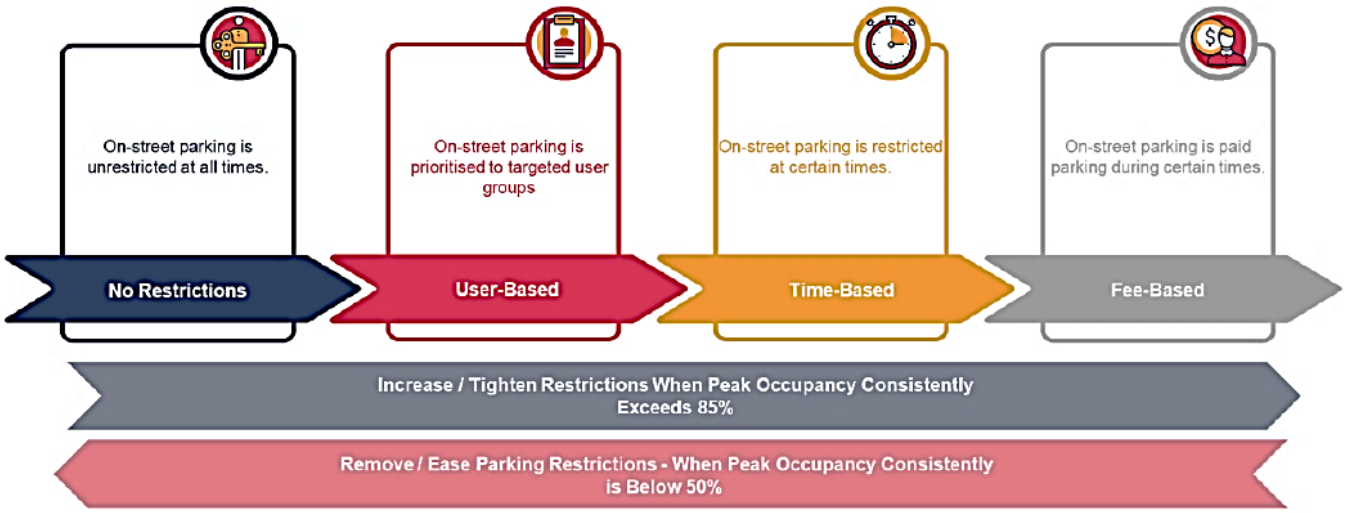

Figure 3: Intervention Levels for Parking Restriction Controls

1.4 Paid Parking

Paid parking refers to parking spaces that require users to pay a fee based on the time they occupy the parking space, and are often combined with time-based restrictions. Paid parking is typically implemented in areas with high parking demand, where time limits alone do not effectively ensure sufficient parking availability, or when time limits become too impractical or short for the local area.

To implement paid parking the following should be considered:

- Paid parking is introduced or adjusted within an area based on the parking intervention thresholds.
- Fees are based on the principles of area and time demand for parking to ensure a reliable parking service and maintenance of parking availability.
- Parking pricing information must be communicated effectively to users. The information must be easy to access and up-to-date.
- Setting an availability target and undertaking reviews of parking occupancy in an area and adjusting the fees to achieve that target. This could be:
  - High Demand (<5% available) - Increase the price of parking
  - Balanced Demand (5% - 15% available) - Keep the price unchanged
  - Low Demand (> 20% available) - Lower the price of parking.
- The goal should be to maintain an average of 5% - 15% of parking availability.
- Decision making will be transparent and the data which has informed decisions will be made public.

While paid parking can generate revenue, the primary benefit is to improve parking turnover and availability at locations of highest demand to improve access and reliability for users that most need parking. It should be noted that Australian Disability Parking Permit (formerly known as Category 1 Blue Disabled Permit) holders are typically exempt from paid parking fees and would benefit from greater access to parking that can be achieved by introducing paid parking.

1.5 Area-Based Parking Approaches

An area-based parking approach looks at parking across a wider area which can lead to efficiencies in land use. Examples of area-based management include:

- Sharing spaces across an activity location instead of site-specific requirements (e.g. shared spaces for a retail strip).
- Sharing spaces across different land uses and developments rather than allocating parking spaces to a particular land use (e.g. shared spaces across a mixed-use development).
- Application of parking management tools across an area:
    - This may include providing more consistent parking restrictions, consolidating loading zones for multiple businesses to share, removing redundant restrictions and proactive parking changes to surrounding areas to control overspill.

Consideration should also be made to provide more consistent parking restrictions that are credible and allow for better parking management and enforcement. This is especially relevant for short time-based restrictions (½P or shorter) where compliance is low, undermining their effectiveness.

1.6 Applying the Parking Management Framework

Council managed on-street and off-street car parking is predominantly located in activity locations, commercial areas, and residential areas. Schools, and recreational/community facilities can also be considered as activity locations. Figure 4 shows the decision-making tool flowchart for parking management in Activity Locations and Commercial Areas. Figure 5 shows the decision-making tool flowchart for parking management in Residential Areas.

Discretion may be applied to introduce time-based or other restrictions where one user type, land use, business or development dominates public parking space. This has occurred in recent times where a single development such as a gym, apartment or school/childcare centre has negatively impacted parking opportunity for other users and future development.

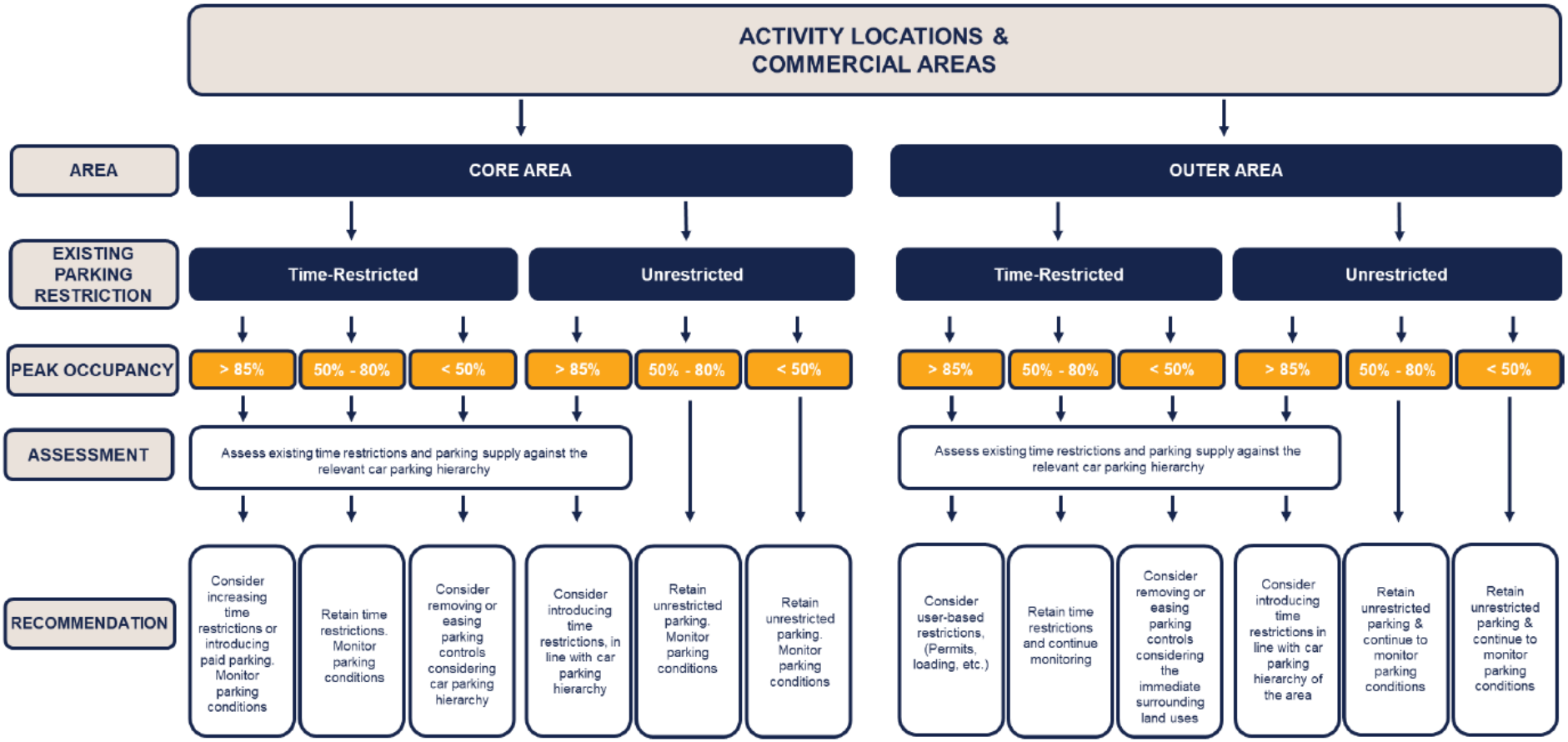

Figure 4: Activity Locations and Commercial Areas - Parking Management Tool

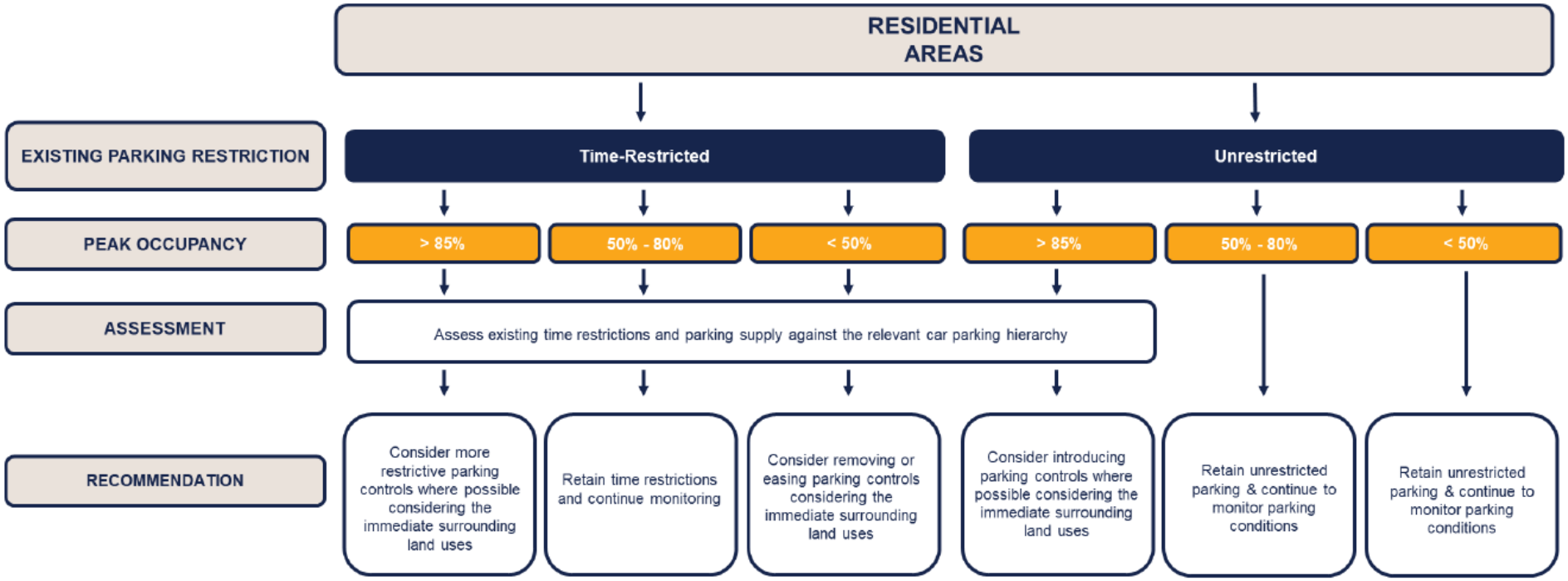

Figure 5: Residential Areas - Parking Management Tools

2. Additional measures to support parking management

2.1 Wayfinding and Dynamic Signage

Standard blue and white directional signage are typically used as wayfinding to car parks. These static signs may include the total number of parking spaces in a car park.

Dynamic signage provides real-time information on available parking spaces in a car park or multiple car parks. It can also direct users to vacant spaces. Users can make informed decisions prior to entering a car park. This can help reduce cruising traffic in search of a parking space. The cost of dynamic signage is significantly higher than standard signage and relies on technology to record when and where vehicles are parked.

2.2 Community Consultation

Community consultation is important to share the rationale for parking change with residents and traders, and gather their insights to inform decision making. It provides an opportunity for Council to explain the proposed parking management tools and what parking controls can be applied to a local area. A commitment to transparency around decision making and for regular monitoring of parking is important.

2.3 Car Share

Car share is a cost-effective alternative to owning a car. Registration, maintenance, insurance and fuel are covered by membership. Members such as residents and businesses pay for the time and distance travelled. Members have been shown to reduce car ownership and total car parking demand across an area.

2.4 Enforcement

Parking enforcement is critical to maintaining an effective parking system. The enforcement of parking restrictions should aim to encourage compliance with the applicable rules and restrictions to support the intended goals of the parking provision (i.e. turnover and access). The enforcement of parking typically takes the form of infringements (fines), which are issued to vehicles found to be parked illegally.

2.5 Emerging Technology

Parking industry trends include innovative data collection methods, GIS data, Artificial Intelligence (AI) and machine learning, parking payment technology, data analytics, digital permits, dynamic signage and real time availability via sensors.

Council already employs some of these technologies including in-ground parking sensors at some activity centres. The sensors indicate when vehicles have been parked in an area for longer than signed which enables Council to provide reliable enforcement and monitor parking trends.

3. Parking Management Review Recommendations

The Parking Management Review investigated 11 key activity locations in Monash:

- Glen Waverley Activity Centre
- Clayton Activity Centre
- Oakleigh Activity Centre
- Mount Waverley Activity Centre
- Huntingdale Activity Precinct
- Pinewood Shopping Centre
- Syndal Shopping Centre
- Holmesglen Neighbourhood Activity Centre
- Kerrie Road Strip Shopping Centre
- Monash University Precinct
- Monash Medical Precinct.

The findings and recommendations from these key activity locations can be adapted and applied to other locations with similar characteristics.

Parking occupancy surveys were undertaken in July 2024 between 8am and 9pm on a typical weekday and weekend. In-ground parking sensor data over a broader period was also assessed where available.

The parking occupancy surveys covered "core areas" within the activity location which are essentially the commercial core of an area. The "outer areas" generally covered the residential streets surrounding the activity location.

Table 2 shows the peak parking occupancy across the core area of each activity location.

Table 2: Parking occupancy in core areas of activity locations

ACTIVITY LOCATION	PEAK CAR PARKING OCCUPANCY	
	WEEKDAY	WEEKEND
Glen Waverley	74%	81%
Clayton	84%	93%
Oakleigh	71%	72%
Mount Waverley	57%	58%
Huntingdale	73%	52%
Pinewood	41%	44%
Syndal	58%	33%
Holmesglen	48%	55%
Kerrie Road	75%	70%
Monash University	79%	-
Monash Medical	77%	26%

Clayton, Glen Waverley and Oakleigh activity centres experienced the highest levels of parking demand, with the core area of Clayton exceeding the target occupancy of 85% on weekends. Monash University and Monash Medical also experienced high parking demand in the core area but are not Council managed car parks.

By comparison the core area of Pinewood had comparatively low parking demand, with less than 50% occupancy on weekdays and weekends.

The following locations had consistently high demand, where parking occupancy is above 85%:

- **Clayton** – Cooke Street East car park, Clayton Road between Dunstan Road and Centre Road, Thomas Street South car park.
- **Glen Waverley** – Central car park, Civic Centre and Library car park, Glendale Street car parks, Kingsway, Coleman Parade, Railway Parade North.
- **Oakleigh** – Portman Street, Station Street, Atherton Road, Hanover Street West car park, Chester Street North car park, Drummond Street, Palmerston Grove.

By applying the Parking Management Framework, the recommendations for the locations above included adjusting parking restrictions, increased enforcement, wayfinding and dynamic signage, and exploring paid parking.

The primary benefit of introducing paid parking is to improve parking turnover and availability at locations of highest demand to improve access and reliability for users that most need parking. It should be noted that Australian Disability Parking Permit (formerly known as Category 1 Blue Disabled Permit) holders are typically exempt from fees and would benefit from greater access to parking that can be achieved by introducing paid parking.

Paid parking can also promote the use of nearby parking areas, where fees do not apply, that have greater parking availability. These include the Cooke Street West car park in Clayton, the expanded soon to be opened Bogong car park in Glen Waverley, and the Atkinson Street multideck carpark in Oakleigh.

Council's Transport Engineers have undertaken further assessment to identify the most-appropriate locations where paid parking can improve parking turnover and availability, and promote nearby parking areas that have greater availability. It is considered unlikely that greater parking availability would result at these locations by adjusting parking restrictions, increased enforcement, and wayfinding and dynamic signage alone. The locations where paid parking would be appropriate include:

- **Clayton** – Clayton Road between Dunstan Road and Centre Road.
- **Glen Waverley** – Kingsway, Coleman Parade between Springvale Road and Kingsway, and Railway Parade North between Springvale Road and Euneva Avenue.
- **Oakleigh** – Portman Street, Chester Street, Station Street, Chester Street North car park, Drummond Street between Atherton Road and Warrawee Park car park, Atherton Road between Station Street and Hanover Street.

Chester Street in Oakleigh is included by applying the area-based approach. The parking demand in the street would most likely increase beyond 85% if paid parking is introduced to surrounding streets and the Chester Street North car park. The current provision of 2-minute, ¼P and ½P parking spaces in Chester Street is also underutilised and would benefit from consolidation to a more consistent 1P restriction.

At other locations of high parking demand, further review and adjustment of existing parking restrictions are recommended. Of further note:

- **Clayton** – Further monitoring and adjustment to restrictions are suggested in the Cooke Street East car park and Thomas Street South car parks. Improved wayfinding signage and

adjustments to parking restrictions in the underutilised Cooke Street West car park may assist.

- **Glen Waverley** – Central car park is now in private ownership and will be redeveloped so no change is recommended. The imminent opening of the expanded Bogong car park will provide greater parking opportunity at the Civic Centre and Library car park. The Glendale Street car parks are to be acquired by the SRLA and will not be providing car parking in the short to medium term. Increasing the length of restrictions to 8pm and beyond will be considered, as well as extending restrictions to apply on Sunday to ensure that the car spaces continue to be available for visitors to the centre and not commuters.
- **Oakleigh** – Further monitoring and adjustment to the Hanover Street West car park is suggested to increase turnover. The Atkinson Street multideck car park and Hanover Street East car parks have greater levels of parking availability. Wayfinding signage and adjustment to time restrictions are suggested to ensure appropriate level of turnover at each respective carpark.

In line with the framework, paid parking could be considered in other locations if parking occupancy continues to exceed 85%. These would be a separate consideration and decision of Council.

Easing or removing parking restrictions are also recommended in many residential streets at the periphery of activity centres, Monash University Precinct and Monash Medical Precinct, where parking occupancy is consistently below 50%.

Further consideration of the surrounding land use, parking use hierarchy, and additional parking occupancy surveys may be required. For example, Monash University and Monash Medical Precinct provides private parking at a fee for staff, students/patients and visitors. Any easing or removal of parking restrictions in the surrounding residential areas could attract users that avoid paying fees in the private car parks. The recommendations should therefore be considered as a preliminary guide for further investigation and consultation.

To implement changes to parking restrictions effectively, community consultation with directly impacted stakeholders is required to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

The recommendations for each activity location have been summarised in Attachment 3 for ease of reference.

FINANCIAL IMPLICATIONS

Conservative estimates for the manufacture and installation of new parking signs as recommended in the Parking Management Review Recommendations is $412,000 as shown in Table 3.

Table 3: Costing estimate for parking sign manufacture and installation changes

ACTIVITY LOCATION	INDICATIVE COST FOR PARKING SIGN CHANGES
Glen Waverley Activity Centre	$98,000
Clayton Activity Centre	$24,000
Oakleigh Activity Centre	$47,000
Mount Waverley Activity Centre	$26,000
Huntingdale Activity Precinct	$15,000
Pinewood Shopping Centre	$10,000
Syndal Shopping Centre	$21,000
Holmesglen Neighbourhood Activity Centre	$3,000
Kerrie Road Strip Shopping Centre	$1,000
Monash University Precinct	$73,000
Monash Medical Precinct	$94,000
TOTAL	**$412,000**

The cost of dynamic signage and associated technology varies according to the specific requirements.

Additional parking occupancy surveys for assessing and monitoring changes are estimated to be in the order of $100,000 annually. Additional costs can also be expected for further investigations and undertaking consultation.

These associated costs will be staggered over a period of time and following further assessment and consultation. Associated costs will either be met from existing operational budgets or will be a consideration as part of Council's annual budget process.

The procurement of paid parking would be determined via a tender process. There are a number of models, including cost of service or profit share to be considered. Operation and maintenance costs would form the basis of any tender received and considered. Given a potential competitive tender process, officers have not provided cost estimates for this, but should Council decide to proceed with a paid parking option, the costs would be known as part of that tender.

Benchmarking of paid parking fees was undertaken with neighbouring councils including Boroondara, Glen Eira, Greater Dandenong, Stonnington and Whitehorse. In comparable on-street parking areas in activity centres with short term time-restrictions (i.e. 1P and 2P), the base parking fee ranges between $2.20 and $3.50 an hour. Reduced fees apply at some locations via incentives such as early-bird rates and cheaper parking rates for the second hour of parking (but these are generally larger carparks and outside of the core of the activity centre.

The benchmarking analysis indicates that Australian Disability Parking Permit (formerly known as Category 1 Blue Disabled Permit) holders are typically exempted from parking fees, and this would

be proposed in Monash if paid parking is introduced. Fees charged would be considered as part of Council's annual budget process where fees and charges are set.

Subject to endorsement, detailed parking changes will be further investigated and consulted on as needed. The cost of any changes, be it new signage (parking restriction and wayfinding) or dynamic signage (that are not associated with the introduction of paid parking) will be considered as part of Council's annual budget program as needed.

POLICY IMPLICATIONS

The Parking Management Review is an action of the Monash Integrated Transport Strategy and supports the Council Plan.

CONSULTATION

Wider community consultation shall be undertaken on the Draft Parking Management Framework and Review Recommendations with a report on the consultation and a recommendation being made for consideration by Council. Direct consultation on parking changes, including paid parking and suggested fees specified by Council, should be undertaken with property owners, occupiers, traders and trader associations in areas where paid parking has been identified for consideration.

A Community Engagement Plan is to be developed with the Communications team, and could include the following:

- Residents
    - Via letter mailout to households in activity centres and surrounding streets where paid parking is identified/parking restrictions are in place
    - Feedback encouraged via Shape Monash page for consolidation and sorting of responses
    - In-person drop-in sessions
    - Social media
- Traders
    - Written correspondence to traders in activity centres and surrounding streets where paid parking is identified/parking restrictions are in place
    - Notification via Economic Development/Placemaking channels
    - Discussion at Trader meetings
    - Feedback encouraged via Shape Monash page for consolidation and sorting of responses
    - In-person drop-in sessions
    - Social media
- Council Staff - All staff email and eBulletin.

To implement changes to parking restrictions effectively, community consultation with directly impacted stakeholders is required to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

SOCIAL IMPLICATIONS

There are no social implications to this report.

HUMAN RIGHTS CONSIDERATIONS

There are no human rights implications to this report.

GENDER IMPACT ASSESSMENT

The community consultation will take into consideration gender and culture through scope of questions, translated materials and in who will be consulted. The consultation will also be shared with Council's Advisory's Committees including the Gender Equity Advisory Committee, Disability Advisory committee, Multicultural Advisory Committee, Positive Ageing Reference Group and Environmental Advisory Committee. The community consultation will further inform the Gender Impact Assessment to determine what changes (if any) need to be considered to the Parking Management Review Framework and Recommendations.

CONCLUSION

The Parking Management Review has been undertaken to understand how the City of Monash can better manage today's demand on the existing parking supply and improve parking access and availability for those most in need.

The Review has produced a Draft Parking Management Framework, along with recommendations to provide a decision-making tool for managing parking in a consistent manner across Monash. Recommendations for 11 key activity locations in Monash have also been identified by applying the principles of the Framework.

It is recommended that Council proceeds to public consultation as outlined in the report.

ATTACHMENT LIST

1. Draft Parking Management Framework - 6 January 2025 [**7.1.7.1** - 74 pages]
2. Draft Parking Management Review Recommendations - 20 February 2025 [**7.1.7.2** - 143 pages]
3. Summary of Recommendations at Key Activity Locations - 20 February 2025 [**7.1.7.3** - 13 pages]


CITY OF
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Draft Parking Framework
WGA240930-RP-TT-0003_E
6 JANUARY 2025
WGA240930

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1 EXECUTIVE SUMMARY

The Monash Parking Framework is an overarching parking framework prepared for use as a decision-making tool applicable to not just the key activity centres, but which can also be extrapolated to other activity locations throughout the municipality including neighbourhood activity centres, shopping centres, strip shopping centres, as well as surrounding residential areas.

This has been designed to ensure that it provides the basis for sustainable and well-balanced parking opportunities in areas with competing needs; to benefit the local community and businesses now and into the future. Having regard to competing needs, such as traders and residents, the distribution and availability of parking within defined activity centres and other key areas of high parking demand (activity locations) must be appropriately managed to ensure Monash remains a vibrant and liveable city.

The Parking Framework has been developed following a literature review on car parking concepts and management tools in addition to parking surveys and analysis undertaken on car parking data in the City of Monash. Population demographics, transport trends, parking policies and management practices in Monash have also been considered.

Notably, the parking surveys and subsequent data analysis has been undertaken on 11 defined activity locations as follows:

- Glen Waverley Activity Centre
- Clayton Activity Centre
- Oakleigh Activity Centre
- Mount Waverley Activity Centre
- Huntingdale Activity Precinct
- Pinewood Shopping Centre
- Syndal Shopping Centre
- Holmesglen Neighbourhood Activity Centre
- Kerrie Road Strip Shopping Centre
- Monash University Precinct
- Monash Medical Precinct

They represent areas of highest parking demand at the time of preparing the Parking Framework.

A range of parking management tools and strategies are proposed for each activity location to address identified issues and challenges. Furthermore, a user hierarchy has been developed for each overarching land use detailing the priorities of kerb space which could be applied across the Council.

Car parking demand is influenced by various factors which can evolve across an area. The framework must be monitored and evaluated on an ongoing basis to remain effective and relevant.

2 INTRODUCTION

Car parking in the City of Monash is an important part of the transport network. As cars are stationary for approximately 95% of the time (Barter, 2013)[1], with 5,157,172 motor vehicles registered within Victoria (Australian Bureau of Statistics, 2021)[2] car parking policy is a critical factor in Victoria's transport system and influences not only how people choose to transit from A to B, but is also a considerable factor in housing affordability, place making, liveability, traffic and congestion as well as the sustainability of our cities.

To understand transport trends in the City of Monash and provide context to car parking policies below, reference is made to the Victorian Integrated Survey of Travel and Activity (VISTA) which is an ongoing survey of household travel activity, primarily across metropolitan Melbourne and Geelong. VISTA has been collecting data since 2007.

VISTA 2020 data shows that 71% of trips originating within the Council utilise a private vehicle.

The existing mode share within the City of Monash is shown in Figure 2.1.

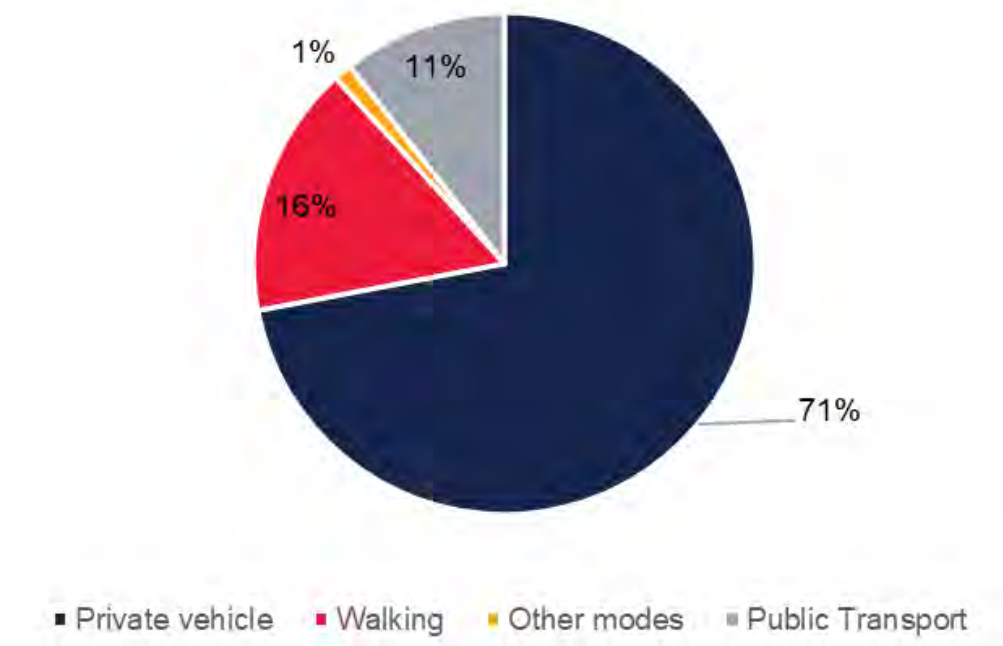


Figure 2.1: VISTA Monash Mode Share Data

[1] Barter, Paul. 2013. ""Cars are parked 95% of the time". Let's check!" *Reinventing Parking.* 22 February . https://www.reinventingparking.org/2013/02/cars-are-parked-95-of-time-lets-check.html.

[2] Australian Bureau of Statistics. 2021. *Motor Vehicle Census, Australia.* Accessed 08 08, 2024. https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release.

2.1 Council's Role In Parking

Parking is an asset that is managed both publicly and privately. Council is responsible for managing local parking arrangements, including:

- The management of public parking facilities
- Allocation of on-street space and parking restrictions
- Enforcement of parking regulations
- Management of parking permit schemes
- Administering the statutory planning process in relation to parking provision

Council is also responsible for engaging with the community regarding parking management, and advocating to external stakeholders, including the State and Federal Governments, on behalf of the community.

2.2 Related Policies and Strategies

This Framework refers or relates to the following Council plans and strategies:

- *Monash Council Plan 2021-2025*
- *Monash Integrated Transport Strategy 2017*
- *Clayton Activity Centre Precinct Plan 2020*
- *Glen Waverley Principal Activity Centre Structure Plan* (updated June 2016)
- *Glen Waverley Principal Activity Centre Sustainable Transport Plan Sept. 2014*
- *Huntingdale Precinct Plan 2020*
- *Oakleigh Major Activity Centre Structure Plan 2012*
- *Oakleigh Major Activity Centre Parking Review 2014*
- *Mount Waverley Structure Plan 2021*

Figure 2.2: City of Monash On-street parking

3 SCOPE

The Framework is designed to establish a comprehensive approach and offer contemporary best practice parking management strategies for managing parking demand in both on-street and off-street public parking facilities within the City of Monash.

The following framework outlines a toolset for the management of parking which can be implemented to improve transport outcomes within the City of Monash under the guidance of Council's Integrated Transport Strategy 2017, as presented within Figure 3.2.

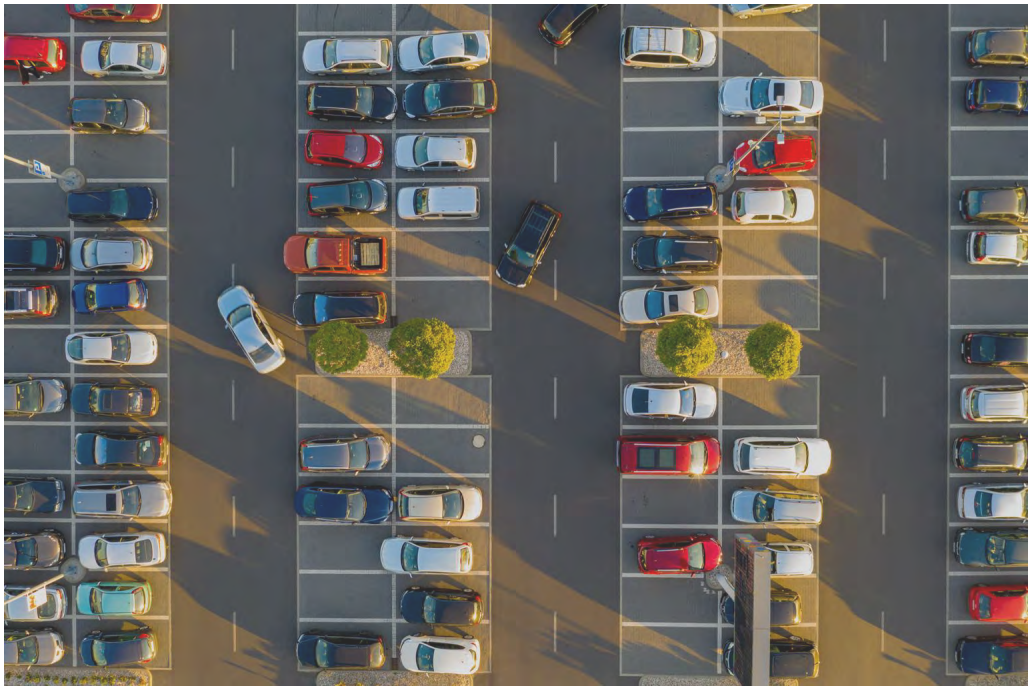


Figure 3.1: Off-street parking

Figure 3.2: Transport in City of Monash

4 BACKGROUND

4.1 City Of Monash Demographics

As per the latest census data provided by the ABS (2023), the City of Monash has an estimated population of 203,560 with a population density of 2,500 people per km^2. The population in the City of Monash is expected to grow by 19.6% by 2041, to a population of 250,219.

The median age in the City of Monash is 38, slightly older than the median age of 37 in Greater Melbourne. The largest age group in the City of Monash is 20 – 24 years old, representing 8.5% of the population within the City of Monash.

The City of Monash includes 24,255 local businesses and 130,172 local jobs with the largest industries being health care and social assistance.

Figure 4.1: Monash Civic Centre Shared Zones

4.2 City of Monash Transport Trends

Transport trends and statistics have been reviewed within the City of Monash and compared to Greater Melbourne for context, noting:

- 54% of households have access to two (2) or more motor vehicles, compared to 51% in Greater Melbourne.
- 15.9% of households have access to three (3) or more motor vehicles in the City of Monash.
- Of resident workers in the City of Monash, 29% live and work in the City of Monash, 18% work in the City of Melbourne.
- Of workers in the City of Monash 23% also live in the City of Monash, comparatively, 11% live in Casey and 7.4% live in Knox.
- On Census Day 2021 in the City of Monash:
  - 47.5% of people travelled to work in a private car
  - 6.1% took public transport and 2.1% rode a bike or walked
  - 31.6% worked at home
- On Census Day 2016 in the City of Monash:
  - 64% of people travelled to work in a private car
  - 17.3% took public transport
  - 3% rode a bike or walked
  - 4.3% worked from home

It is noted the census data from 2021 was collected while Covid-19 lockdowns/restrictions were in place. Therefore, the journey to work data is not indicative of typical conditions. 2016 data is used to best reflect the journey to work travel modes within the City of Monash.

Figure 4.2: Monash Health Off-street parking

4.3 Parking Occupancy Targets

It is generally accepted that car parking facilities operate at optimum efficiency when within the range of 85% to 95% (Austroads, 2020)[3], noting 85% occupancy equates to approximately one (1) in seven (7) parking spaces being available.

A peak parking occupancy of 85% represents an optimum relationship between the supply and demand of said parking facility. It is not unreasonably difficult to find a parking space, and spaces are occupied at a level that justifies the supply. This means the parking facilities are well used, while limiting customer frustration and congestion caused by vehicle circulating in search for a parking space.

The City of Monash should typically aim for the 85% benchmark for their parking facilities within activity locations. In areas where parking occupancy is regularly above 85% parking management tools can be employed to reduce the occupancy, as detailed within Section 6.

4.4 Existing Parking Management Approach

The following car parking management tools and strategies are in use within the City of Monash.

4.4.1 Car Parking Restrictions

Time restrictions for parking spaces are common in the City of Monash. They are used to manage the level of parking turnover required within an area. Time restrictions form a primary component of existing car parking management in Monash's Activity Centres and key activity locations such as major hospital and university precincts.

Localised parking restrictions are in place around land uses such as schools and recreational facilities, with shorter parking restrictions typically in place where a higher turnover of parking is desirable.

Commuter car parking restrictions are provided surrounding railway stations. Time restrictions are typically installed along one or both sides of the street to prevent all day parking by commuters and ensure parking space is available for local residents and business. Commuter parking should first be found in railway station car parks.

Other user restrictions in the City of Monash include clearways, residential permit, trader permits, accessible parking spaces, no parking, no stopping, loading zones, work zones and bus zones. These are provided to meet the needs of specific user groups, land uses or to support road safety and access.

4.4.2 Paid Parking

All car parking spaces managed by the City of Monash have no fee. There is no known resource detailing the extent of private or commercial paid parking in the City of Monash, however, site inspections and research have identified the following areas provide paid parking. These carparks are not managed by Council and use a fee to manage the demand for space, enabling optimal turnover to ensure spaces are available for those requiring it.

- Monash University
- Holmesglen Tafe
- Monash Health
- Oakleigh Central
  - Free for the first 2 hours
- Waverley and Mulgrave Private Hospitals
- Victorian Rehabilitation Centre
- The Glen Shopping Centre
  - Supply of 3,500 parking spaces which are free for the first three (3) hours

[3] Austroads, 2020. *Guide to Traffic Management Part 11: ,* Sydney: Austroads Ltd.

4.4.3 Enforcement

Enforcement aims to improve compliance with the relevant parking regulations, increasing the effectiveness of the parking management system. Without enforcement, regulations such as time restrictions and fees can become meaningless. This lack of accountability leads to misuse of parking spaces, such as vehicles overstaying time limits or avoiding payment, which can disrupt traffic flow, reduce accessibility, and negatively impact businesses and residents.

The City of Monash parking Enforcement Officers issue infringement notices for vehicles found to break the parking rules. Enforcement Officers utilise the following tools and technologies.

4.4.3.1 Officer Inspections

Enforcement officers patrol areas checking for compliance with relevant parking restrictions.

4.4.3.2 In-ground parking sensors

The City of Monash utilises in-ground parking sensors to detect when vehicles enter and leave a parking bay. This is used to alert a parking officer of vehicles that overstay a car parking space and encourage turnover of parking spaces.

The sensors also allow for data collection of how parking spaces are used and can assist in the development of data driven parking policies.

4.4.3.3 Dash Camera Vehicles

The City of Monash parking inspectors utilise dash cameras to record illegally parked vehicles.

Figure 4.3: Clayton Off-street Car Parking – Cooke Street East

4.5 Factors Effecting Parking Demand

To achieve goals outlined within the Monash Integrated Transport Strategy and provide alternatives to driving and parking, a modal shift/behaviour change from private vehicle to sustainable transport modes is needed.

To drive the modal shift, there needs to be a change in perception recognising the benefits of public transport and that sustainable transport methods are seen as a more convenient, reliable, and affordable option (in comparison to using a private vehicle).

Managing parking demand, is one tool available that can influence modal shift, the following factors have been identified to influence car parking demand as per (Austroads, 2020).

- **Geographic location**
  - Demand generally decreases as density increases. In denser areas there is typically an increase in the availability and attractiveness of other transport modes to the car.

In the City of Monash this effect is observed in the Glen Waverley and Clayton activity locations as shown in Figure 4.4 and Figure 4.5 comparing the population density and % of resident workers who travelled to work by car in the City of Monash. Where in close proximity to reliable public transport options the reliance on private vehicles decreases.

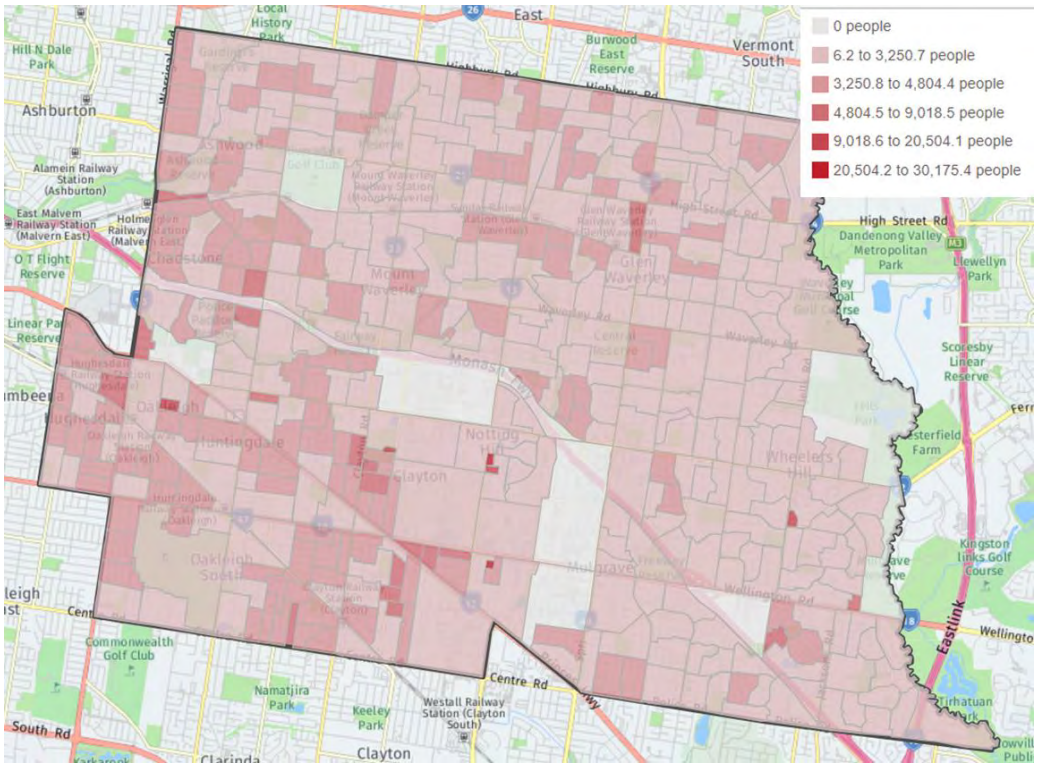


Figure 4.4: City of Monash Population Density Map (ABS, 2023)

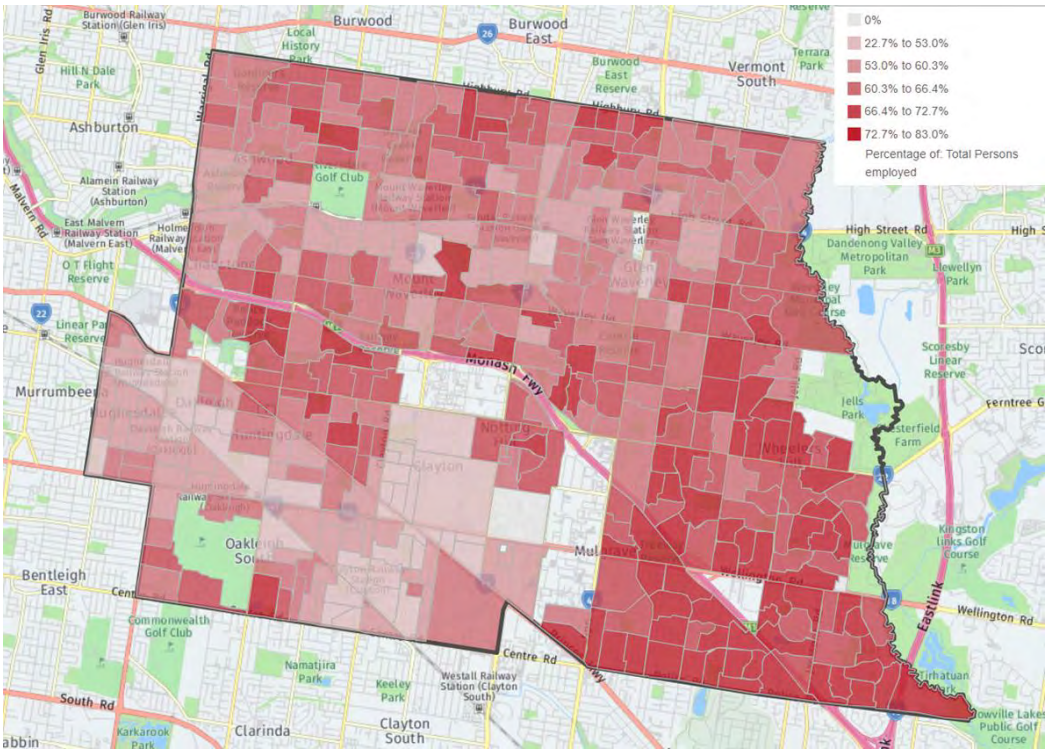


Figure 4.5: City of Monash % of Working Residents Who Travelled to Work By Car Map (ABS, 2016)

- **Availability and attractiveness of other transport modes**
  - Transport modes that are competitively priced, frequent, accessible and reliable decrease parking demand

In the City of Monash this is observed in the residential areas surrounding railway stations where public transport is comparatively more reliable, frequent and accessible compared to other areas as shown in Figure 4.6.

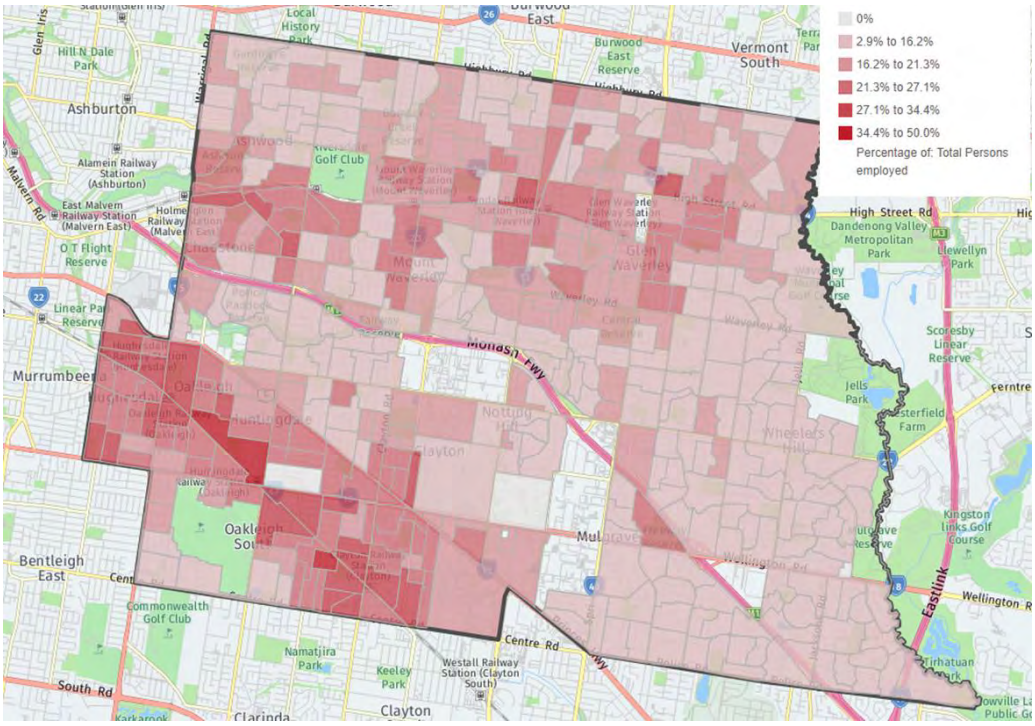


Figure 4.6: City Of Monash % of Working Residents Who Travelled to Work By PT Map (ABS, 2016)

- **Types of land use**
  - Land uses with typically high trip generation and long duration of stay increase parking demand

  In the City of Monash, this is observed within Monash University and the Monash Medical Precinct which land uses typically see long duration of stay.
- **Accessibility and attractiveness of the parking facilities**
  - Where parking is not easily accessible, or attractive (due to congestion and other factors) demand may be reduced
- **Demographic/socio economic patterns**
  - The number of cars owned per household will influence parking demand
- **Cost of Parking**
  - As the perceived cost of parking increases, parking demand generally decreases. Additionally, if the perception is parking is cheap or free demand generally increases.
- **Time of day, weekly and seasonal variations**
  - Parking demand for different land uses will peak at different times of day, week and year. An example of a typical temporal distribution of parking demand is shown in Figure 4.7.

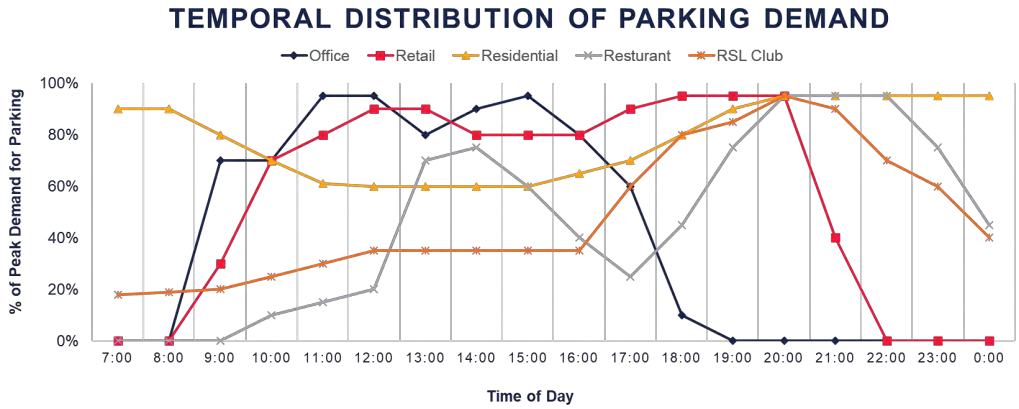


Figure 4.7: Typical Hourly Distribution of Parking Demands (Adapted from ARRB Group)

4.6 Stakeholder Needs

The City of Monash has many stakeholders that rely on parking. The needs of these stakeholders are varying and must be prioritised against the number of spaces available to accommodate them. Figure 4.8 outlines the key stakeholders and their needs.

Disability Spaces that are safe, accessible, and conveniently located near their destination Fair and inclusive parking regulations to accommodate a range of needs	**Businesses** Dependable access for timely pickup or delivery of goods Customer access through parking, pick-up/drop-off areas, public transport, or other convenient methods Flexibility to use parking spaces to enhance business operations, such as outdoor dining parklets	**Residents** Residents without access to off-street parking: Nearby parking for their own or visitors' vehicles Assurance that vehicles won't block property access or create disruptions
Delivery Convenient and reliable access to loading zones near their destination. Sufficient time allowed to complete deliveries	**Car Share** Vehicles that are visible and easily accessible to serve current users and attract new ones Availability of vehicles at the times and locations most convenient for users	**Visitors** Available spaces that are affordable, conveniently located, and meet user needs A straightforward, fair, and seamless on-street parking experience
Pick-Up/Drop-Off Spaces that are easy and safe to access, located in high-demand areas for convenient pick-up and drop-off	**Bikes/Motor Bikes** Convenient parking near their destination with secure bike storage whilst keeping footpaths clear	**Tradespeople** Reliable access to parking close to the worksite for building works
Emergency/ Public Service Guaranteed access to designated spaces in specific locations to facilitate smooth operations	**Public Transport** Stops that are appropriately located and sized to meet demand	**Special Events/Construction** Availability of vacant kerbside space for timely and convenient temporary use

Figure 4.8: Stakeholder Needs

4.7 Parking Characteristics Within Activity Locations

Parking demand surveys were undertaken in July 2024 within 11 activity locations. Occupancy data was collected between 8:00am and 9:00pm on a typical weekday and weekend.

The surveys included larger parking areas that are not Council owned such as at railway stations, shopping centres such as The Glen and Oakleigh Central, Monash University and the Monash Medical precinct. While these major car parks are not managed by Council, any changes to their operation have a direct impact to the parking amenity of the activity location.

It is noted that this represents a snapshot of the current parking supply and occupancy observed. If restrictions, supply or parking management tools are employed it is expected that the occupancy observed will be affected. For long term management tools for relevant land uses see Section 7.

An overview of the surveyed areas, summary of the parking occupancy data and a summary of the survey findings is provided below:

4.7.1 Glen Waverley Activity Centre

Core Area

- 5,016 spaces
- Peak occupancy of 81% (2pm Thu)

Outer Area

- 1,970 spaces
- Peak occupancy 33% (1pm Thu)

Observations

- Overall occupancy:
  - Weekday peak: 63% (1pm Thu)
  - Weekend peak: 66% (1pm Sat)
- Weekend demand slightly higher than weekday
- High demand in the commercial centre (core area)
- Low demand within residential streets and non-commercial surrounds (outer area)
- 21% of vehicles overstayed restrictions (POD data)

4.7.2 Clayton Activity Centre

Core Area

- 571 spaces
- Peak occupancy 84% (1pm Sat)

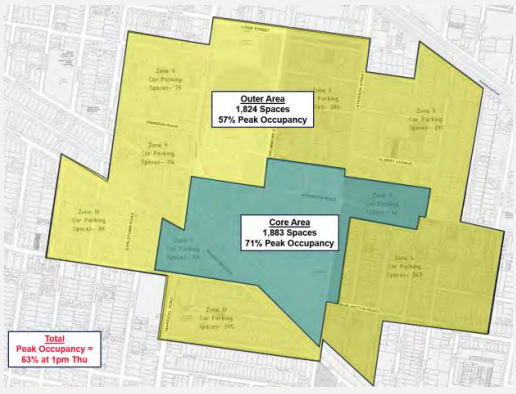
Outer Area

- 1,216 spaces
- Peak occupancy 56% (1pm Thu)

Observations

- Overall occupancy:
  - Weekday peak: 65% (1pm Thu)
  - Weekend peak: 63% (1pm Sat)
- Weekday demand slightly higher than weekend
- High demand in both the commercial centre and non-commercial surrounds (core area), indicates some overspill. Occupancy within the core area nearing 85th percentile
- Demand just above 50% in residential streets (outer area), suggests use by commuters and traders
- 6% of vehicles overstayed restrictions (POD data)

4.7.3 Oakleigh Activity Centre



Core Area

- 1,883 spaces
- Peak occupancy 71% (1pm Sat)

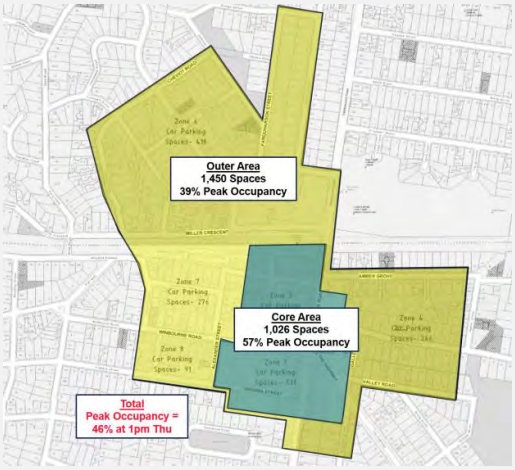
Outer Area

- 1,824 spaces
- Peak occupancy 57% (1pm Thu)

Observations

- Overall Occupancy:
  - Weekday peak: 63% (1pm Thu)
  - Weekend peak: 58% (1pm Sat)
- Weekday demand slightly higher than weekend
- Relatively high demand in the commercial centre (core area)
- Demand just above 50% in residential streets and non-commercial surrounds (outer area)
- 12% of vehicles overstayed restrictions (POD data)

4.7.4 Mount Waverley Activity Centre



Core Area

- 1,026 spaces
- Peak occupancy of 57% (1pm Sat)

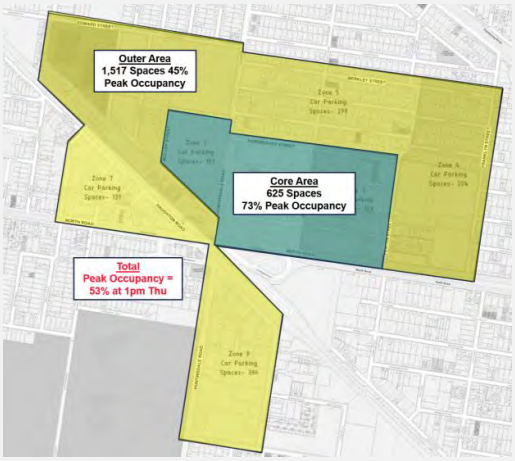
Outer Area

- 1,450 spaces
- Peak occupancy of 39% (1pm Thu)

Observations

- Overall occupancy:
  - Weekday peak: 46% (1pm Thu)
  - Weekend peak: 37% (1pm Sat)
- Weekday demand slightly higher than weekend
- Low demand in both the commercial centre and non-commercial surrounds (core area)
- Low demand in residential streets (outer area)

4.7.5 Huntingdale Activity Precinct



Core Area

- 625 spaces
- Peak occupancy 73% (1pm Thu)

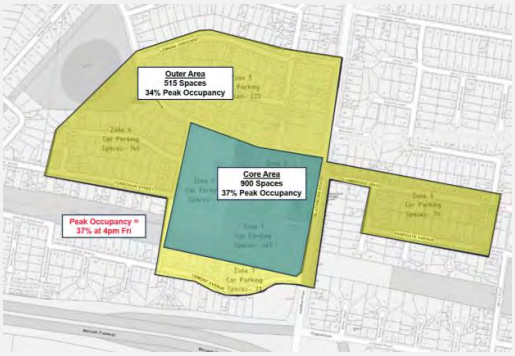
Outer Area

- 1,517 spaces
- Peak occupancy 45% (1pm Thu)

Observations

- Overall occupancy:
  - Weekday peak: 53% (1pm Thu)
  - Weekend peak: 38% (1pm Sat)
- Weekday demand higher than weekend
- Relatively high demand in the commercial centre (core area)
- Low demand in residential streets (outer area)

4.7.6 Pinewood Shopping Centre



Core Area

- 900 spaces
- Peak occupancy 37% (1pm Sat)

Outer Area

- 515 spaces
- Peak occupancy 34% (9am Fri)

Observations

- Overall occupancy:
  - Weekday peak: 37% (4pm Fri)
  - Weekend peak: 34% (1pm Sat)
- Weekday demand slightly higher than weekend
- Very low demands in both the commercial centre (core area) and residential areas (outer area)

4.7.7 Syndal Shopping Centre

Core Area

- 1,076 spaces
- Peak occupancy 58% (2pm Thu)

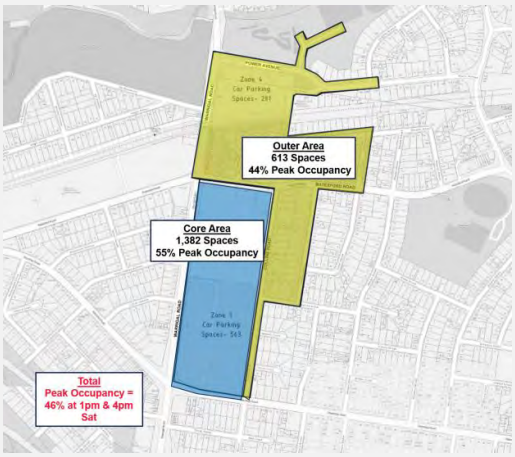
Outer Area

- 1,196 spaces
- Peak occupancy 53% (1pm Thu)

Observations

- Overall occupancy:
  - Weekday peak: 55% (1pm Thu)
  - Weekend peak: 35% (7pm Sat)
- Weekday demand higher than weekend
- Peak demands just above 50th percentile in both the commercial centre (core area) and residential areas (outer area)

4.7.8 Holmesglen Neighbourhood Activity Centre



Core Area

- 1,382 spaces
- Peak occupancy 55% (3pm Sat)

Outer Area

- 613 spaces
- Peak occupancy 44% (1pm Sat)

Observations

- Overall occupancy:
  - Weekday peak: 45% (1pm Thu)
  - Weekend peak: 46% (1pm & 4pm Sat)
- Weekend demand slightly higher than weekday
- Peak demand just above half the capacity within the commercial centre (core area)
- Low demand in residential streets (outer area)

4.7.9 Kerrie Road Strip Shopping Centre

Core Area

- 44 spaces
- Peak occupancy 70% (1pm Fri)

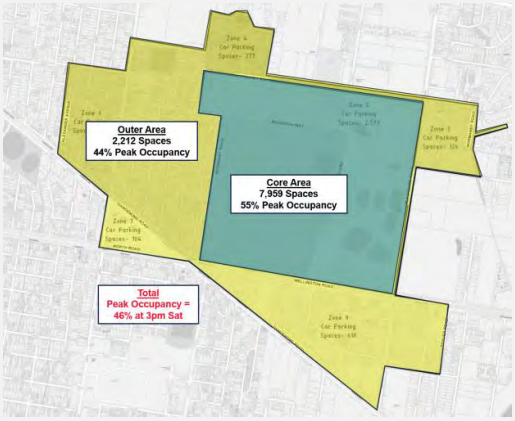
Outer Area

- 103 spaces
- Peak occupancy 56 % (1pm Sat)

Observations

- Overall occupancy:
  - Weekday peak: 56% (1pm Fri)
  - Weekend peak: 59% (1pm Sat)
- Weekend demand slightly higher than weekday
- Relatively high demand within strip shopping centre (core area)
- Low demand in residential streets (outer area)

4.7.10 Monash University Precinct



Core Area

- 7,959 Spaces
- Peak occupancy 55% (1pm Tue)

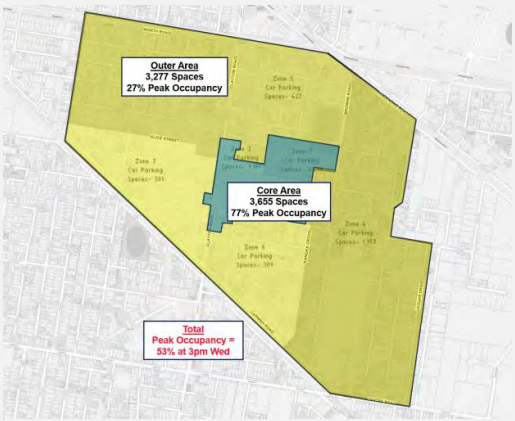
Outer Area

- 2,212 Spaces
- Peak occupancy 44% (4pm Tues

Observations

- Overall occupancy:
  - Weekday peak: 45% (1pm Tue)
  - Weekend peak: 46% (1pm Wed)
- Weekend demand slightly higher than weekday
- Peak demand just above half the capacity within educational centre (core area)
- Low demand in residential streets (outer area)

4.7.11 Monash Medical Precinct



Core Area

- 3,655 spaces
- Peak occupancy 77% (1pm Wed)

Outer Area

- 3,277 spaces
- Peak occupancy 27% (9am Sat)

Observations

- Overall occupancy:
  - Weekday peak: 53% (1pm Wed)
  - Weekend peak: 27% (4pm Sat)
- Weekday demand higher than weekend
- High demand in the commercial centre (core area)
- Low demand in residential streets (outer area)

The parking demand and occupancy data indicates that each activity location is unique in its size and function.

- **Glen Waverley** experienced the highest demand of all centres, with a demand of 66% at 1pm on a Saturday. The activity centre experienced a peak demand of 81% within the commercial core area.
- **Clayton** also experienced a demand of 65% at 1pm on a Thursday. The activity centre experienced a demand of 84% within the commercial core area nearing the 85% occupancy. This suggests that further parking control management tools may be appropriate..
- **Pinewood** experienced a demand of 37% at 4pm on a Friday with the commercial core area reaching a peak demand of 41%. Consideration could be given to reviewing restrictions within the area.

The peak percentage car parking demand across the core area of each Activity Location is shown in Table 4.1.

Table 4.1: Occupancy Data Summary

ACTIVITY LOCATION	PEAK CAR PARKING OCCUPANCY	
	WEEKDAY	WEEKEND
Glen Waverley	74%	81%
Clayton	84%	93%
Oakleigh	71%	72%
Mount Waverley	57%	58%
Huntingdale	73%	52%
Pinewood	41%	44%
Syndal	58%	33%
Holmesglen	48%	55%
Kerrie Road	75%	70%
Monash University	79%	-
Monash Medical	77%	26%

While Table 4.1 indicates that there is sufficient parking on a holistic level, a detailed review of specific sub areas indicates that parking in some areas has reached a level that necessitates improved management of existing parking resources to meet current land use needs (I.e. above 85% occupancy as defined in Section 4.3).

It is recognised that there are areas within every activity location where demands are high, reflecting the most popular and convenient locations to park (Table 4.2). Extents of these zones can be found within Appendix A - . Areas where the weekday or weekend occupancy is at or above the 85th percentile is shaded red within Table 4.2 below.

Table 4.2: Capacity versus Peak Occupancy by Area

ACTIVITY LOCATION	AREA	CAPACITY (SPACES)	WEEKDAY PEAK OCCUPANCY	WEEKEND PEAK OCCUPANCY
Glen Waverley	Zone 1	3,257	2,447	2,691
	Zone 2	686	500	527
	Zone 3	33	20	22
	Zone 4	356	326	347
	Zone 5	80	79	80
	Zone 6	110	91	96
	Zone 7	66	65	66
	Zone 8	428	354	403
	Zone 9	418	129	100
	Zone 10	544	196	203
	Zone 11	232	92	67
	Zone 12	203	66	68
	Zone 13	386	159	181
	Zone 14	173	92	70
Clayton	Zone 1	553	468	520
	Zone 2	6	5	5

ACTIVITY LOCATION	AREA	CAPACITY (SPACES)	WEEKDAY PEAK OCCUPANCY	WEEKEND PEAK OCCUPANCY
	Zone 3	12	9	11
	Zone 4	344	231	109
	Zone 5	190	137	137
	Zone 6	212	68	63
	Zone 7	211	113	113
	Zone 8	259	149	177
Oakleigh	Zone 1	110	94	59
	Zone 2	1,728	1,227	1,279
	Zone 3	46	31	25
	Zone 4	364	210	172
	Zone 5	299	103	112
	Zone 6	286	211	168
	Zone 7	270	207	114
	Zone 8	80	38	55
	Zone 9	114	68	68
	Zone 10	118	38	46
	Zone 11	295	188	127
Mount Waverley	Zone 1	531	293	294
	Zone 2	126	82	69
	Zone 3	369	236	238
	Zone 4	246	59	32
	Zone 5	419	164	149
	Zone 6	418	143	69
	Zone 7	276	196	93
	Zone 8	91	15	31
Huntingdale Road	Zone 1	181	144	123
	Zone 2	275	213	169
	Zone 3	169	130	71
	Zone 4	204	59	60
	Zone 5	298	62	51
	Zone 6	498	284	180
	Zone 7	131	46	46
	Zone 8	386	248	163
Pinewood Shopping Centre	Zone 1	663	184	211
	Zone 3	237	197	193
	Zone 4	76	39	22
	Zone 5	222	84	42
	Zone 6	140	31	18

ACTIVITY LOCATION	AREA	CAPACITY (SPACES)	WEEKDAY PEAK OCCUPANCY	WEEKEND PEAK OCCUPANCY
	Zone 7	77	12	9
Syndal	Zone 1	481	394	158
	Zone 2	522	211	186
	Zone 3	73	42	41
	Zone 4	603	393	245
	Zone 5	200	114	46
	Zone 6	90	29	31
	Zone 7	58	28	18
	Zone 8	48	20	20
	Zone 9	124	31	34
	Zone 10	85	43	46
Holmesglen	Zone 1	563	332	442
	Zone 2	819	350	327
	Zone 3	332	175	145
	Zone 4	281	90	127
Kerrie Road	Zone 1	44	33	31
	Zone 2	29	26	29
	Zone 3	61	20	28
	Zone 4	13	3	2
Monash University	Zone 1	5,380	3,956	-
	Zone 2	2,579	2,299	-
	Zone 3	126	89	-
	Zone 4	277	166	-
	Zone 5	787	207	-
	Zone 6	332	139	-
	Zone 7	104	16	-
	Zone 8	679	244	-
Monash Medical	Zone 1	236	128	47
	Zone 2	1,181	653	266
	Zone 3	2,238	2,039	662
	Zone 4	1,357	345	349
	Zone 5	427	165	165
	Zone 6	798	224	252
	Zone 7	381	137	135
	Zone 8	342	82	82

5 CHALLENGES TO PARKING MANAGEMENT IN MONASH

Based on an analysis of demographic trends, parking demand data and Council policies several key parking challenges have been identified for the City of Monash.

5.1 High Demand in Core Areas during Peak Times

The core areas within Monash experience significantly high parking demands during peak times reaching the 85th percentile capacity.

5.2 Parking Spillover into Residential Streets

In some areas, commuter and long-term parking was observed to overflow into nearby residential streets, anecdotally causing issues for local residents. Drivers may also be avoiding parking fees in some private car parks.

5.3 Parking Management around Construction Sites

The growth in construction projects within Monash has led to parking management challenges, particularly near activity location sites, such as the Glen Waverley Activity Centre where significant construction is underway.

5.4 Balancing User Demands with Timed Restrictions

Managing the expectations of diverse user groups, parking controls need to work as best as possible for all, and not be designed to match individual user preferences. For example, customers, traders, commuters may have opposing demand patterns, with customers seeking short term convenient parking and employees and commuters seeking longer term parking.

5.5 Loading and Delivery

On-street loading spaces are often sought in convenient areas to retail frontage and can conflict with other user groups including customers. Furthermore, in some areas (often in historical buildings/areas) there is a lack of an off-street loading area or loading is accessed via a narrow laneway presenting a challenge for loading vehicle access and the loading or unloading of goods. New developments should ensure service vehicles can be catered within the development itself, including waste and recycling collection.

Consideration should be made to loading zone signage allowing for other users during evenings and weekends if appropriate, and considering the hierarchies of car parking spaces in various land uses as detailed within Section 6.

5.6 Alignment with Broader Council Objectives

Parking policies need to support Monash's Integrated Transport Strategy, aiming at reducing car dependency and promote sustainable transport.

5.6.1 Space Allocation and Urban Design

Noting the finite land area in activity locations, a balance is required between the competing interests of urban design outcomes including placemaking, landscaping, tree planting, open space and parklets and transportation requirements including traffic lanes, public transport, bicycle lanes, footpaths and car parking.

Other urban design considerations for parking include encouraging active surveillance, lighting, and visual amenity.

These place making and urban design considerations often include the removal of car parking supply which can pose a challenge in areas where parking demand is high or exceeds the supply.

5.7 Accessible Parking

The Monash Disability Action Plan 2021-2025 indicates that a significant number of residents in the region live with disabilities, with many requiring assistances in their daily lives. Within the Monash health catchment ABS data indicates 61,209 people have a disability which requires daily assistance with communication, mobility or self-care.
The anticipated growth in the average age of the population presents challenges related to mobility and transportation.

Accessible parking at Monash Activity Locations generally meets the recommended 1-2% ratio with the exception of Huntingdale. Parking occupancy data generally showed accessible parking space available across the week at all locations.

Regarding off-street parking, the Building Code of Australia mandates that a specific percentage (typically 1–2%, depending on the size of the development). Regarding on-street parking *Australian Standard 2890.5 Parking Facilities – On-street parking* outlines recommendations for the minimum number of accessible spaces dependent on the adjacent land uses and developments ranging from 1% - 4% as detailed in Table 5.1.

Table 5.1: Recommend Minimum Number of Accessible Spaces by Land Use

TYPE OF DEVELOPMENT AND LAND USE	RECOMMENDED MINIMUM NUMBER OF ACCESSIBLE SPACES
Retail/Commercial	2%
Public transport	2%
Community facilities	2%
Senior citizen centres, clubs and residential care facilities	3% to 4%
Medical centres, services and hospitals	3% to 4%
Tertiary Education institutions	1% to 2%
Entertainment centres, Function centres	2%
Outdoor sporting facilities and outdoor recreation areas	1% to 2%

The City of Monash evaluates the on-street accessible parking provision on a case-by-case basis, considering factors such as the nature of adjacent land uses, practically of providing accessible spaces, the demand for accessible parking throughout the week, the availability of off-street parking associated with land uses, and the presence of existing accessible parking spaces within 50 meters that do not require crossing the road.

5.8 Parking Enforcement

Effective parking enforcement is crucial for maintaining reliable parking services, managing flow, and ensuring fair access. However, enforcement is sometimes perceived as punitive or revenue-driven, especially when fines result from unclear signage or honest mistakes.

Success in parking management is not measured by fines but by compliance and the clear communication of parking options.

6 MANAGING PARKING IN MONASH

The Framework focuses on managing car parking within the City of Monash in a manner that provides best utilisation of the current spaces.

The Framework identifies tools to manage existing parking, utilise emerging technologies and promote efficient operations.

6.1 User Hierarchy

A user hierarchy has been developed to inform the prioritisation of on-street parking spaces where conflicting demands exist.

Different hierarchies will apply based on the area, surrounding land use, housing density, access to public transport and other factors.

Hierarchies of the users of car parking spaces are shown for activity centres, hospital/community, higher education and residential areas from Figure 6.2 to Figure 6.5.

6.1.1 Hierarchy Definitions

The hierarchies refer to the following user groups as defined within Table 6.1.

Table 6.1: User Group Descriptions

USER GROUP	DESCRIPTION
Safety	Car parking is prohibited for the safety of all road users such as No Stopping zones at intersections and crossings
Pedestrians	Pedestrian areas, crossing and paths are provided with a higher priority to car parking spaces
Public Transport Zones	Public transport parking for buses and rail replacement services
Accessible Spaces	Accessible parking spaces designed in accordance with the relevant Australian Standards
Bicycles	Bicycle infrastructure primarily on Principal Bicycle Network or Strategic Cycling Corridor
Loading Zone	Parking for the loading and unloading of goods
Drop-off / Pick-up	Short term designated drop-off/pick-up spaces including taxi and ride share zones
Patrons / Customer Parking	Short term parking provided for customers
Car Share	Car share parking spaces only
Local Employees	Longer term parking for employees
Commuters	Long stay commuter parking for those transferring to another mode of transport
Residential / Visitor	Long term parking for residential parking and their visitors

6.1.2 Core Overview

6.1.2.1 Activity Locations/Commercial Areas

In commercial areas (such as Glen Waverley Activity Centre), various parking demands will coexist, including short-stay parking for patrons and customers, as well as long-term parking for employees and commuters, especially where other transport connections are available. Priority should be given to spaces that reflect the type of activity within the area typically, focusing on short-term parking in high-demand locations to ensure a high turnover of users. Lower-priority users include those requiring longer-term parking, such as traders, employees, residents, and commuters.

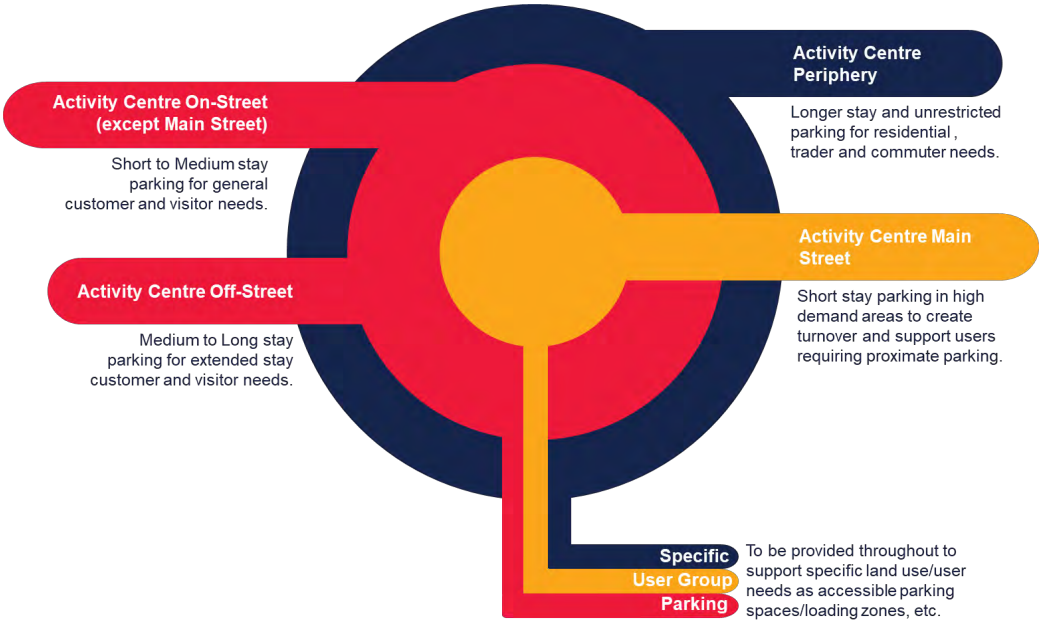


Figure 6.1: Parking Management (Activity Locations/Commercial Areas)

The hierarchy for the use of car parking spaces in commercial land use is shown in Figure 6.2.

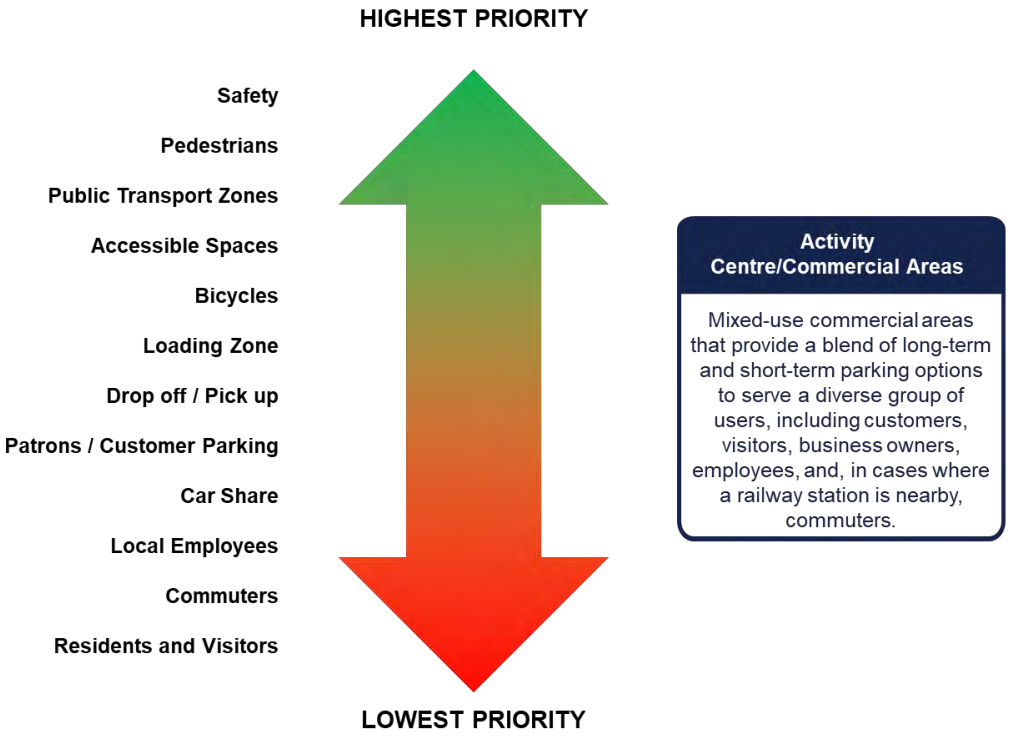


Figure 6.2: Car Parking Space Hierarchy - Activity Locations/Commercial Areas

6.1.2.2 Core Activity Locations- Hospital / Community

In hospital / community areas (such as Monash Medical Centre), a mixture of parking demands will be present including short term pick up / drop off, short term for patient/customers and long term demands from staff. The hierarchy for the use of car parking space in a hospital/community activity core is shown in Figure 6.3.

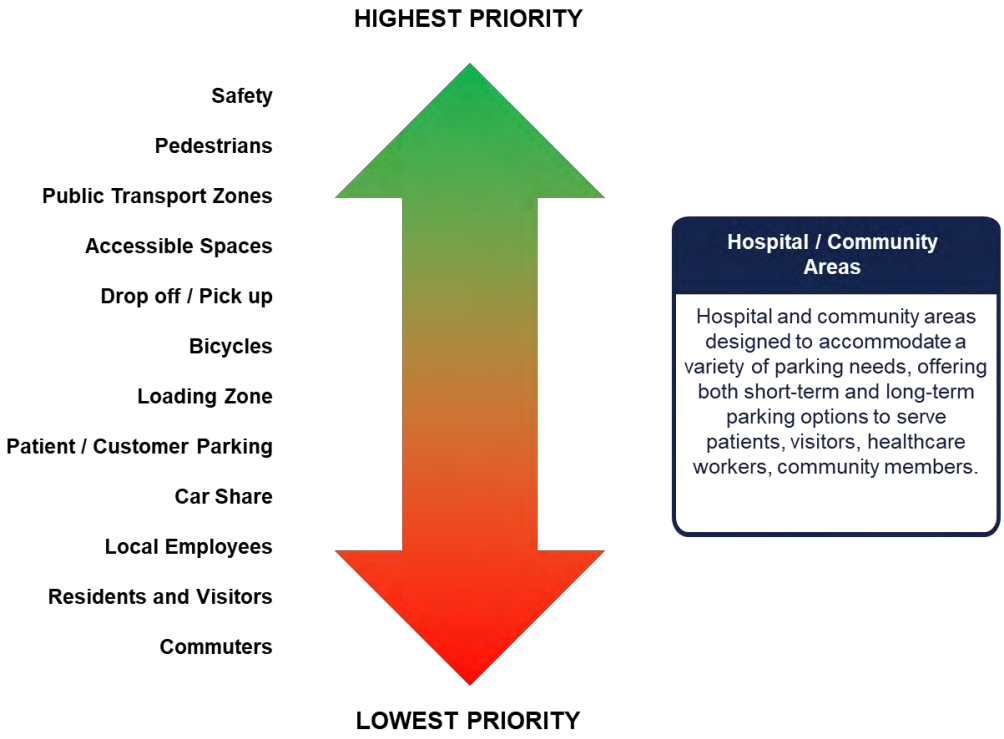


Figure 6.3: Activity Location Core Car Parking User Hierarchy- Hospital/Community

6.1.3 Outer - Parking Spread Overview

Outside of activity core locations is primarily residential and recreational areas within the City of Monash. The parking demands generated from these areas have various parking demands including overspill from activity locations.

6.1.3.1 Higher Education – Outer areas

In higher education core activity locations, car parking demand will typically tend to longer stay with demand generated from students and staff.

The hierarchy for the use of car parking space in a higher education activity location, outside of the core is shown in Figure 6.4. As Council will have limited jurisdiction over a higher education campus the hierarchy refers to the municipal areas surrounding a campus, which will also require consideration to the respective land use surrounding the higher education area.

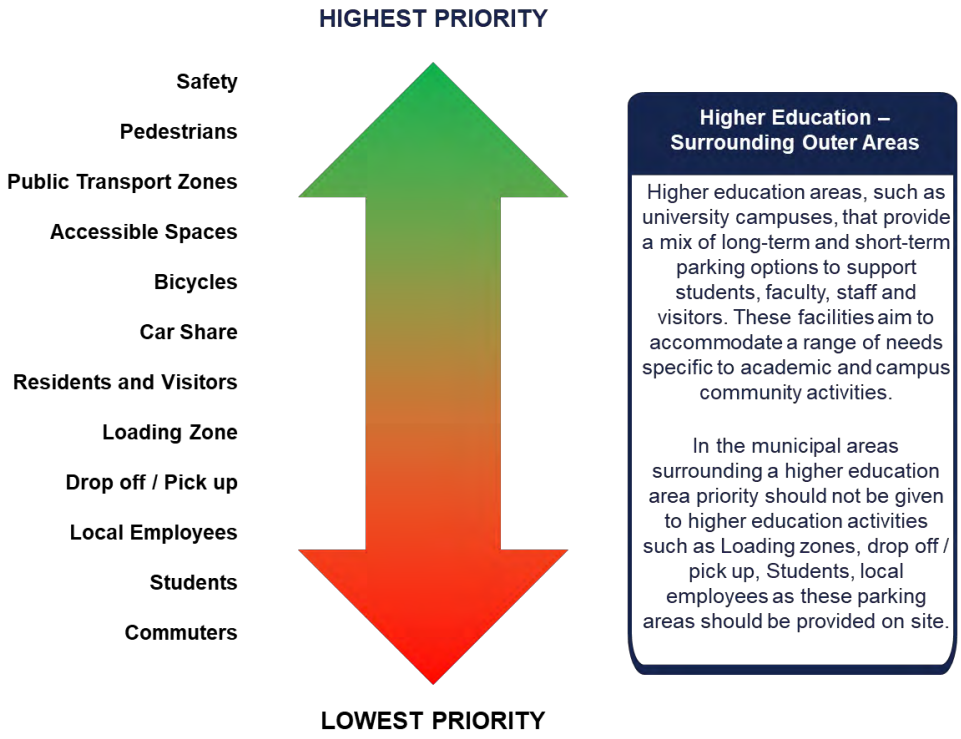


Figure 6.4: Core Car Parking User Hierarchy- Higher Education Activity Areas

6.1.4 Residential Overview

In residential areas, parking controls should focus on striking a balance between the long-stay parking demanded by households and the requirements of all residents for street space to accommodate visitors, family, caregivers, and tradespeople.

6.1.4.1 On-Street – Residential Areas

Residential areas surrounding activity cores will see a mixture of parking demand generated from overspill parking from customers, employees from activity locations / transport connections seeking long-term parking/free parking, and parking demand from residents and their visitors.

Additionally, it is noted that within primarily residential areas parking demand is generated from other land uses complementary to residential uses such as childcare facilities, schools, community centres, local strip shops and isolated businesses.

The kerbside priority in residential areas surrounding activity cores is illustrated within Figure 6.5.

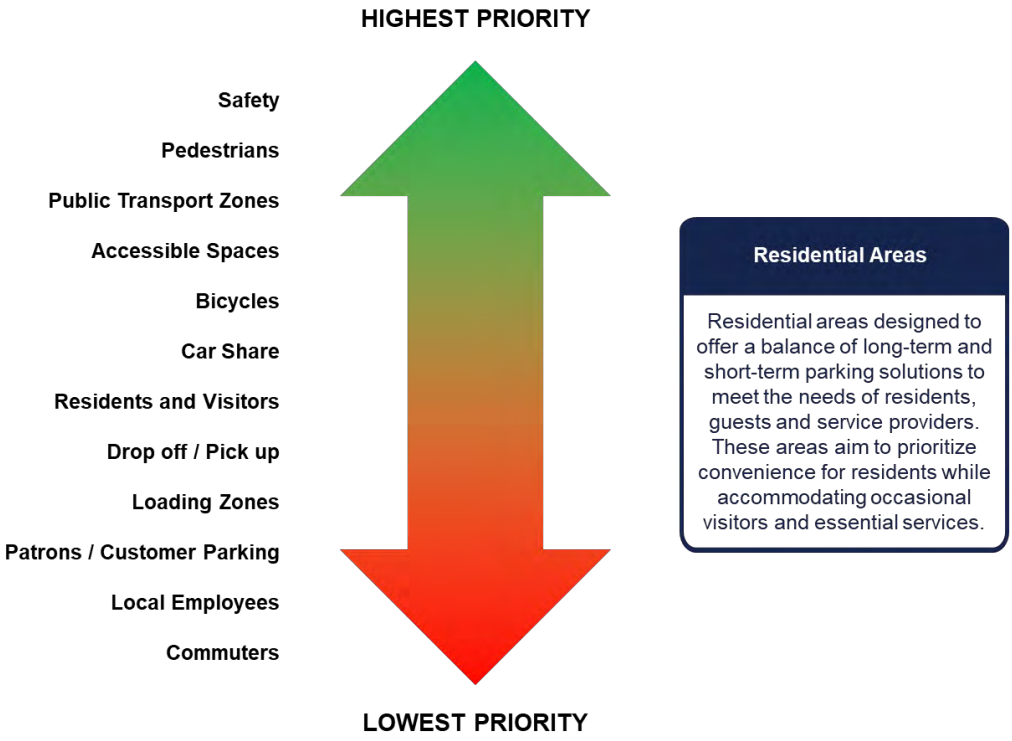


Figure 6.5: Car Parking User Hierarchy- Residential Areas

6.2 Parking Management Tools

The following section outlines parking management tools appropriate for the City of Monash. These tools can increase the availability and reliability of the parking service.

The tools are outlined from simple tools where supply is sufficient to meet demand, to more complex management tools to be considered in areas where demand exceeds supply and/or areas with competing demands from different user groups.

6.2.1 Parking Restriction Controls

The increasing levels of intervention for parking restriction controls is shown in Figure 6.6. The levels of level of controls implemented are to be increased when the peak occupancy consistently exceeds 85%- 95% and parking controls removed/eased when peak occupancy is consistently below 50%.

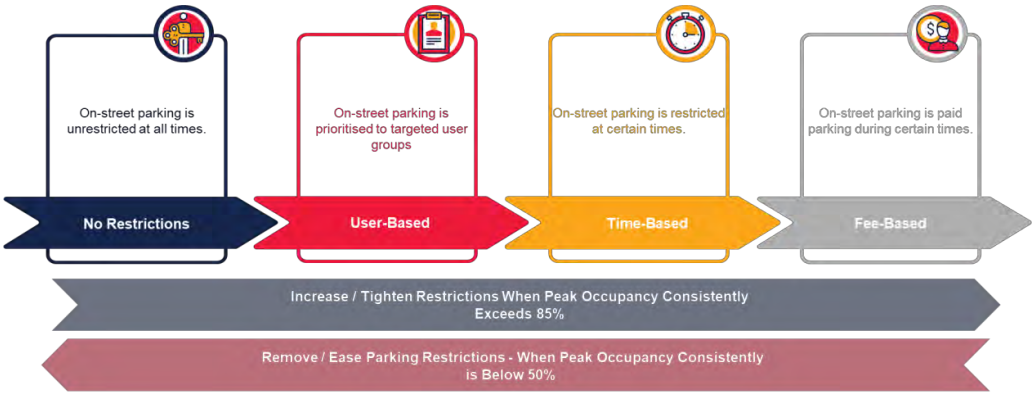


Figure 6.6: Intervention Levels for Parking Restrictions Controls

The framework ensures that areas with high parking availability have fewer controls, while areas that have low availability will have controls applied to ensure there are spaces available.

6.2.1.1 No Restrictions

- Unrestricted parking refers to parking spaces that have no time limits, designated user controls or fees
- This type of parking is generally appropriate in areas and at times of low demand
- No restrictions should apply when parking occupancy is below 50% at all times

6.2.1.2 User-Based Restrictions

- Where restrictions are applied to specific bays, ensuring space is available for particular uses (for example, loading, bus stops, accessible parking)
- The provision and allocation of these spaces should be based on demonstrated demand and the needs of nearby land uses
- Prioritisation of these designated spaces should align with the on-street parking hierarchies specified in Section 6.1
- User-based restrictions typically apply for certain times of day and days of the week and will remain unrestricted at times of low demand

6.2.1.3 Time-Based Restrictions

- Time-based restrictions are used to balance different user needs, such as short-term parking for shoppers and visitors
- The parking duration permitted is set to encourage appropriate turnover based on the needs of nearby businesses and facilities, and promotes specific areas for different user groups
- When parking occupancy is consistently above 85%, we introduce time-based restrictions. These typically only apply at times of the day and week when availability is low
- Discretion may also be applied to introduce time-based restrictions where one user type, land use, business or development over-dominates public parking space

6.2.1.4 Fee-Based Restrictions

- When time-based restrictions have been introduced and parking occupancy remains consistently above 85%, we introduce fee-based restrictions
- As fee-based restrictions apply, they will apply for certain times of day and days of week and will remain time-restricted or unrestricted at times of lower demand
- The fee-based restrictions will require a payment with applicable fees priced to target achieving the optimum parking occupancy of 85-95%

Parking fees will be implemented as shown in Figure 6.7.

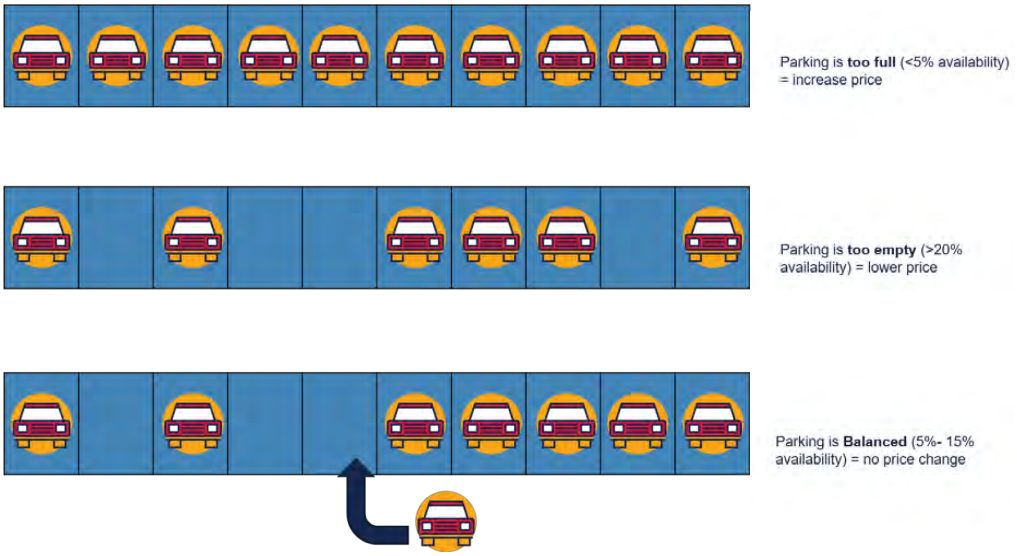


Figure 6.7: Parking Fee Structure

6.2.2 Paid Parking

Paid parking refers to parking spaces that require users to pay a fee based on the time they occupy the parking space, often combined with timed restrictions. This system is typically implemented in areas with high parking demand, where time limits alone do not effectively ensure sufficient parking turnover or availability.

To implement paid parking the following should be considered:

- Preparation of a Paid Parking Policy document for the City of Monash to set out administration of paid parking and define the role of Council.
- Paid parking is introduced or adjusted within an area based on the parking intervention thresholds as per Section 4.3.
- Fees are based on the principles of area and time demand for parking to ensure a reliable parking service and maintenance of parking availability.
- Parking pricing information must be communicated effectively to customers. The information must be easy to access and up-to-date.
- Demand-based pricing involves setting the price of parking at the lowest price that keeps a few spaces available within a defined area (further detailed below)
- It requires setting an availability target and undertaking reviews of parking occupancy in an area and adjusting the fees to achieve that target.
- The goal should be to maintain an average of 5% - 15% of parking availability.
- Decision making will be transparent and the data which has informed decisions will be made public.

High Demand	<5% Available	Increase the price of parking
Balanced Demand	5% - 15% Available	Keep the price unchanged
Low Demand	> 20% Available	Lower the price of parking

Demand Based Pricing

Demand based pricing varies the price of parking by location and time in response to demand. It aims to minimise cruising for a space and to maximise efficiency as shown in Figure 6.8. These include driving during off-peak hours when parking rates are lower, opting for less expensive parking and walking further to destinations, reducing the duration of parking, using off-street parking options, carpooling to share parking costs, or utilising public transportation, cycling and walking.

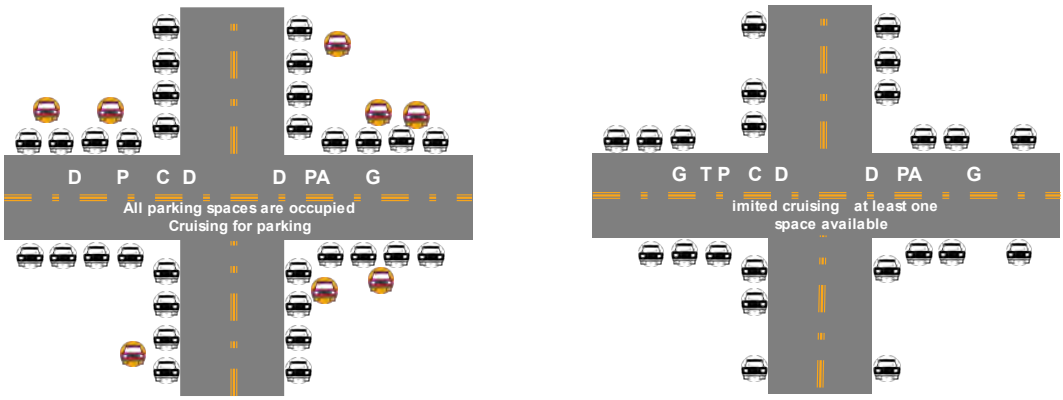


Figure 6.8: Impact of Pricing On Circulation Time

6.2.3 Area Based Parking Approaches

Unless controlled by user based restrictions, available on-street parking outside a specific property is seldom guaranteed. The availability of parking typically refers to a street block, street section or off-street car park.

Area based parking management approaches car parking from wider areas which can lead to efficiencies in land use. Examples of area based management include:

- Sharing spaces across an activity location instead of site-specific requirements (i.e., shared spaces for a retail strip).
- Sharing spaces across different land uses and developments rather than allocating parking spaces to a particular land use (i.e. shared spaces across a mixed use development).
- Application of parking management tools across an area or zone instead of for each site:
  - This may include providing consistency of restrictions through an area, consolidating loading zones so multiple businesses could utilise them, removing unnecessary restrictions and proactive changes to surrounding areas to control overspill.

6.2.4 Community Consultation

Community consultation is important to communicate proposed changes to the management of parking to residents and traders. It provides a platform for Council to explain the reasoning and logic behind the proposed parking management tools while offering stakeholders opportunity for input and critique. Feedback from the consultation process can guide adjustments to the implementation, ensuring that community concerns are addressed.

6.2.5 Wayfinding and Dynamic Signage

Parking signage should be consistent in activity locations to reduce confusion and can be used as a navigational aid to find available parking space.

Dynamic signage provides information on available parking spaces in an off-street car park or multiple car parks. It can also direct drivers to vacant spaces. Drivers can make informed decisions prior to entering a car park. This can help reduce cruising traffic in search of a car parking space.

6.2.6 Car Sharing

Car sharing is a cost-effective alternative to owning a car. Registration, maintenance, insurance and fuel are covered by membership. Members such as residents and businesses pay for the time and distance travelled. Members have been shown to reduce car ownership and total car parking demand across an area.

Independent research (Phillip Boyle & Associates, 2016)[4] indicates that each car share space in urban Melbourne can replace between 7-10 privately owned vehicles. The research included a review of best practice principles to guide local government including quality, scale, integration, car ownership savings and municipal support.

[4] Phillip Boyle & Associates. (2016). Research for the City of Port Philip's Car Share Policy Review. City of Port Philip.

6.2.7 Parking Permits

Parking permits allow permit holders to park in designated parking spaces and areas. They are typically specific to the user group such as residents, traders and construction works. The permit can be combined with time limits, pricing, or special purpose zones. They are most commonly implemented in high-demand areas where the needs of particular user groups need to be prioritised.

Residential parking permits are available in the City of Monash for residents who live in streets with parking restrictions. Various permits are available subject to the eligibility criteria. A single dwelling on a site may be eligible for three (3) permits for free and the fourth permit costs $150.

6.2.8 Enforcement

The enforcement of parking restrictions should aim to encourage compliance with the applicable rules and restrictions to support the intended goals of the parking provision, i.e. turnover and access. The enforcement of parking typically takes the form of infringements or fines, which are issued to vehicles found to be parked illegally.

Enforcement can pose a challenge noting significant resources required including labour and equipment to undertake.

Currently, the City of Monash uses dash camera vehicles and parking sensors, in addition to Officer inspections. Technology to aid parking enforcement is provided below:

6.2.8.1 Parking Sensors

Sensors assist with enforcement of parking restrictions and can collect data on parking turnover and duration. This can help future parking policies and the management of parking.

One sensor technology used is the Parking Overstay Detection System (PODS) which is installed underneath a parking space to detect the length of stay of a vehicle. If a vehicle has overstayed the relevant restriction, an alert is sent to a nearby parking officer.

Emerging technology in this space include point clouds or lidar technology to detect vehicles in imagery to determine parking occupancy.

6.2.8.2 Handheld Devices

These allow enforcement officers to monitor vehicle compliance with parking regulations efficiently. They can issue and print infringement notices with precise location details, take photos of violations, record interactions with drivers, and check vehicle histories for prior offenses, payment status and digital permit status. This is currently in use in the City of Monash.

6.2.8.3 Mobile Camera Systems

Using License Plate Recognition (LPR), these vehicle-mounted cameras record registration numbers of parked vehicles to track parking turnover and identify violations. Occupancy data collected can be shared via web interfaces and smartphone apps for easy access by the public to indicate parking trends or occupancy.

6.2.8.4 Fixed Camera Systems

CCTV cameras can be used for security and to monitor restricted areas, such as bus and loading zones. With LPR capabilities, they can also track occupancy and stay duration, identifying any vehicles exceeding time limits.

These systems provide several benefits to Monash, including:

- Enhanced monitoring to identify areas where non-compliance most impacts turnover and availability, enabling more effective enforcement.
- Increased efficiency in patrols, freeing up officers to cover more areas and respond to resident requests.

- Reduction in disputes over parking violations due to accurate, reliable data.
- Improved safety for officers by reducing the need for traditional vehicle mark-up during patrols.

It is noted this may pose legal issues. Understanding that cameras for parking must be separate from surveillance CCTV.

6.2.9 Removal/ Easing of Parking Controls

Where parking occupancy is low in areas with parking restrictions in place, consideration should be given to removing or easing parking restrictions. This is particularly relevant when the peak parking occupancy consistently remains below 50%, or when user-based restrictions are no longer required.

Furthermore, consideration should be made to providing consistency of parking restrictions to a specific area to establish credible and effective management of parking. This is especially relevant for short time-based restrictions (30-minutes or less) where compliance is low, undermining their effectiveness.

6.3 Emerging Technology

The future of parking is smart, sustainable, and interconnected as a result of emerging technologies that are increasingly becoming integral to the transportation network. By leveraging this technology, Monash can effectively manage parking spaces, reduce congestion, and make better use of existing infrastructure. Listed below are some of the parking industry trends that could be implemented within the City of Monash.

6.3.1 Innovative Data Collection Methods, GIS Data

Data collection allows for evidence-based parking policy and can help avoid car parking oversupply leading to inefficient land use. Innovative data collection methods include utilising computer vision technology to recognise (deidentified) cars in video/photos to automatically count car parking occupancy.

6.3.2 Artificial Intelligence (AI) and Machine Learning

AI and machine learning algorithms are being used to forecast parking demand and enhance pricing strategies. By analysing historical data, weather patterns, and special events, these systems can adjust parking prices in real-time to better manage demand. This dynamic pricing model not only aims to maximise revenue but also ensures fair access to parking resources, allowing for more efficient use of available spaces.

6.3.3 Parking Payment Technology

Recent advances in payment technology have allowed for digital payment options / pay by phone allowing for parking users to utilise smartphones and cashless systems aiming to improve the efficiencies of parking payment and management of revenue generated from paid parking. Advances in parking payment technologies include:

- Parking apps (e.g. PayStay, EasyPark).
- Meter Technology including:
  - Pay-by-Phone
  - Virtual Meters
  - Cashless payment
- Automated payments via camera technology.

6.3.4 Data Analytics

Data analytics in car parking can provide predictive information to the car parking occupancy and provide general trends as to when car parking spaces are expected to be available, this can allow drivers to plan their trips.

6.3.5 Digital Permit

Digital permits allow for users to apply and manage their parking permits online. This also reduces any risk of a permit being lost or stolen.

6.3.6 Digital e-paper Signage

E-paper signage (similar to technology used for e-readers) can provide clear messaging on the specific parking restrictions. This can include notifying the driver of towing, special events, or the live restriction in place which can simplify the signage.

The e-paper technology uses minimal power as e-paper only requires power when updating, which enables the sign to be powered by solar energy.

Figure 6.9: E-Paper Signage Compared to Standard Signage (Source: Mercury Innovation)

6.3.7 Dynamic Signage and Realtime Availability via Sensors

Dynamic signage can display live availability of car parking spaces often including wayfinding signage to direct drivers to the closest available parking lot. This is typically used in large car parks located at the entrance.

Dynamic signage in conjunction with sensors and IoT (Internet of things) can display real-time parking availability online allowing for users to plan their trips where they may alter their end destination or time of trip. This can assist in limiting cruising for a parking space.

Figure 6.10: Dynamic Signage at Monash University

7 RECOMMENDATIONS

The following parking management tools are recommended for Council managed on-street and off-street car parks. The management tools can be applied when parking occupancy nears or exceeds the supply or if there is an oversupply of parking. To effectively manage parking within residential areas, a structured framework supported by technology can greatly improve organisation, access, and overall user experience.

7.1 Activity Locations/Commercial Areas

7.1.1 Dynamic Signage

Dynamic signage guides drivers efficiently to available parking spaces which allows reducing parking search time, increases turnover, and can dynamically update to reflect time-based pricing or restrictions.

Dynamic signage can be installed to display real-time information on parking availability across car parking areas. These aid in directing drivers to under-utilised areas, ensuring optimal use of all parking spaces. They can also highlight special areas, like premium spaces or spaces designated for short-term use, promoting fair space turnover in busy areas.

7.1.2 Parking review

Review parking areas that are consistently above 85% occupancy having regard to the car parking space hierarchy, parking control intervention and area-based parking approach parking management tools. This may include allocating space for targeted user groups, and reserving prime spaces for short-term retail/business customers to ensure they have easy access, while designating further areas for employees or long-term visitors.

Time limits should be reviewed to include shorter time limits, up to two (2) hours, in high demand parking spaces to encourage turnover.

At locations where appropriate time-based restrictions are installed and parking occupancy still remains consistently above 85%, consider fee-based restriction parking. Areas of parking oversupply, where parking occupancy is below 50%, shall also be reviewed to determine if less restrictive parking controls may be warranted.

7.1.3 Implement Paid Parking

Paid parking can be used to manage demand, discourage long-term parking in premium spaces, and generate revenue.

Paid parking zones can be introduced in high demand areas with free or reduced-cost parking on the periphery. Revenue from paid parking can typically be used toward administration, local infrastructure improvements, place making, and improving walking, cycling and sustainable transport to the area.

7.1.4 Car Sharing

Promote shared mobility options to reduce parking demand and support sustainable transport. Reduces the overall demand for parking spaces, promotes eco-friendly travel options, and aligns with sustainable transportation goals.

Dedicate parking spaces for car-sharing services in central locations to provide easy access and promote use. Private business and developers could partner with car-sharing companies to offer discounted or special access for car-share vehicles, encouraging residents and visitors to opt for shared vehicles instead of private cars. Promotional campaigns can be implemented to increase awareness and incentivise the use of car-sharing services, making them a viable alternative to private car ownership.

To facilitate parking management in activity locations and commercial areas, a flowchart-based decision-making tool has been developed, as shown in Figure 7.1. This tool provides a structured approach to evaluating parking occupancy and determining the appropriate interventions for different areas.

The flowchart considers whether parking restrictions are time-based or unrestricted. It guides in assessing peak occupancy rates and applying suitable solutions, such as reviewing parking controls, introducing paid parking, or monitoring areas with underutilised spaces.

The framework ensures that parking management strategies are targeted and responsive to actual demand, leading to optimised parking availability and improved user satisfaction. This systematic approach also helps prioritise parking for specific user groups, reduce congestion, and enhance accessibility in high-demand locations.

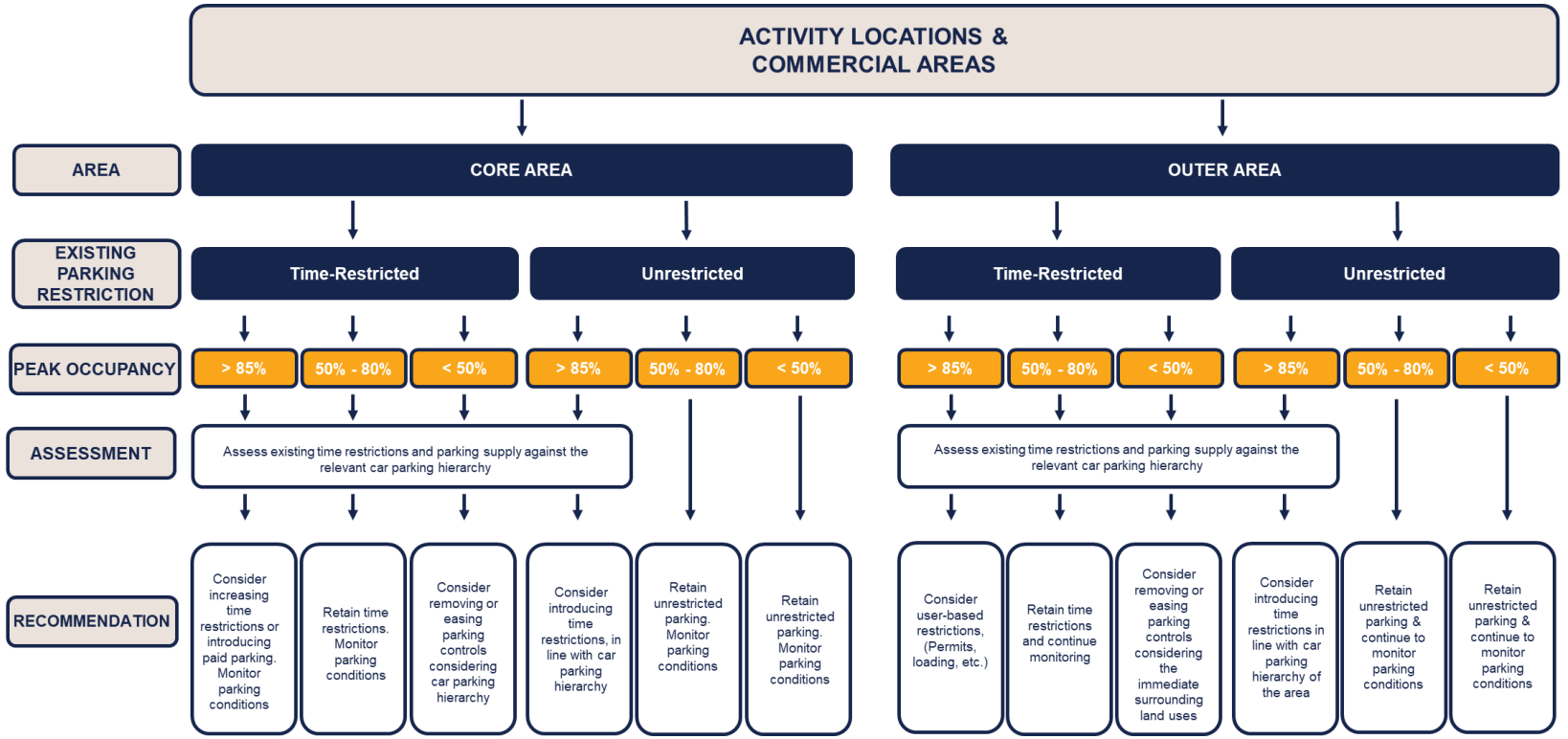


Figure 7.1: Activity Locations & Commercial Areas - Parking Management Tool

7.2 Hospital/Community Areas

A parking management tool that may be utilised to review and manage parking within hospital/ community areas is presented within Figure 7.2.

7.2.1 Parking Review

Parking reviews would be limited to Council on-street and off-street public car parks only. Review parking areas that are consistently above 85% occupancy having regard to the car parking space hierarchy, parking control intervention and area-based parking approach parking management tools.

Time limits should be reviewed to include shorter time limits, up to two (2) hours, in high demand parking spaces to encourage turnover.

At locations where appropriate time-based restrictions are installed and parking occupancy still remains consistently above 85%, consider fee-based restriction parking. Areas of parking oversupply, where parking occupancy is below 50%, shall also be reviewed to determine if less restrictive parking controls may be warranted.

7.2.2 Car Sharing

To reduce parking demand and promote sustainable transportation, encourage the use of shared mobility options like car-sharing. Designate convenient parking spaces near main entrances or visitor areas specifically for car-sharing services, making them easily accessible for staff and visitors. Hospitals and health providers could partner with car-sharing companies to offer discounted rates or special access for hospital and community centre users, incentivizing the choice of shared vehicles over private cars. Launch targeted information campaigns to increase awareness about car-sharing as a practical option for regular visits and appointments, helping to alleviate parking congestion and foster a sustainable approach to transportation.

To facilitate parking management in hospital and community areas, a flowchart-based decision-making tool has been developed, as shown in Figure 7.2. This tool provides a structured approach to evaluating parking occupancy and determining the appropriate interventions for different areas.

The flowchart considers whether parking restrictions are time-based or unrestricted. It guides in assessing peak occupancy rates and applying suitable solutions, such as reviewing parking controls, introducing paid parking, or monitoring areas with underutilised spaces.

The framework ensures that parking management strategies are targeted and responsive to actual demand, leading to optimised parking availability and improved user satisfaction. This systematic approach also helps prioritise parking for specific user groups, reduce congestion, and enhance accessibility in high-demand locations.

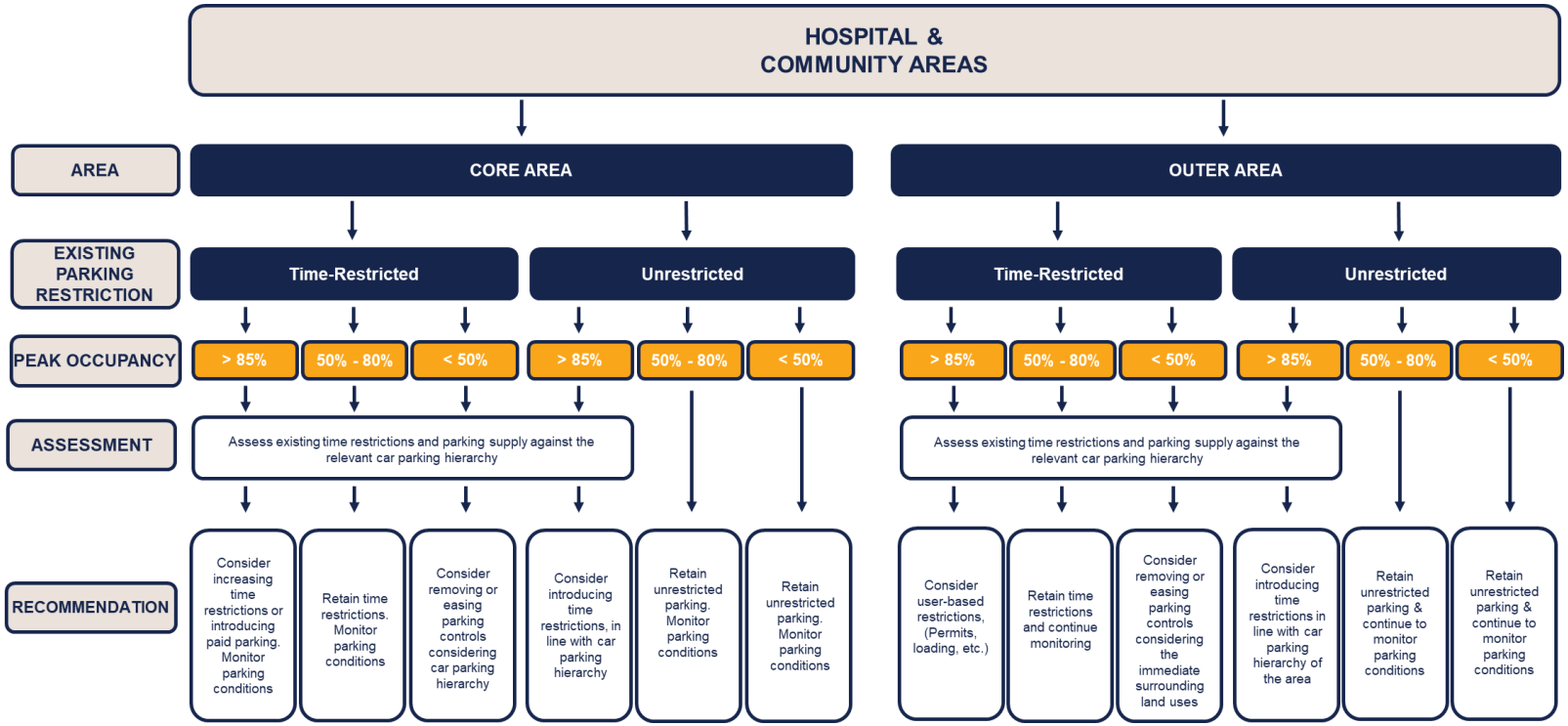


Figure 7.2: Hospital & Community Areas - Parking Management Tool

7.3 Higher Education Areas

A parking management tool that may be utilised to review and manage parking within higher education areas is presented within Figure 7.3.

7.3.1 Car Sharing

To reduce parking demands and promote sustainable transportation, educational centres should offer and incentivise shared mobility options like car-sharing. Dedicating convenient parking near main entrances and popular areas will make these services more accessible, encouraging their use by students, faculty, and staff. Partnering with car-sharing companies to provide discounted rates or special privileges can make shared vehicles an affordable and convenient alternative to personal cars. Campus-wide promotional campaigns and orientation sessions should be implemented to raise awareness of car-sharing as a viable option.

7.3.2 Parking Review

Parking reviews would be limited to Council on-street and off-street public car parks only. Review parking areas that are consistently above 85% occupancy having regard to the car parking space hierarchy, parking control intervention and area based parking approach parking management tools.

Time limits should be reviewed to include shorter time limits, up to two (2) hours, in high demand parking spaces to encourage turnover.

At locations where appropriate time-based restrictions are installed and parking occupancy still remains consistently above 85%, consider fee-based restriction parking. Areas of parking oversupply, where parking occupancy is below 50%, shall also be reviewed to determine if less restrictive parking controls may be warranted.

To facilitate parking management in higher education areas, a flowchart-based decision-making tool has been developed, as shown in Figure 7.3. This tool provides a structured approach to evaluating parking occupancy and determining the appropriate interventions for different areas.

The flowchart considers whether parking restrictions are time-based or unrestricted. It guides in assessing peak occupancy rates and applying suitable solutions, such as reviewing parking controls, introducing paid parking, or monitoring areas with underutilised spaces.

The framework ensures that parking management strategies are targeted and responsive to actual demand, leading to optimised parking availability and improved user satisfaction. This systematic approach also helps prioritise parking for specific user groups, reduce congestion, and enhance accessibility in high-demand locations.

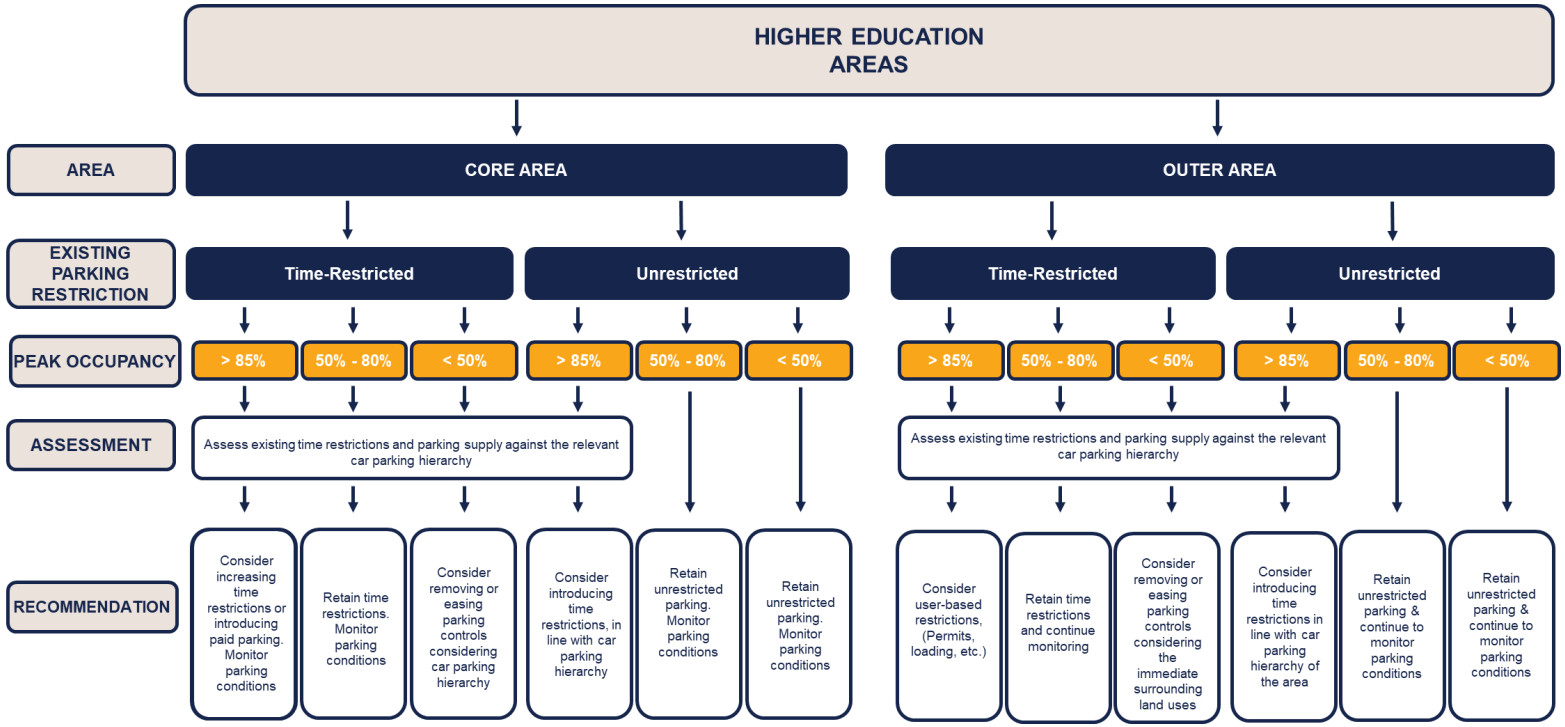


Figure 7.3: Higher Education Areas - Parking Management Tool

7.4 Residential Areas

A parking management tool that may be utilised to review and manage parking within residential areas is presented within Figure 7.4

7.4.1 Parking Review

Review parking in residential areas as necessary in response to community requests and development. Consider parking change in areas of high demand that are consistently above 85% occupancy having regard to the car parking space hierarchy, parking control intervention and area-based parking approach parking management tools.

Time-based restrictions may be introduced to remove excessive levels of long-term parking (including local employees, business and commuters). Discretion may also be applied to introduce time-based restrictions where one user type, land use, business or development over-dominates public parking space.

At locations where appropriate time-based restrictions are installed and parking occupancy still remains consistently above 85%, consider more restrictive parking measures and resident permit parking only.

Areas of parking oversupply where parking occupancy is below 50% shall also be reviewed to determine if less restrictive parking controls may be warranted.

To assist with managing parking within residential areas, a flowchart-based decision-making tool has been developed, as shown in Figure 7.4. This tool provides a structured approach for assessing parking conditions and implementing appropriate control measures to address community needs and changing demands.

The flowchart outlines a systematic process for reviewing parking demand and identifying areas where changes may be required. By evaluating peak occupancy rates, the framework helps determine the need for interventions, such as introducing time-based restrictions, resident permit schemes, or adjusting controls in areas of oversupply.

For residential areas with consistently high occupancy levels (above 85%), the tool recommends reviewing parking against the car parking hierarchy and considering time-based restrictions to mitigate excessive long-term parking by non-residents. Where occupancy levels remain above 85%, stricter measures, such as resident-only parking, may be introduced to prioritise local access. Conversely, in areas with occupancy below 50%, less restrictive parking controls can be considered to optimise usage and access.

By following this structured framework, Monash can balance community needs, ensure equitable access, and enhance the overall effectiveness of parking management in residential neighbourhoods.

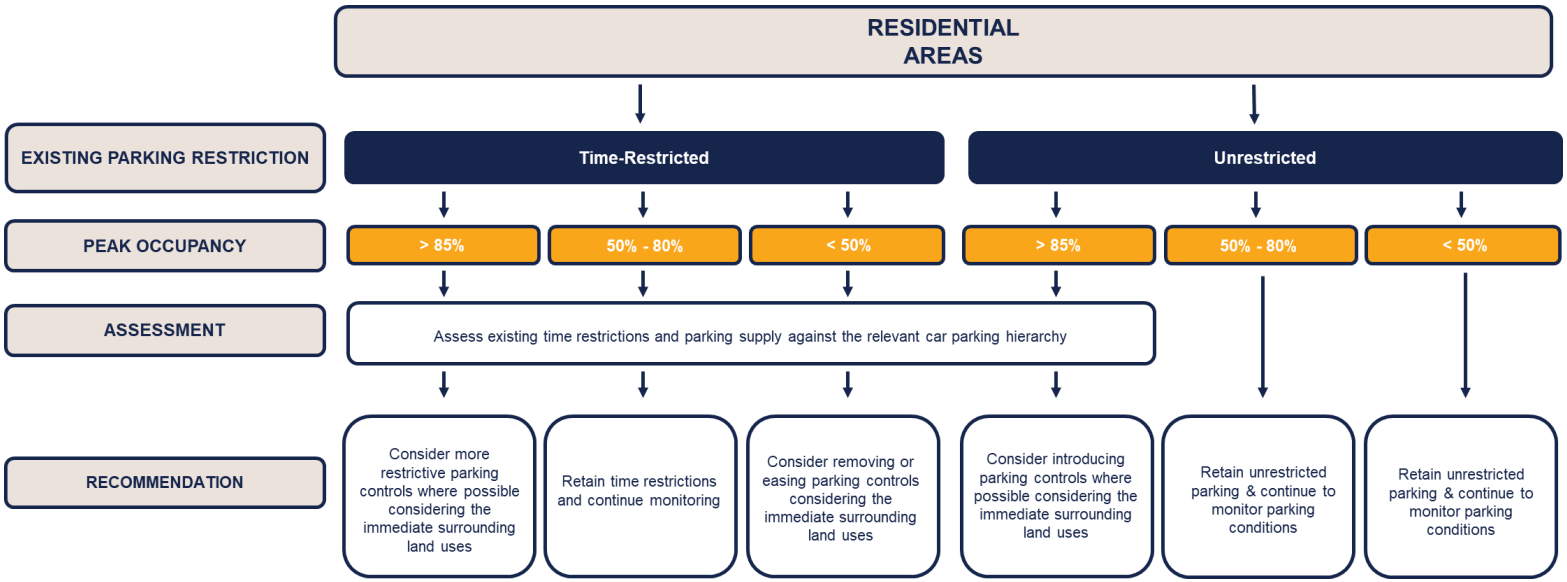


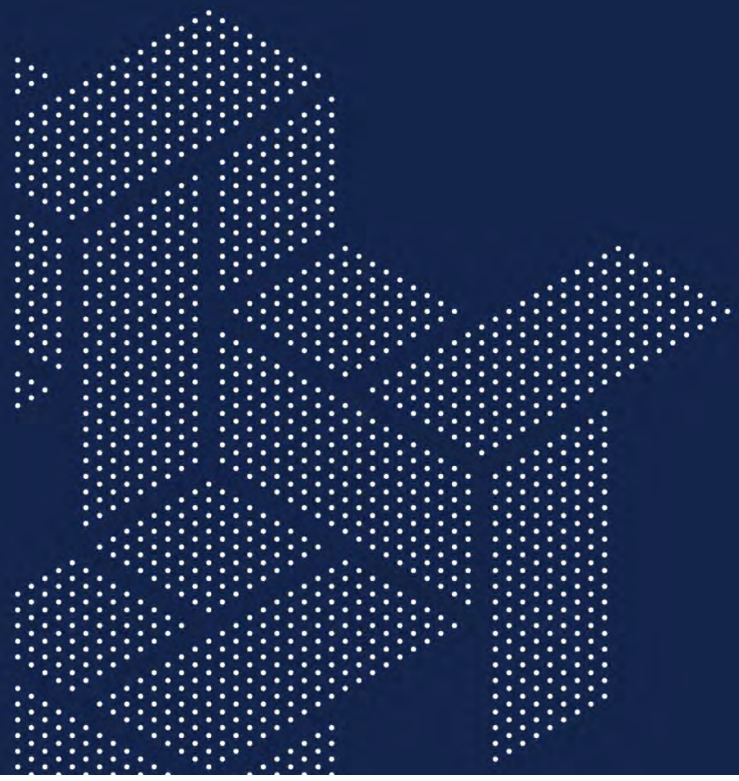
Figure 7.4: Residential Areas - Parking Management Tools

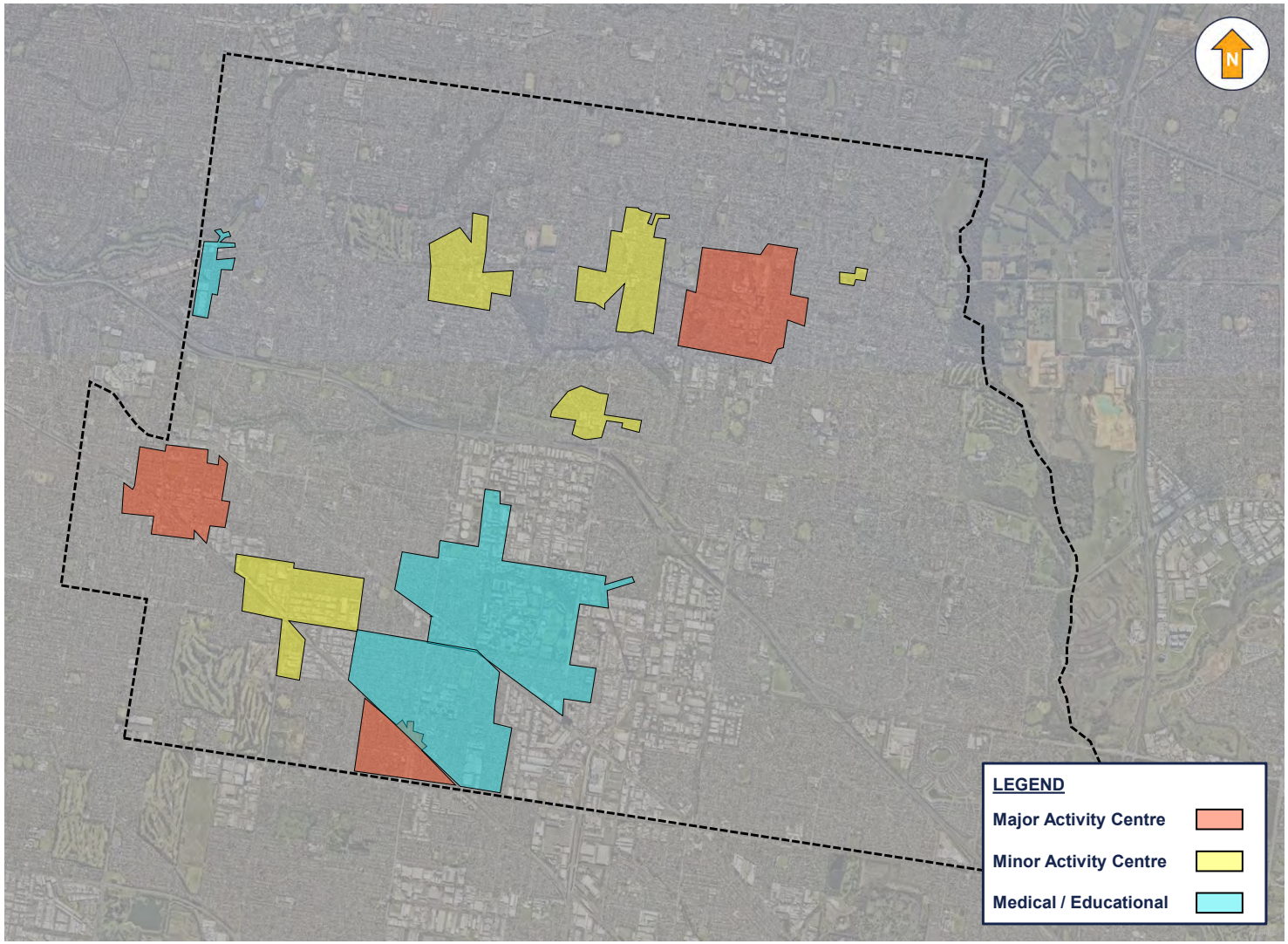
8 MONITORING & EVALUATION

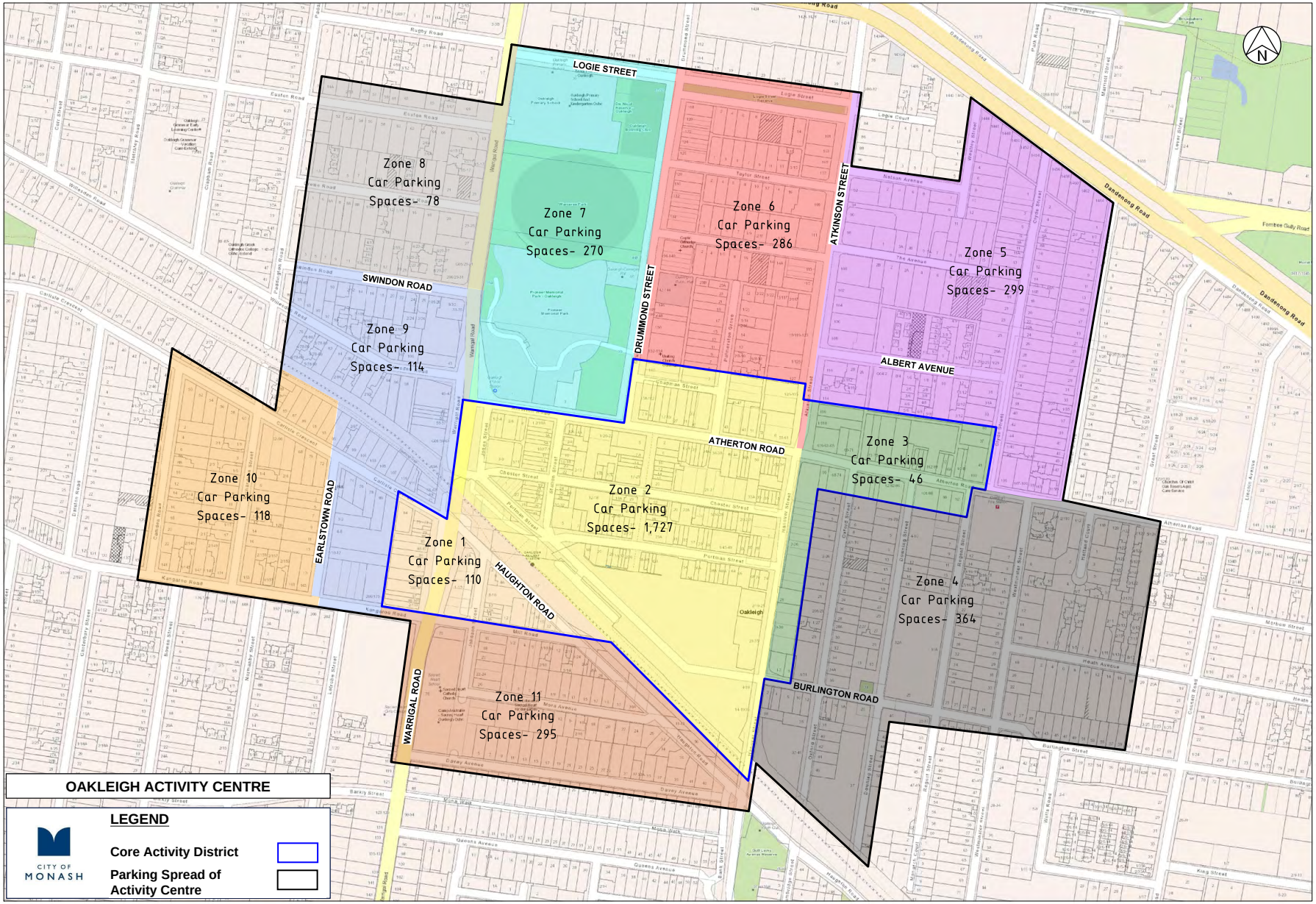
There are several variables that influence car parking, including demographics, travel characteristics and land use development. These items will continue to change and evolve over coming years. As such the effectiveness and appropriateness of this framework must also continue to be reviewed and be updated. It is proposed that Council undertake regular parking surveys to monitor parking demand and inform parking management processes and planning decisions.

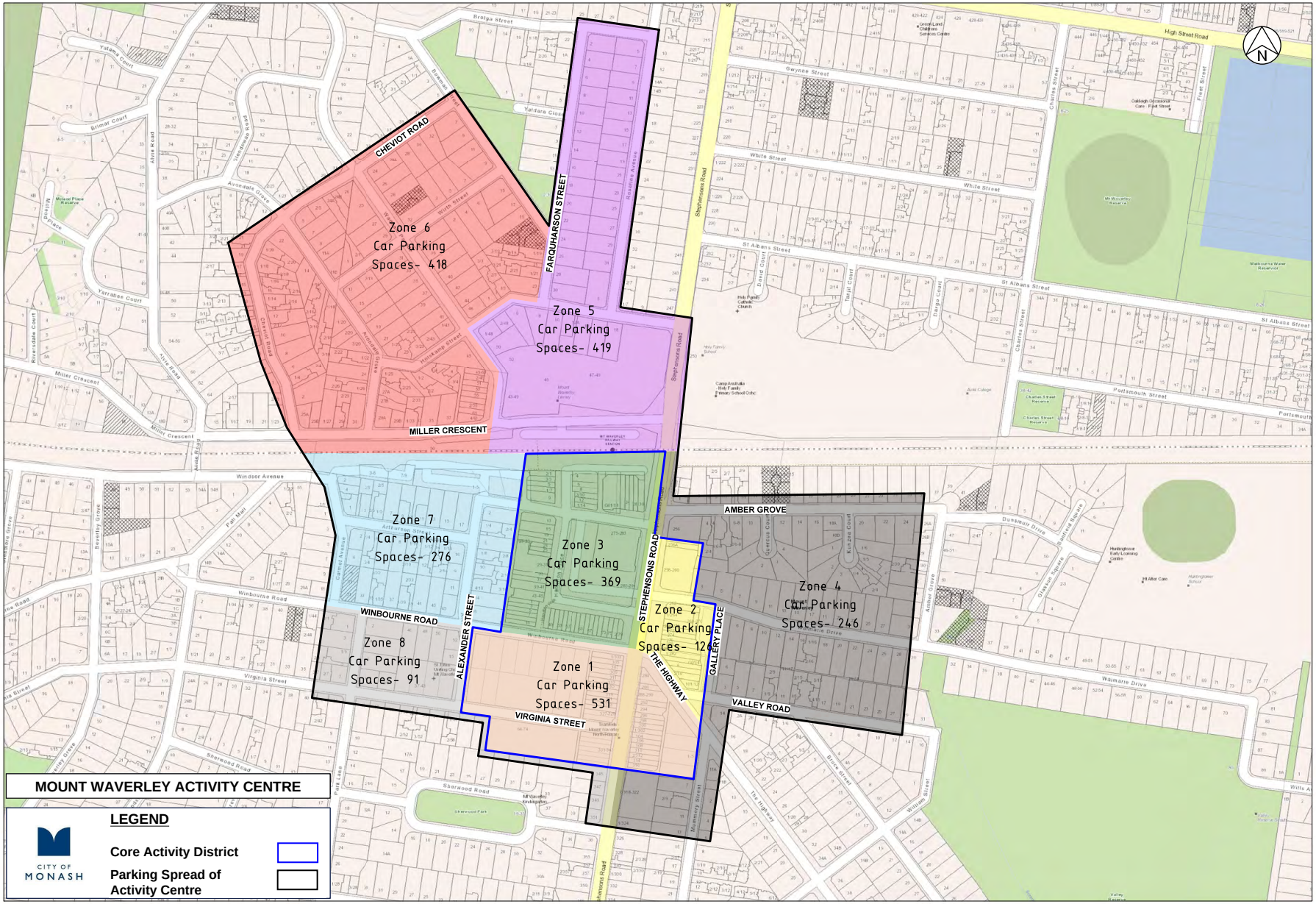
A formal review of this parking framework should be completed five years after its implementation. The review will consider the need for further parking management interventions to ensure sustainable parking practices are maintained across the municipality.

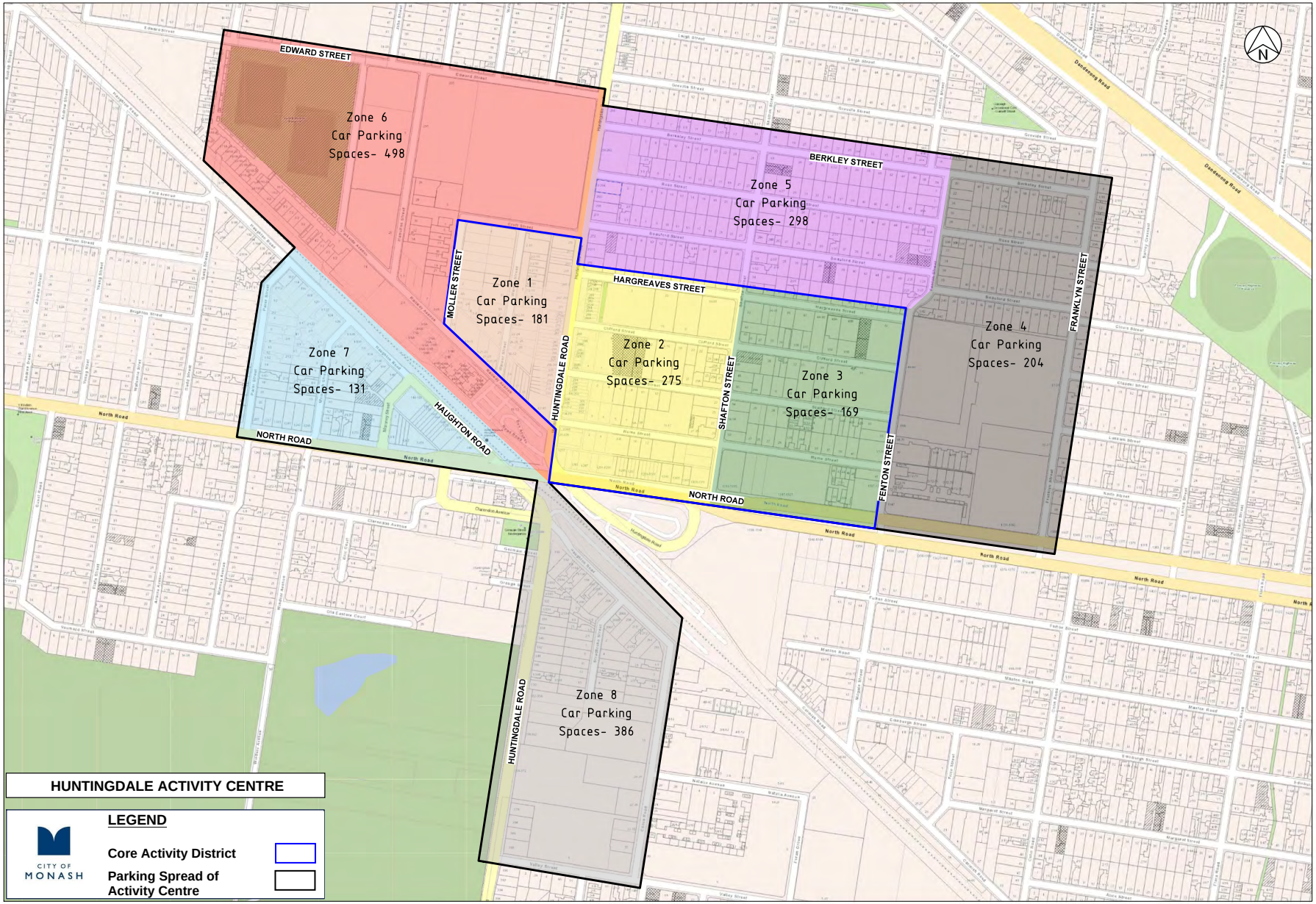
APPENDIX A -
ACTIVITY LOCATION MAPS

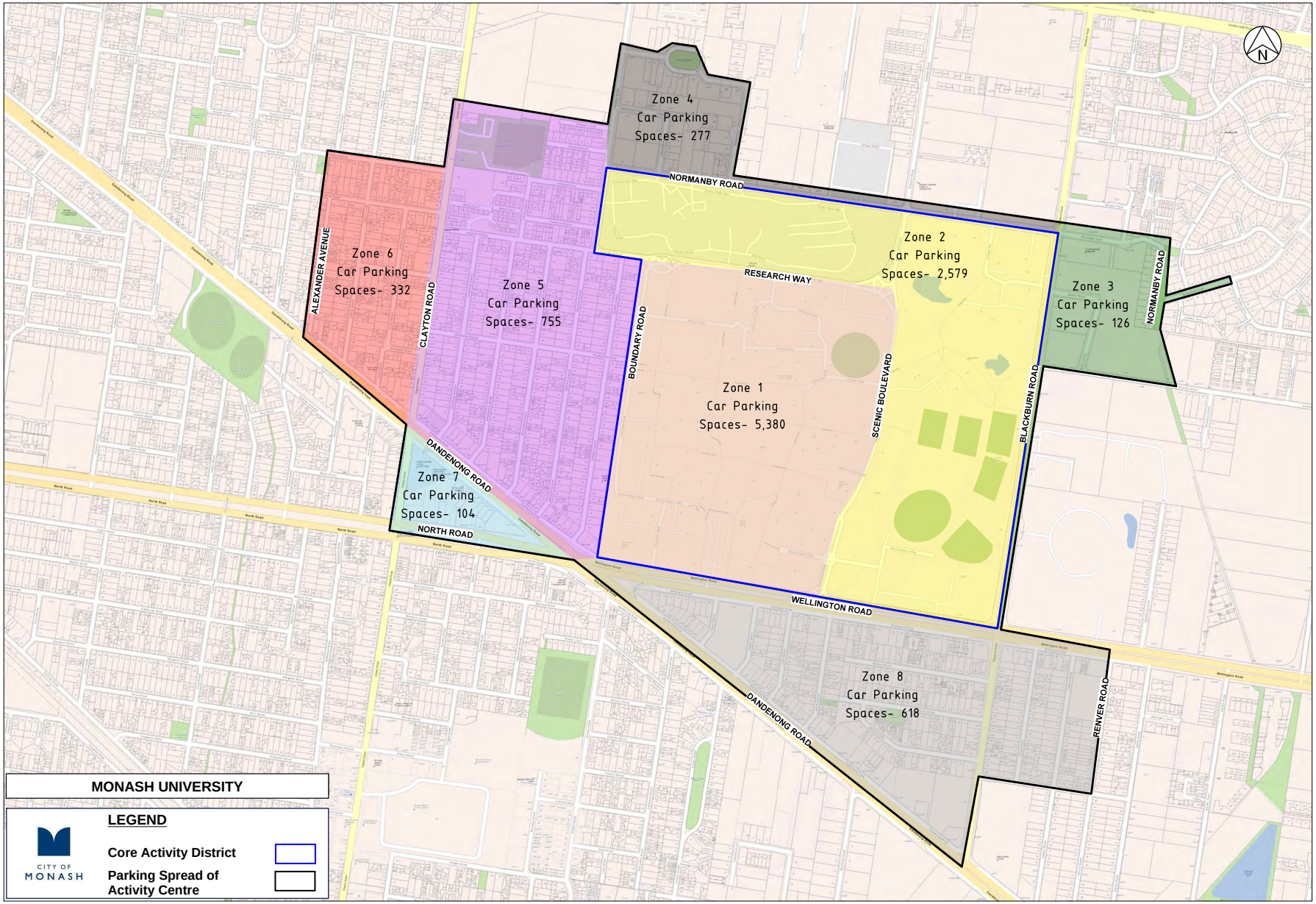


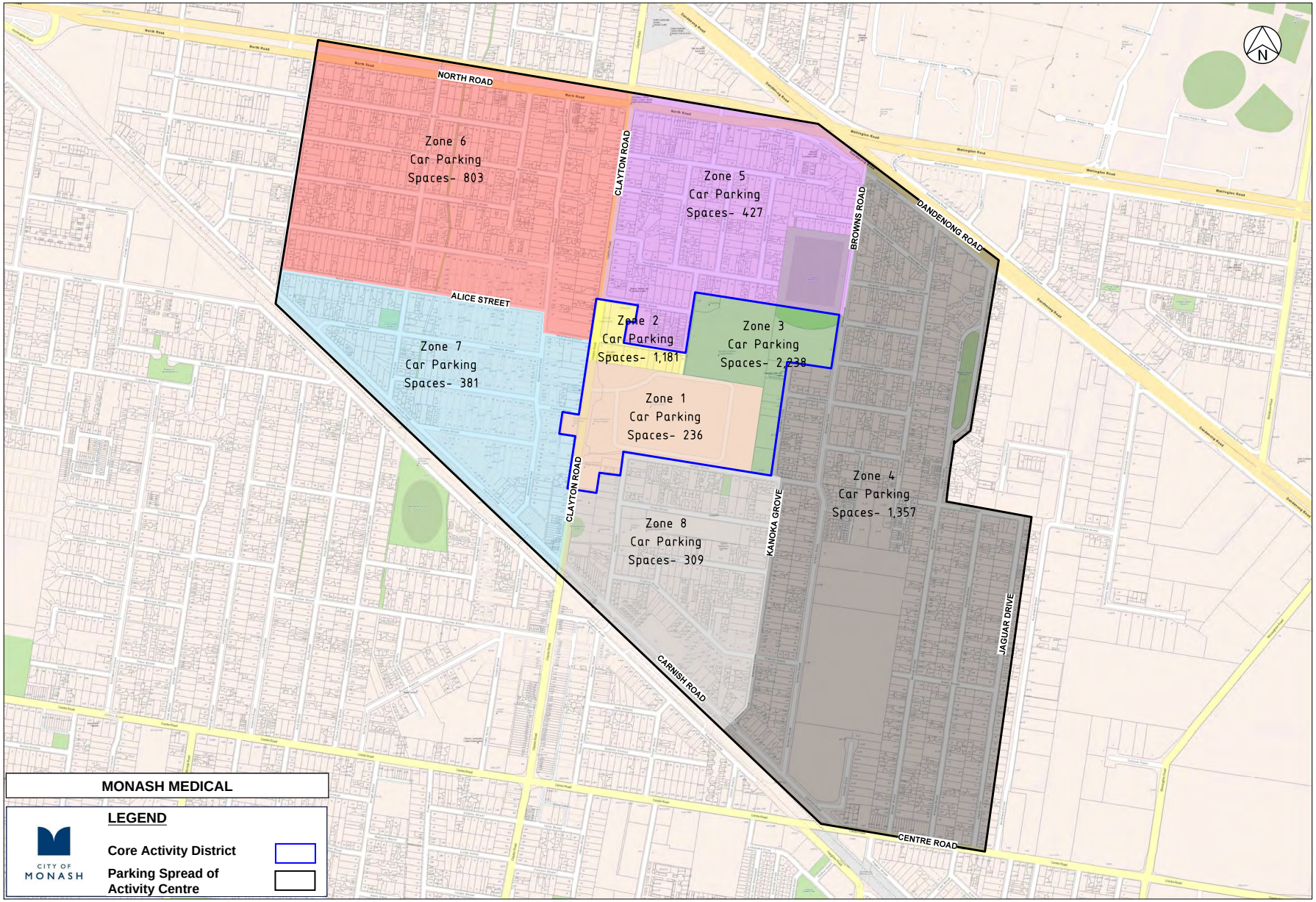

N
LEGEND
Major Activity Centre
Minor Activity Centre
Medical / Educational

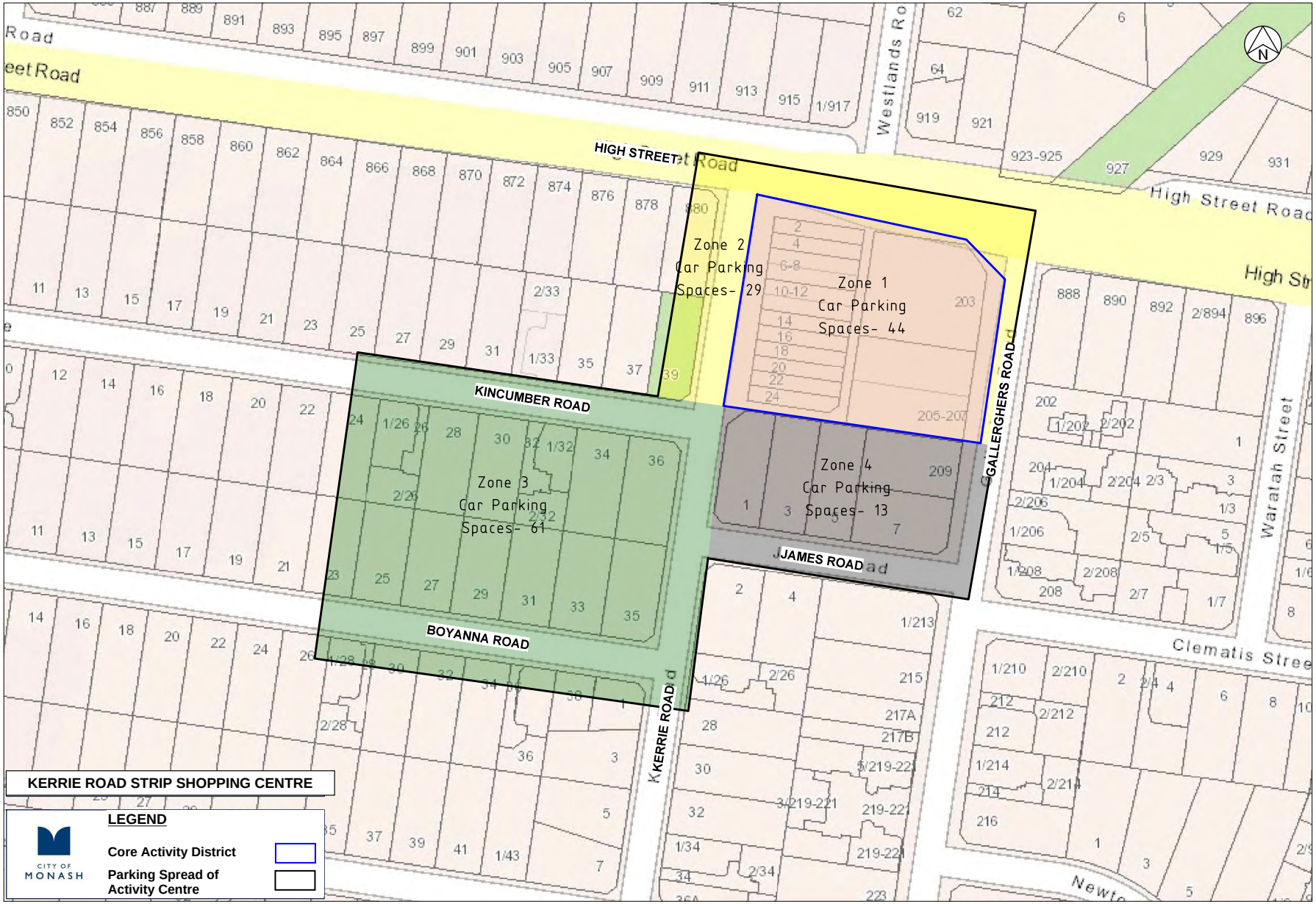

LOGIE STREET
SWINDON ROAD
DRUMMOND STREET
ATKINSON STREET
ALBERT AVENUE
ATHERTON ROAD
EARLSTOWN ROAD
HAUGHTON ROAD
WARRIGAL ROAD
BURLINGTON ROAD
Dandenong Road
Zone 8
Car Parking
Spaces- 78
Zone 7
Car Parking
Spaces- 270
Zone 6
Car Parking
Spaces- 286
Zone 5
Car Parking
Spaces- 299
Zone 9
Car Parking
Spaces- 114
Zone 10
Car Parking
Spaces- 118
Zone 2
Car Parking
Spaces- 1,727
Zone 3
Car Parking
Spaces- 46
Zone 1
Car Parking
Spaces- 110
Zone 4
Car Parking
Spaces- 364
Zone 11
Car Parking
Spaces- 295
N
OAKLEIGH ACTIVITY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


Zone 6
Car Parking
Spaces- 418
Zone 5
Car Parking
Spaces- 419
Zone 7
Car Parking
Spaces- 276
Zone 3
Car Parking
Spaces- 369
Zone 8
Car Parking
Spaces- 91
Zone 1
Car Parking
Spaces- 531
Zone 2
Car Parking
Spaces- 12
Zone 4
Car Parking
Spaces- 246
CHEVIOT ROAD
FARQUHARSON STREET
MILLER CRESCENT
AMBER GROVE
WINBOURNE ROAD
ALEXANDER STREET
STEPHENSONS ROAD
GALLERY PLACE
THE HIGHWAY
VIRGINIA STREET
VALLEY ROAD
High Street Road
Stephensons Road
St Albans Street
Portsmouth Street
Windsor Avenue
Winbourne Road
Virginia Street
Sherwood Road
Dunsmuir Drive
Waimarie Drive
MOUNT WAVERLEY ACTIVITY CENTRE
LEGEND
Core Activity District
Parking Spread of Activity Centre
CITY OF MONASH
N


EDWARD STREET
Zone 6
Car Parking
Spaces- 498
BERKLEY STREET
Zone 5
Car Parking
Spaces- 298
MOLLER STREET
Zone 1
Car Parking
Spaces- 181
HARGREAVES STREET
FRANKLYN STREET
Zone 4
Car Parking
Spaces- 204
Zone 7
Car Parking
Spaces- 131
HUNTINGDALE ROAD
Zone 2
Car Parking
Spaces- 275
SHAFTON STREET
Zone 3
Car Parking
Spaces- 169
FENTON STREET
HAUGHTON ROAD
NORTH ROAD
North Road
Dandenong Road
Zone 8
Car Parking
Spaces- 386
HUNTINGDALE ACTIVITY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


Zone 4
Car Parking
Spaces- 277
NORMANBY ROAD
Zone 2
Car Parking
Spaces- 2,579
RESEARCH WAY
Zone 3
Car Parking
Spaces- 126
NORMANBY ROAD
ALEXANDER AVENUE
Zone 6
Car Parking
Spaces- 332
CLAYTON ROAD
Zone 5
Car Parking
Spaces- 755
BOUNDARY ROAD
Zone 1
Car Parking
Spaces- 5,380
SCENIC BOULEVARD
BLACKBURN ROAD
DANDENONG ROAD
Zone 7
Car Parking
Spaces- 104
NORTH ROAD
WELLINGTON ROAD
Zone 8
Car Parking
Spaces- 618
DANDENONG ROAD
RENWER ROAD
N
MONASH UNIVERSITY
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


NORTH ROAD
Zone 6
Car Parking
Spaces- 803
CLAYTON ROAD
Zone 5
Car Parking
Spaces- 427
BROWNS ROAD
DANDENONG ROAD
ALICE STREET
Zone 7
Car Parking
Spaces- 381
Zone 2
Car Parking
Spaces- 1,181
Zone 3
Car Parking
Spaces- 2,238
Zone 1
Car Parking
Spaces- 236
CLAYTON ROAD
Zone 8
Car Parking
Spaces- 309
KANOKA GROVE
Zone 4
Car Parking
Spaces- 1,357
JAGUAR DRIVE
CARNISH ROAD
CENTRE ROAD
N
MONASH MEDICAL
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre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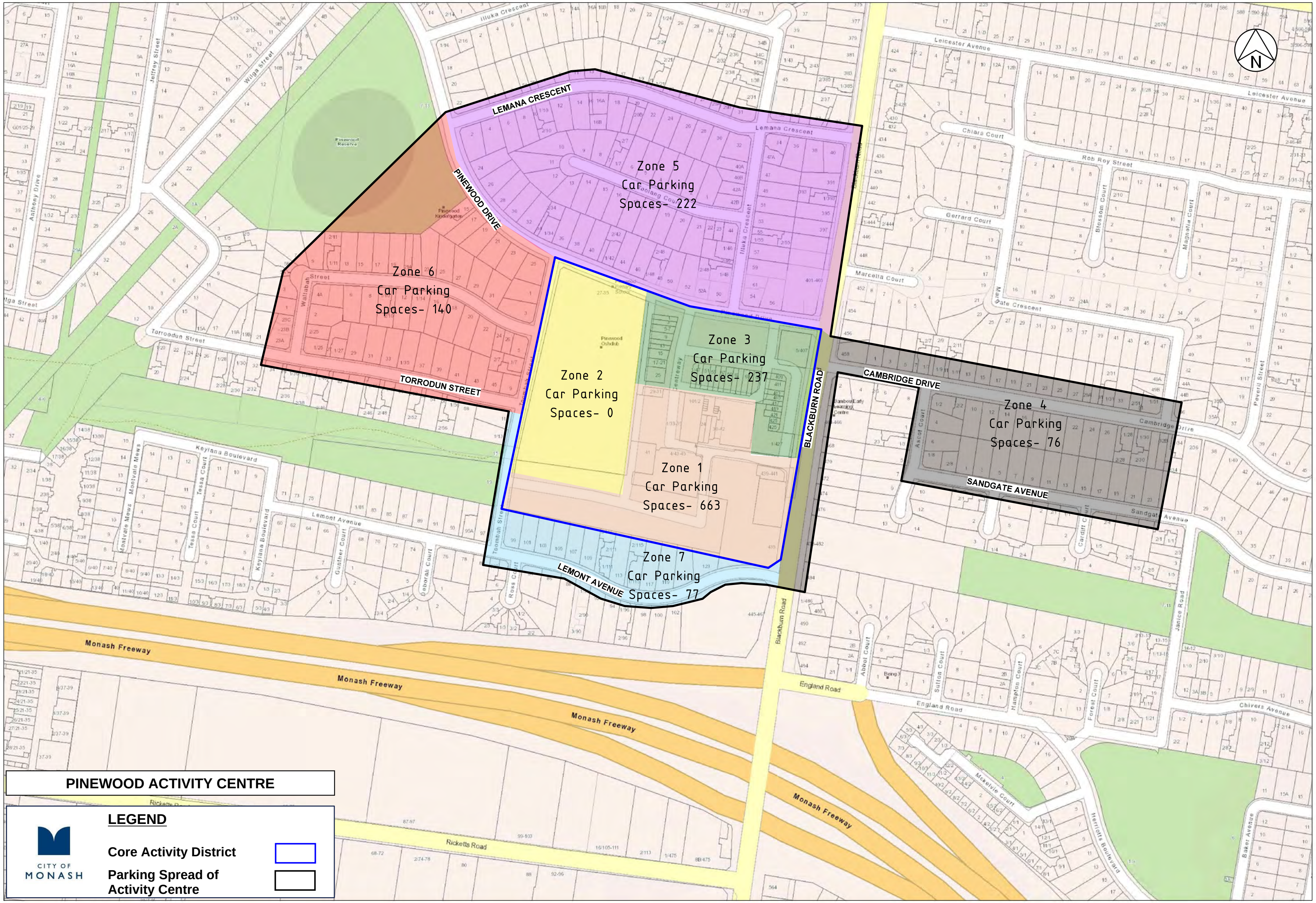
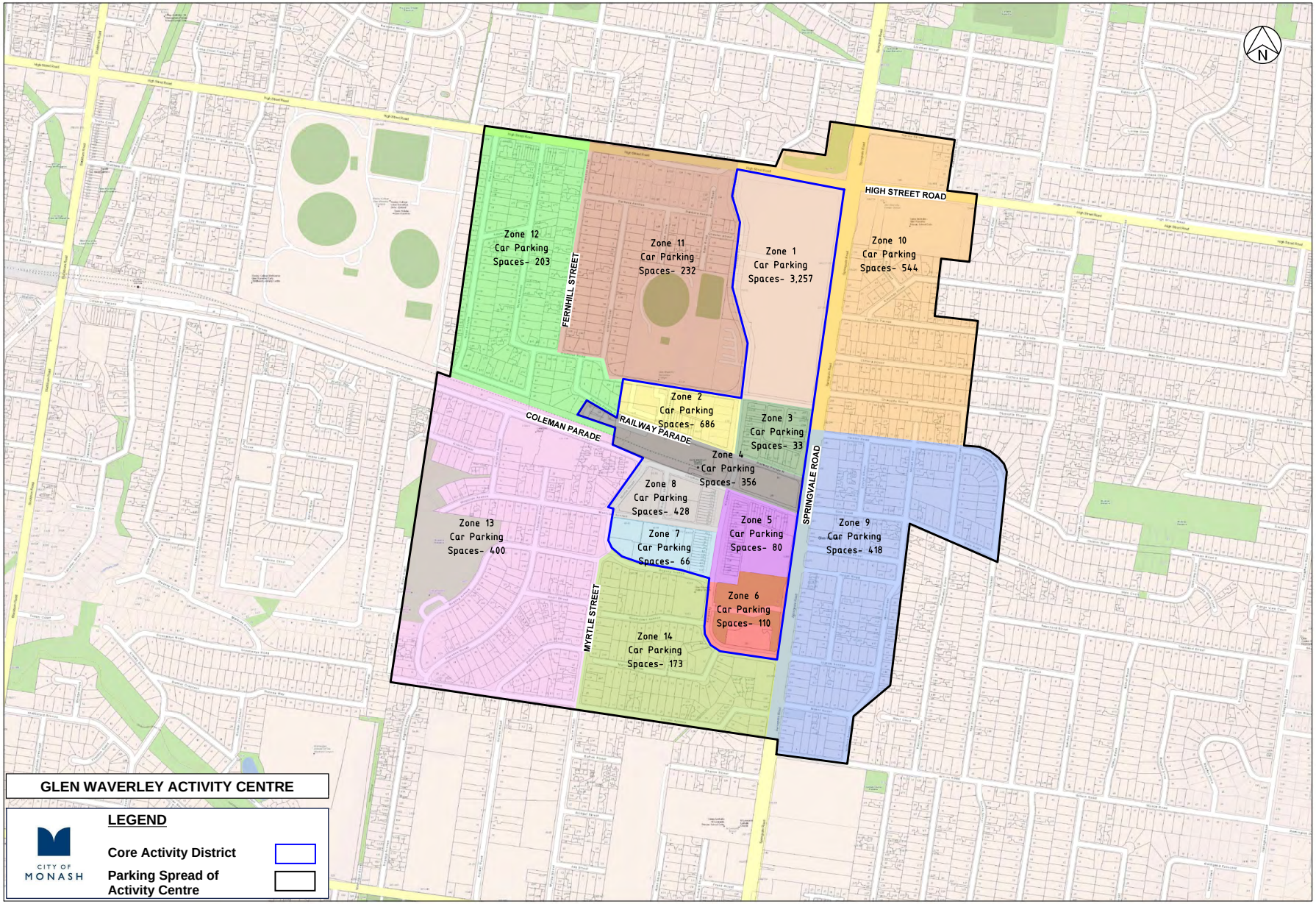
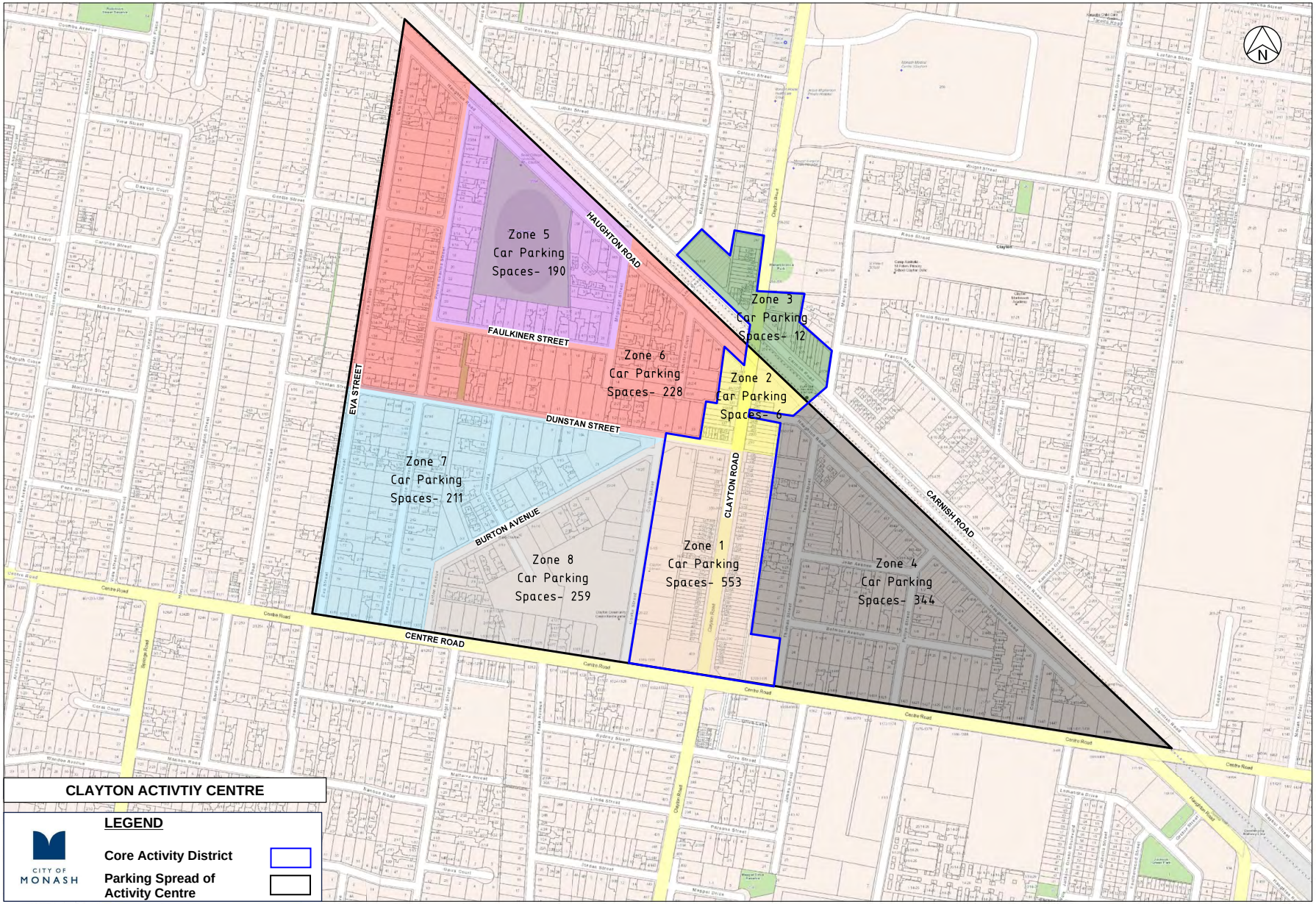
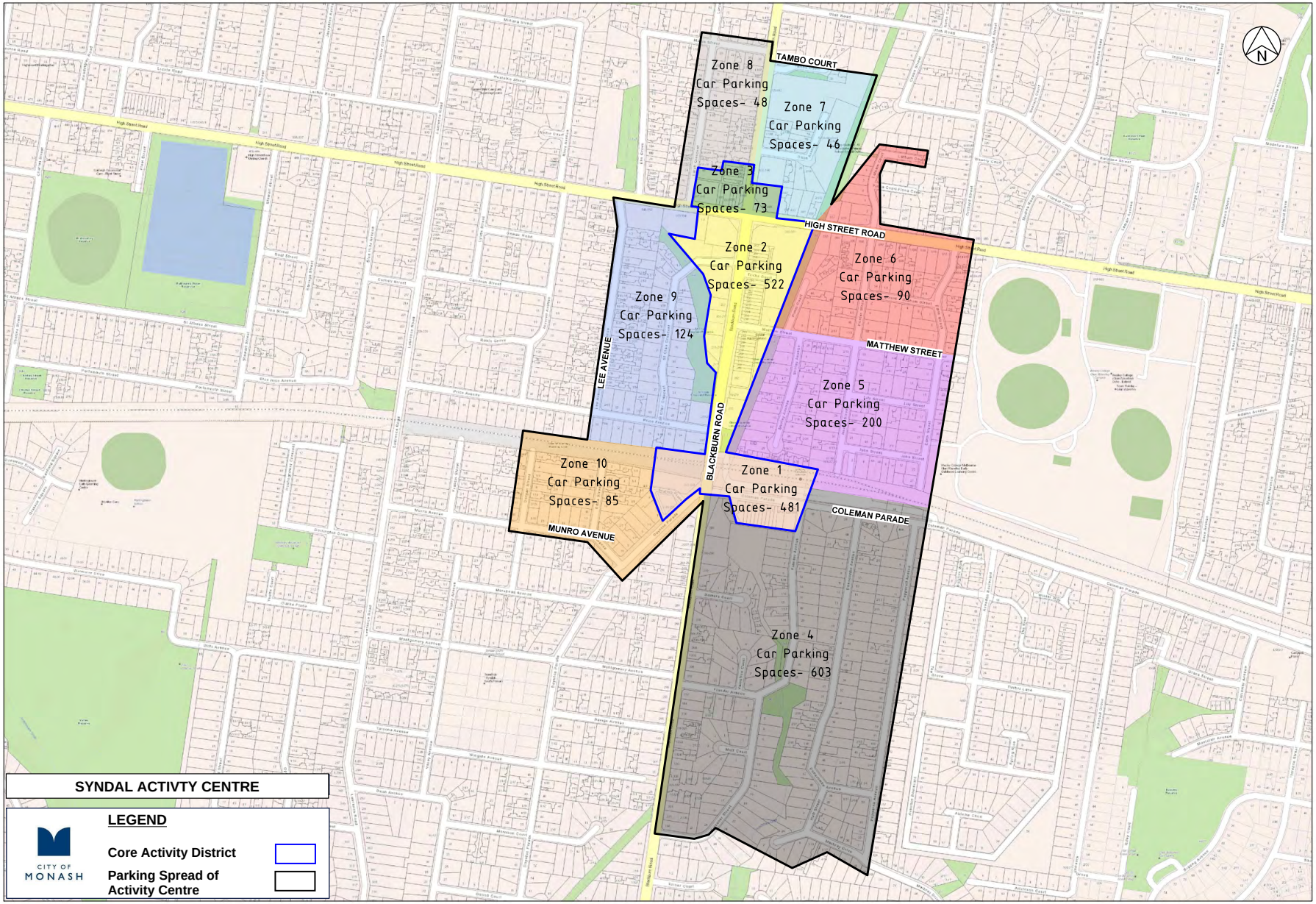
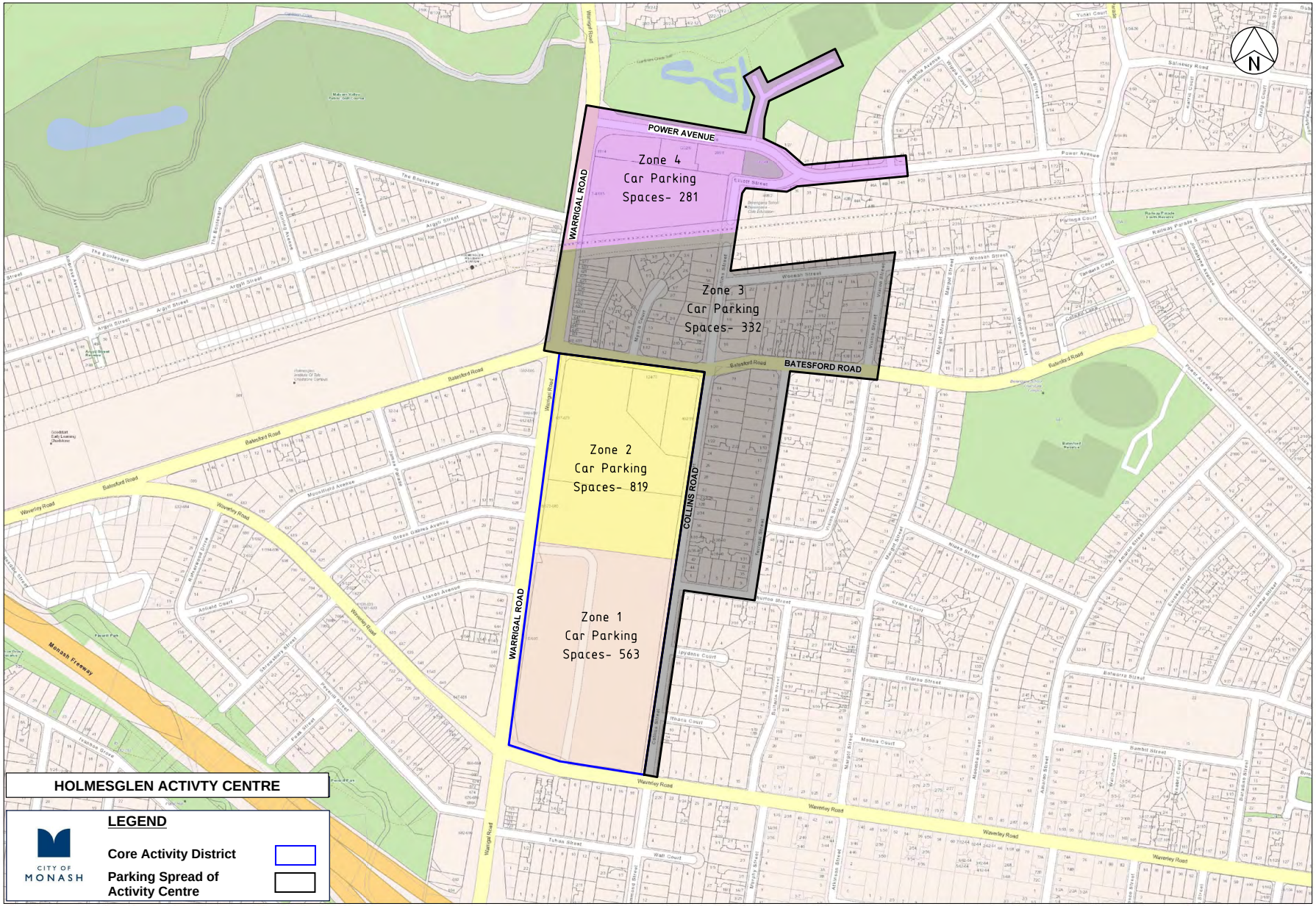
High Street Road
Zone 2
Car Parking
Spaces- 29
Zone 1
Car Parking
Spaces- 44
KINCUMBER ROAD
GALLERGHERS ROAD
Zone 3
Car Parking
Spaces- 61
Zone 4
Car Parking
Spaces- 13
JAMES ROAD
BOYANNA ROAD
KERRIE ROAD
Waratah Street
Clematis Stree
KERRIE ROAD STRIP SHOPPING CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


PINEWOOD ACTIVITY CENTRE
LEGEND
Core Activity District
Parking Spread of Activity Centre
CITY OF MONASH
Zone 1 Car Parking Spaces- 663
Zone 2 Car Parking Spaces- 0
Zone 3 Car Parking Spaces- 237
Zone 4 Car Parking Spaces- 76
Zone 5 Car Parking Spaces- 222
Zone 6 Car Parking Spaces- 140
Zone 7 Car Parking Spaces- 77
LEMANA CRESCENT
PINEWOOD DRIVE
TORRODUN STREET
BLACKBURN ROAD
CAMBRIDGE DRIVE
SANDGATE AVENUE
LEMONT AVENUE
Monash Freeway
N

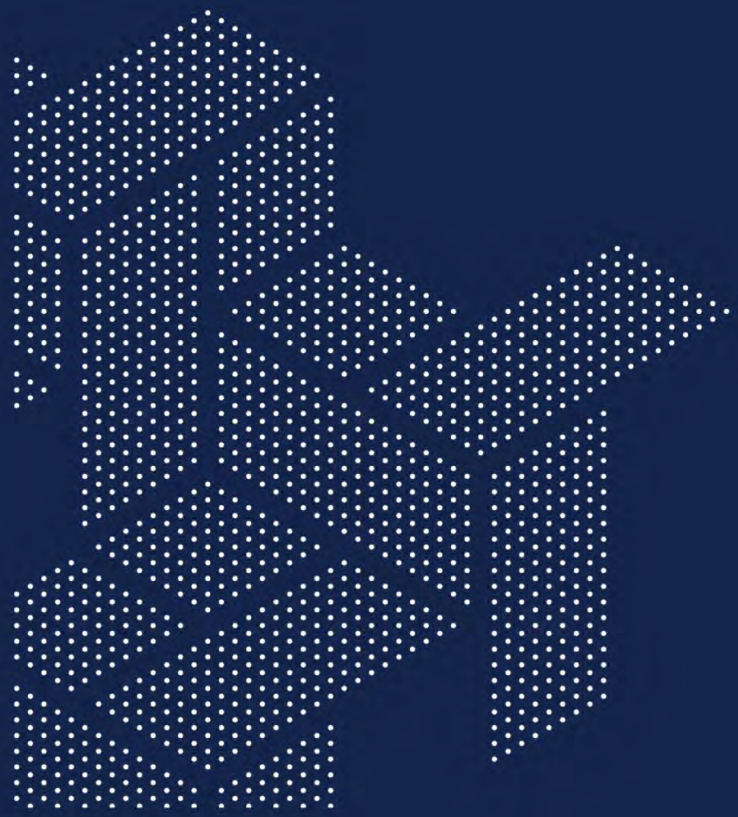

N
HIGH STREET ROAD
FERNHILL STREET
COLEMAN PARADE
RAILWAY PARADE
SPRINGVALE ROAD
MYRTLE STREET
Zone 12
Car Parking
Spaces- 203
Zone 11
Car Parking
Spaces- 232
Zone 1
Car Parking
Spaces- 3,257
Zone 10
Car Parking
Spaces- 544
Zone 2
Car Parking
Spaces- 686
Zone 3
Car Parking
Spaces- 33
Zone 4
Car Parking
Spaces- 356
Zone 8
Car Parking
Spaces- 428
Zone 13
Car Parking
Spaces- 400
Zone 7
Car Parking
Spaces- 66
Zone 5
Car Parking
Spaces- 80
Zone 9
Car Parking
Spaces- 418
Zone 6
Car Parking
Spaces- 110
Zone 14
Car Parking
Spaces- 173
GLEN WAVERLEY ACTIVITY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


Zone 5
Car Parking
Spaces- 190
Zone 6
Car Parking
Spaces- 228
Zone 3
Car Parking
Spaces- 12
Zone 2
Car Parking
Spaces- 6
Zone 7
Car Parking
Spaces- 211
Zone 8
Car Parking
Spaces- 259
Zone 1
Car Parking
Spaces- 553
Zone 4
Car Parking
Spaces- 344
HAUGHTON ROAD
FAULKINER STREET
EVA STREET
DUNSTAN STREET
BURTON AVENUE
CLAYTON ROAD
CARNISH ROAD
CENTRE ROAD
N
CLAYTON ACTIVTIY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


Zone 8
Car Parking
Spaces- 48
Zone 7
Car Parking
Spaces- 46
Zone 3
Car Parking
Spaces- 73
Zone 2
Car Parking
Spaces- 522
Zone 6
Car Parking
Spaces- 90
Zone 9
Car Parking
Spaces- 124
Zone 5
Car Parking
Spaces- 200
Zone 10
Car Parking
Spaces- 85
Zone 1
Car Parking
Spaces- 481
Zone 4
Car Parking
Spaces- 603
TAMBO COURT
HIGH STREET ROAD
MATTHEW STREET
LEE AVENUE
BLACKBURN ROAD
MUNRO AVENUE
COLEMAN PARADE
N
SYNDAL ACTIVTY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre


POWER AVENUE
Zone 4
Car Parking
Spaces- 281
WARRIGAL ROAD
Zone 3
Car Parking
Spaces- 332
BATESFORD ROAD
Zone 2
Car Parking
Spaces- 819
COLLINS ROAD
Zone 1
Car Parking
Spaces- 563
WARRIGAL ROAD
Batesford Road
Waverley Road
Monash Freeway
N
HOLMESGLEN ACTIVTY CENTRE
LEGEND
CITY OF MONASH
Core Activity District
Parking Spread of Activity Centre

APPENDIX B -
EXISTING CONDITIONS SNAPSHOT



1 EXISTING PARKING OCCUPANCY

1.1 Parking Characteristics Within Activity Locations

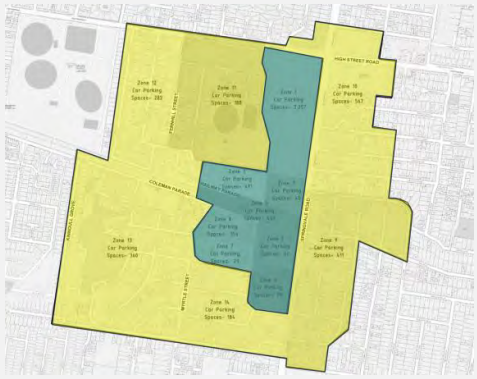
Parking demand surveys were undertaken in July 2024 within 11 Activity Locations. Occupancy data was typically collected between 8:00am and 9:00pm on a typical weekday and weekend.

For detailed occupancy and supply data refer to Survey Data Analysis Report - WGA240930-RP-TT-0002_C.

2 ACTIVITY LOCATION RECOMMENDATIONS

Below are suggested parking management tools for specific study areas within the City of Monash. Recommendations have been made based on car parking occupancy data collected in July 2024.

2.1 Glen Waverley Activity Centre



Core Area

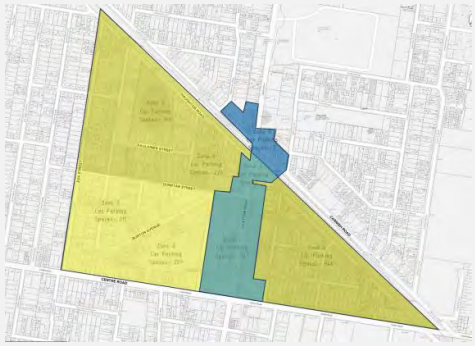
The peak occupancy within the core area is close to the 85th percentile. Management tools could include:

- Installing dynamic signage
- Paid parking systems
- Review user group allocations

Outer Area

- Occupancy within the outer area well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.2 Clayton Activity Centre



Core Area

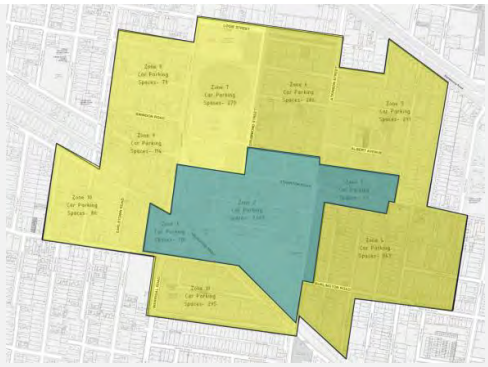
The peak occupancy within the core area exceeds the 85th percentile. Management tools could include:

- Review of time restrictions
- Implementing paid parking
- Review user allocation

Outer Area

- Given the occupancy within the outer area of Clayton remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.3 Oakleigh Activity Centre



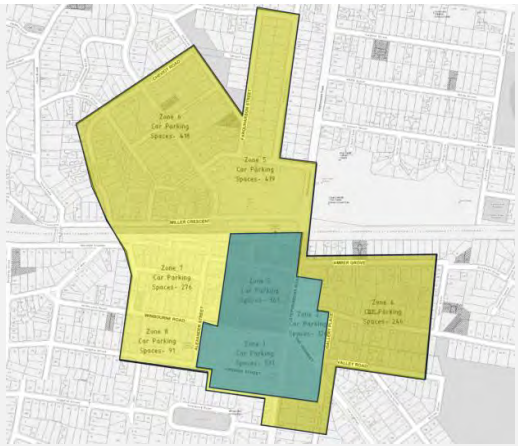
Core Area

- The peak occupancy within the core area is below the 85th percentile, however, specific areas within the core area reached the 85th percentile. Management tools could include:
  - Installing dynamic signage
  - Reviewing time restrictions
  - Paid parking
  - Review user group allocations
  - Promote car sharing

Outer Area

- Occupancy within the outer area of Oakleigh remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.4 Mount Waverley Activity Centre



Core Area

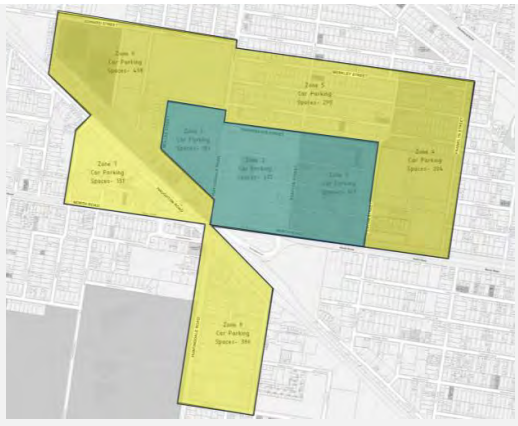
The peak occupancy within the core area is close to 50% of the capacity. Parking usage within this area could be enhanced by easing restrictions. Certain areas within Mount Waverley, for instance Hamilton Place car park experience higher demands in comparison to other areas within the activity centre. Management tools could include:

- Review of time restrictions
- Dynamic Signage

Outer Area

- Given the occupancy within the outer area of Mount Waverley remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.5 Huntingdale Activity Centre



Core Area

The peak occupancy within the core area is close to 50% of the capacity. Management tools could include:

- Review of time restrictions

Outer Area

- Given the occupancy within the outer area of Huntingdale remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.6 Pinewood Shopping Centre

Core Area

The peak occupancy within the core area is close to one-third of the capacity. However, parking demand generated for an area within the Pinewood Shopping Centre is nearing capacity. Management tools could include:

- Dynamic signage
- Review of user allocations
- Review of time restrictions

Outer Area

- Given the occupancy within the outer area of Pinewood remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.7 Syndal Shopping Centre

Core Area

The peak occupancy within the core area remains well below the 85th percentile. However, parking occupancy within the railway carparks within Syndal is noted to be close to the 85th percentile. Management tools could include:

- Review of time restrictions
- Review of user group allocations

Outer Area

- Given the occupancy within the outer area of Syndal remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.8 Holmesglen Neighbourhood Activity Centre

Core Area

The peak occupancy within the core area is well below the 85th percentile. However, parking occupancy within a specific area is noted to be nearing capacity. Management tools could include:

- Dynamic Signage
- Review of time restrictions
- Enforcing stricter time restrictions and implementing paid parking within the car parking area which is nearing capacity and easing restrictions within the car parks that are under-utilised thereby allowing an even spread of the demand generated.

Outer Area

- Given the occupancy within the outer area of Holmesglen remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.9 Kerrie Road Strip Shopping Centre

Core Area

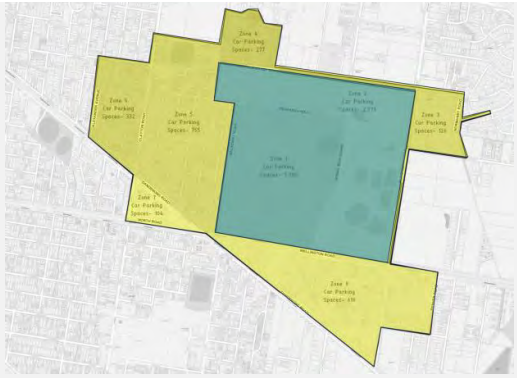
The peak occupancy within the core area remains below the 85th percentile. Management tools could include:

- Review of time restrictions
- Review of user allocation

Outer Area

- While the occupancy within the outer area of Kerrie Road remains well below the 85th percentile, the demand for on-street parking is quite high in certain areas. Residential parking permit zones could be implemented to manage on-street parking.

2.10 Monash University Precinct



Core Area

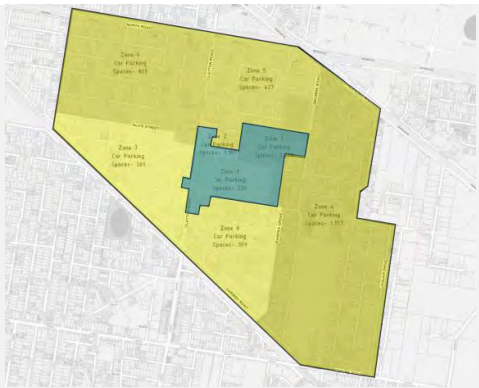
The core area within the Monash University precinct is private car parking areas owned and managed by Monash University. While the peak occupancy within the core area remains below the 85th percentile, some car parks are noted to be above or reaching the 85th percentile. Management tools could include:

- Promote car sharing
- Demand based pricing
- Reviewing time restrictions

Outer Area

- Given the occupancy within the area surrounding Monash University remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

2.11 Monash Medical Precinct



Core Area

The core area within the Monash Medical Precinct is private car parking areas owned and managed by Monash Health. The peak occupancy within the core area is noted to be very close to the 85th percentile. Management tools could include:

- Dynamic signage
- Promote car sharing
- Time Restrictions
- Demand based pricing

Outer Area

- Given the occupancy within the outer area remains well below the 85th percentile, consideration could be given on easing parking restrictions within the area.

WGA

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City of Monash

Draft Strategic Parking Management Review Recommendations

STRATEGIC PARKING MANAGEMENT REVIEW REPORT

WGA240930

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20 February 2025

Revision History

REV	DATE	ISSUE	ORIGINATOR	CHECKER	APPROVER
A	6/12/2024	Working Draft	Julian Rickard & Navshi Bamunusinghe	Eric Kydd	Eric Kydd
B	20/12/2024	Draft	Julian Rickard & Navshi Bamunusinghe	Eric Kydd	Eric Kydd
C	1/02/2025	Final	Julian Rickard & Navshi Bamunusinghe	Eric Kydd	Eric Kydd
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E	20/02/2025	Updated Final	Julian Rickard & Navshi Bamunusinghe	Eric Kydd	Eric Kydd

CONTENTS

1 EXECUTIVE SUMMARY

The Strategic Parking Management Review (SPMR) provides a detailed assessment of parking conditions across 11 key activity locations in the City of Monash. The report analyses parking occupancy data, evaluates the effectiveness of existing restrictions and offers targeted recommendations to improve parking efficiency, accessibility, and equity. The overarching goal is to balance parking demand with the Council's broader goals of sustainability and urban growth.

The findings highlight significant variations in parking occupancy levels across the Council. Many core activity centres, such as Glen Waverley and Clayton, exceed the target peak occupancy of 85%, resulting in limited parking availability. Meanwhile, residential areas often experience underutilisation, with peak occupancies generally below 50%.

The SPMR recommends several strategic interventions. In core activity centres, extending parking restrictions into the evening hours, particularly in Glen Waverley and Clayton, is essential to manage peak demand. Introducing paid parking and adjusting time limits in the core areas of Glen Waverley, Clayton and Oakleigh will improve turnover during busy periods. Improved signage for off-street parking facilities is also suggested to enhance accessibility and utilisation, particularly in smaller centres such as the Kerrie Road Strip Shopping Centre. For outer areas, easing restrictions in low-demand zones while maintaining residential parking priorities near sensitive locations like Monash University is advised.

The report emphasises the need for community consultation as a critical step in implementing these changes. Engaging stakeholders will ensure that proposed adjustments address local needs and gain community support. A phased approach to implementation, coupled with ongoing monitoring of parking occupancy, will enable the City of Monash to refine strategies and adapt to evolving conditions.

In conclusion, this review offers a clear framework to optimise parking management across the City of Monash. By aligning parking policies with best practices, the recommendations aim to improve efficiency ensuring fair and equitable use of parking resources across the city.

2 INTRODUCTION

2.1 Purpose

WGA has been engaged by the City of Monash to undertake a review of strategic parking management including the preparation of a Strategic Parking Management Review Report (SPMR).

2.2 Background

This SPMR has been developed following:

1. A literature review of car parking management concepts and management tools
2. Parking surveys and data analysis across 11 activity locations in the City of Monash
3. Preparation of a Parking Management Framework for the City of Monash

Parking surveys and subsequent data analysis has been undertaken on 11 defined activity locations as follows:

- Glen Waverley Activity Centre
- Clayton Activity Centre
- Oakleigh Activity Centre
- Mount Waverley Activity Centre
- Pinewood Shopping Centre
- Syndal Shopping Centre
- Holmesglen Neighbourhood Activity Centre
- Huntingdale Activity Precinct
- Kerrie Road Strip Shopping Centre
- Monash University Precinct
- Monash Medical Precinct

The locations are a representative sample of larger and smaller activity centres across the municipality. The recommendations of this report, including ongoing monitoring, can be applied across the municipality. Similar analysis would need to occur in each location to understand the specific parking needs and interventions.

The preceding reports and data analysis have provided discussion on the following:

- The existing demographic, transport, population and housing trends in the City of Monash
- Existing best practices for managing parking within activity locations
- High level occupancy targets for activity centres
- Factors affecting parking demand
- Existing parking management approach in the City of Monash
- Identification of parking management tools appropriate for use within the City of Monash per land use area
- User hierarchies for particular land uses for public parking

2.3 Scope

The following SPMR report aims to provide recommended parking management tools for implementation across the 11 defined activity locations. Recommendations are made within specific zones where appropriate whilst considering the land uses and holistic approaches in line with area-based parking approaches. It aims to effectively manage car parking across the City of Monash to create fair, equitable parking and kerbside space.

3 PRINCIPLES OF PARKING MANAGEMENT

3.1 Target Peak Parking Occupancy

Parking occupancy refers to the proportion of parking spaces that have a car parked in them at a given time and area. The target peak parking occupancy has been set with reference to international and Australian best practice based on published literature.

A peak parking occupancy of 85% represents an optimum relationship between the supply and demand of said parking facility. It is not unreasonably difficult to find a parking space, and spaces are occupied at a level that justifies the supply. This means the parking facilities are well used, while limiting customer frustration and congestion caused by vehicles circulating in search for a parking space.

The City of Monash should typically aim for the 85% benchmark for their parking facilities within activity locations. In areas where parking occupancy is consistently above 85% parking management tools can be employed to reduce the occupancy. This may encourage greater parking turnover and availability in the prime locations and promote more readily available parking options a short walking distance away.

Furthermore, in core activity areas where the peak parking occupancy is consistently below 50% and parking controls are in place, the parking control restrictions could be eased or removed in a staged approach that considers the impact of other parking changes in the surrounding area.

3.2 Parking Management Tools

The following section outlines parking management tools appropriate for the City of Monash. These tools can increase the availability and reliability of the parking service.

The tools are outlined from simple tools where supply is sufficient to meet demand, to more complex management tools to be considered in areas where demand exceeds supply and/or areas with competing demands from different user groups.

3.2.1 Parking Restriction Controls

The increasing levels of intervention for parking restriction controls is shown in Figure 3.1. The levels of level of controls implemented are to be increased when the peak occupancy consistently exceeds 85%- 95% and parking controls removed/eased when peak occupancy is consistently below 50%.

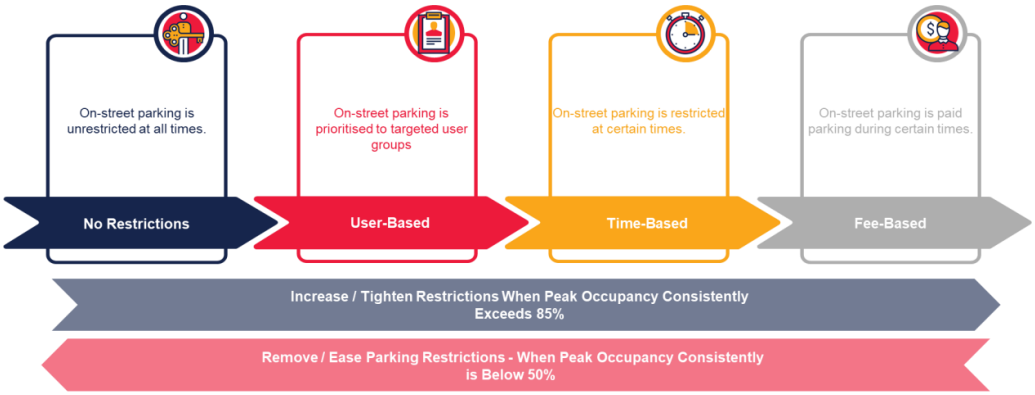

Figure 3.1: Intervention Levels for Parking Restrictions Controls

3.2.1.1 No Restrictions

- Unrestricted parking refers to parking spaces that have no time limits, designated user controls or fees
- This type of parking is generally appropriate in areas and at times of low demand
- No restrictions should apply when parking occupancy is below 50% at all times

3.2.1.2 User-Based Restrictions

- Where restrictions are applied to specific bays, ensuring space is available for particular uses (for example, loading, bus stops, accessible parking)
- The provision and allocation of these spaces should be based on demonstrated demand and the needs of nearby land uses
- User-based restrictions typically apply for certain times of day and days of the week and will remain unrestricted at times of low demand

3.2.1.3 Time-Based Restrictions

- Time-based restrictions are used to balance different user needs, such as short-term parking for shoppers and visitors
- The parking duration permitted is set to encourage appropriate turnover based on the needs of nearby businesses and facilities, and promotes specific areas for different user groups
- When parking occupancy is consistently above 85%, we introduce time-based restrictions. These typically only apply at times of the day and week when availability is low
- Discretion may also be applied to introduce time-based restrictions where one user type, land use, business or development over-dominates public parking space

3.2.1.4 Paid Parking

- When time-based restrictions have been introduced and parking occupancy remains consistently above 85%, we introduce paid parking
- As fee-based restrictions apply, they will apply for certain times of day and days of week and will remain time-restricted or unrestricted at times of lower demand
- The fee-based restrictions will require a payment with applicable fees priced to target achieving the optimum parking occupancy of 85-95%

Parking fees will be implemented as shown in Figure 3.2.

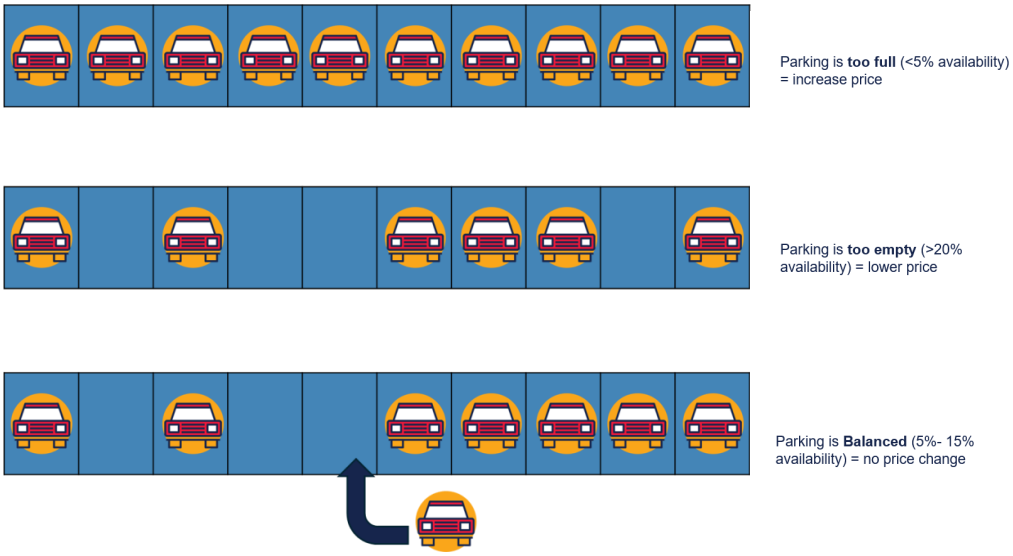

Figure 3.2: Parking Fee Structure

3.3 Paid Parking - Background:

Paid parking refers to parking spaces that require users to pay a fee based on the time they occupy the parking space, often combined with timed restrictions. This system is typically implemented in areas with high parking demand, where time limits alone do not effectively ensure sufficient parking turnover or availability. Paid parking can be used to manage demand, discourage long-term parking in premium spaces, and generate revenue.

3.3.1 Why Implement Paid Parking?

Paid parking can be implemented to manage the demand of parking and to promote a fairer distribution to the costs of parking. The following report section outlines the costs of parking and the benefits and drawbacks of implementing paid parking.

The Costs of Parking

Historically, the costs to provide and maintain car parking spaces have been generally absorbed into the land and development costs. This is reflective of parking seen as a public infrastructure. The costs of a parking space can be broken into financial costs and economic costs as follows:

Financial

- Construction costs
- Maintenance
- Enforcement

Economic

- Opportunity cost of the land (area)
- Pollution
- Traffic congestion

Benefits and Drawbacks of Paid Parking

The benefits and drawbacks of paid parking are outlined below

Benefits

- Reduced traffic congestion
  - Discourages unnecessary car trips and long term parking
- Incentivise alternative transport methods and car pooling
- Economic benefits
  - Revenue can be reinvested into the local community
  - Increased turnover of parking spaces can improve customer access to businesses
  - Recovery of the costs to provide parking
- Optimised urban design and land use
- Fairer distribution of the costs associated with providing and managing parking

Drawbacks

- Increased costs for drivers
- Potential business impact
  - Customers may choose to visit areas where parking is subsidized
- Displacement of parking demand
  - To surrounding local streets where free parking may be provided
- Administrative costs
- Potential for unfair access to areas

Considering the above, the implementation of paid parking should consider the potential wider consequences of paid parking. This may include implementing user based restrictions in the surrounding areas or an area based approach to the implementation of parking management tools.

In summary, the implementation of paid parking in an area must be carefully considered. Whilst paid parking can manage demand and has numerous benefits including economic and urban design improvements, it can have unintended consequences such as potential business impacts and parking displacement.

4 ACTIVITY LOCATIONS

The 11 key precincts as identified by City of Monash include the following activity locations:

- Glen Waverley Activity Centre
- Clayton Activity Centre
- Oakleigh Activity Centre
- Mount Waverley Activity Centre
- Pinewood Shopping Centre
- Syndal Shopping Centre
- Holmesglen Neighbourhood Activity Centre
- Huntingdale Activity Precinct
- Kerrie Road Strip Shopping Centre
- Monash University Precinct
- Monash Medical Precinct

Each activity location consists of a core area where the majority of activity and associated parking demand is generated (i.e. commercial activity centre, tertiary education campus etc.) and the outer area surrounding the core. The extent of surveyed area surrounding the activity locations is shown in Figure 4.1.

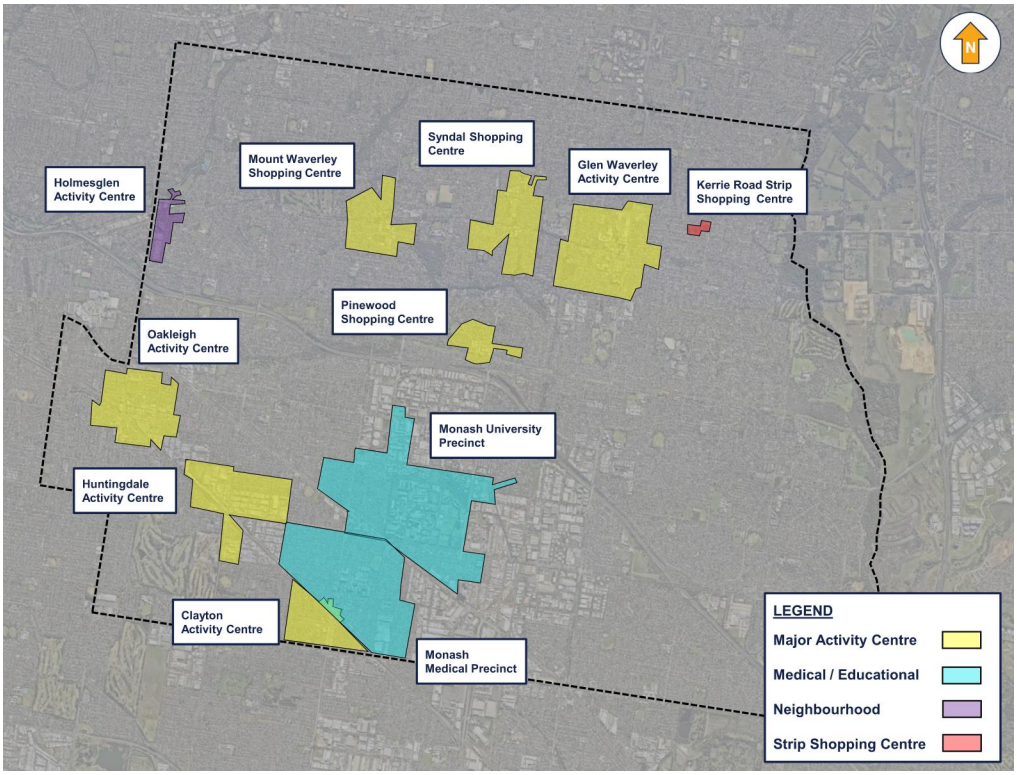

Figure 4.1: City of Monash – 11 Key Precincts

5 GLEN WAVERLEY ACTIVITY CENTRE

5.1 Background

Glen Waverley Activity Centre is a designated Major Activity Centre under the Victorian Government's 'Plan Melbourne' strategy. It holds a significant strategic transport importance due to the following factors:

- **Transport Hub:** Glen Waverley is a key public transport node, featuring the Glen Waverley Railway Station with direct access to Melbourne's CBD, and numerous bus routes connecting surrounding suburbs. The strong transport links reduce the reliance on private cars and encourage the use of public and active transport.
- **Commuter Parking:** Proximity to Glen Waverley Station attracts long-term commuter parking, creating challenges in ensuring short-term parking availability for local businesses.
- **High Parking Demand:** The centre's mix of retail, dining, and entertainment options, along with residential growth, creates high parking demand, especially around Kingsway and The Glen Shopping Centre.
- **Sustainable Transport Goals:** City of Monash is focused on promoting sustainable transport by improving public transport services, pedestrian-friendly environments, and cycling infrastructure. Effective parking management strategies are needed to balance high parking demand with the encouragement of alternative transport modes.

5.2 Survey Results Snapshot

There are a total of 6,986 parking spaces available within the Glen Waverley study area including 3,257 parking spaces within The Glen shopping centre. Of the 6,986 parking spaces available within the study area, 1,856 spaces are located on-street, with the remaining 5,130 spaces located off-street.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 5.1.

5.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to Council car parking only. Private car parks within the core area of note include:

- **The Glen Shopping Centre**
- **VicTrack commuter Parking**

Private car parking areas is shown within Figure 5.2.

5.2.2 Future Parking Changes in Glen Waverley Activity Centre

Significant parking changes are occurring in the short to medium term in the Glen Waverley Activity Centre. The Central car park has been sold for future redevelopment. The Suburban Rail Loop Authority (SRLA) will acquire the Glendale Street East and West car parks. A new SRLA car park for commuters is proposed north of Glen Waverley railway station at 9-11 Railway Parade North.

The expanded Bogong car park at 1-5 Bogong Avenue, was under construction at the time of the review and excluded from the assessment. The Bogong car park will provide a total of 1,037 car parking spaces and offset future car park closures.

Council should monitor parking (including considering any consequential changes to parking restrictions) in the activity centre as car parks are built or closed. The SRLA car park is also likely to be available after hours and on weekends for non-commuters.

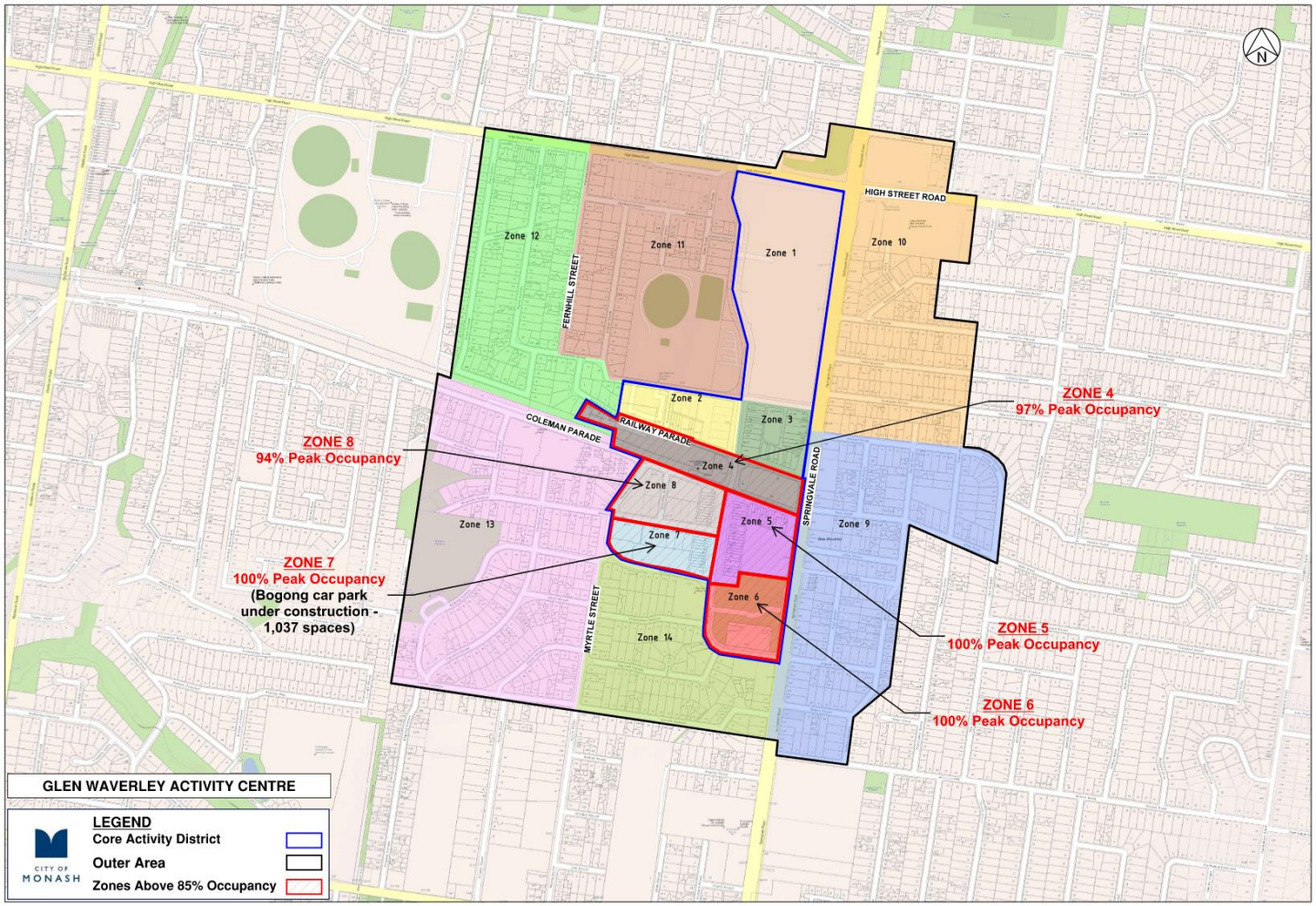

Figure 5.1: Glen Waverley Core – Zones with Peak Occupancy Exceeding 85% Occupancy

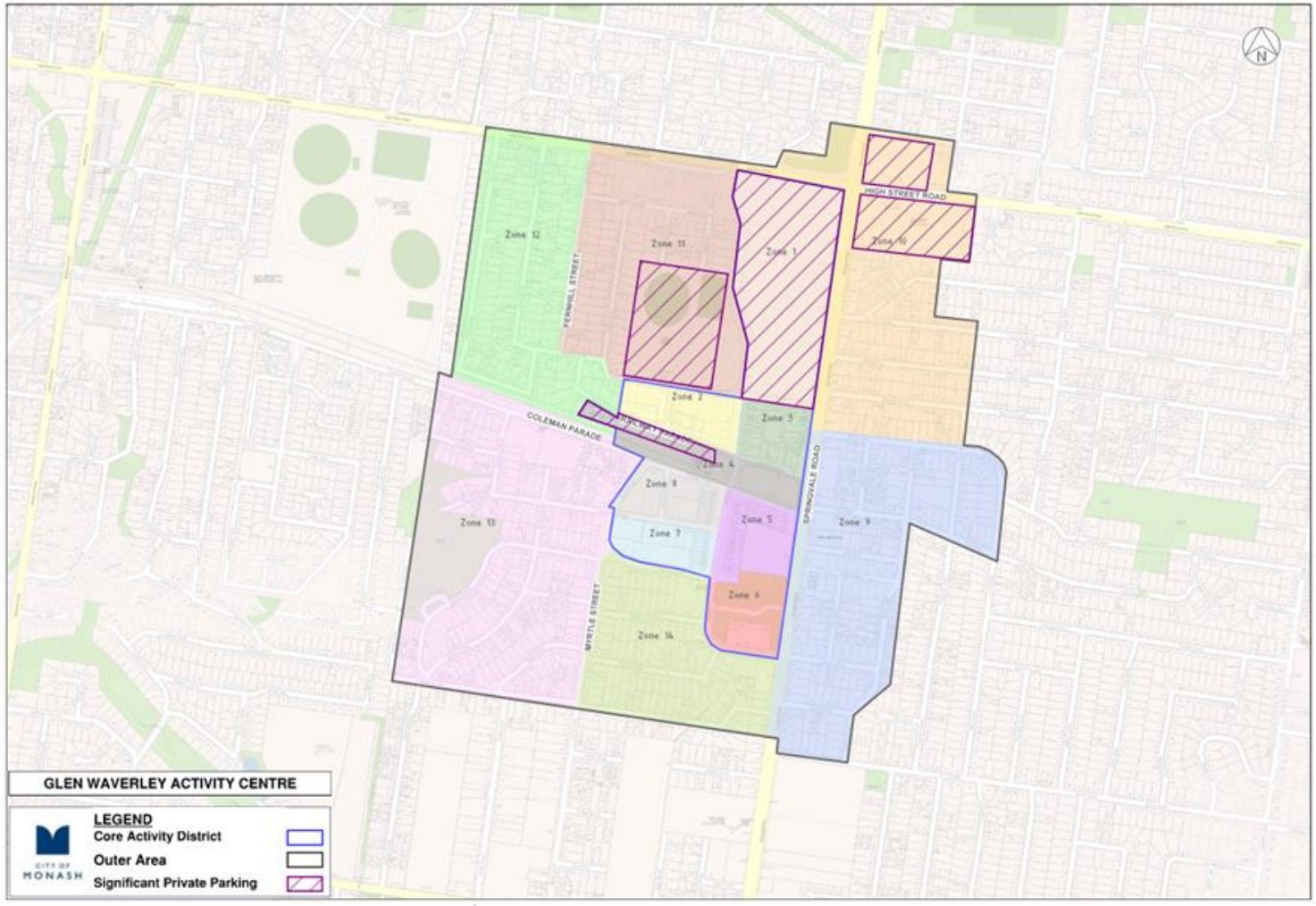

Figure 5.2: Private Parking in the Glen Waverley Activity Centre

5.3 Analysis – Parking in Glen Waverley

5.3.1 Core Area

Parking data analysed in Figure 5.1, the peak occupancy in zones 4,5,6,7,8 exceed the 85% target occupancy.

Recommendations are made to consolidate zones in line with area based parking approaches to provide consistent parking management across an area to provide the most efficient and fair parking to an area.

Zones 4, 5, 6, 7 and 8 – Context

The Glen Waverley Zones 4, 5, 6, 7 and 8 include the Kingsway district, the Glen Waverley railway station and the Monash Civic Centre and Library. Car parking in the area includes the Glen Waverley Central Parking Area, VicTrack commuter parking, Monash Civic Centre and library parking and on-street parking on Coleman Parade, Kingsway, Bogong Avenue and the yet to open Bogong car park. This car parking available within the consolidated area is considered within walking distance from key destinations within the Glen Waverley core.

Existing Car Parking Conditions

Filtering out private car parking (including VicTrack parking), the defined area includes 886 car parking spaces operated by Council as shown in Figure 5.3, the occupancy results for this consolidated area is shown in Figure 5.4 and Figure 5.5. It is noted that significant parking changes are occurring in the short to medium term in the Glen Waverley Activity Centre including the closure of car parks and opening of Bogong car park. This is further discussed in Section 5.2.2.

Figure 5.3: Car Parking Areas Included within Consolidated Area – Occupancy on Thursday 25 July 2024

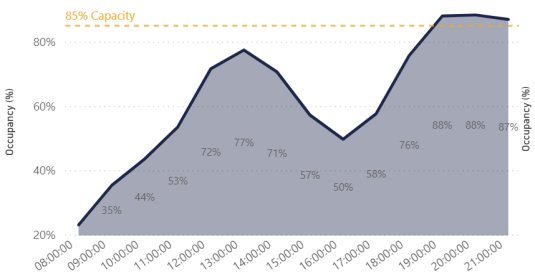

Figure 5.4: Glen Waverley Consolidated Area – Occupancy Thursday 25 July 2024

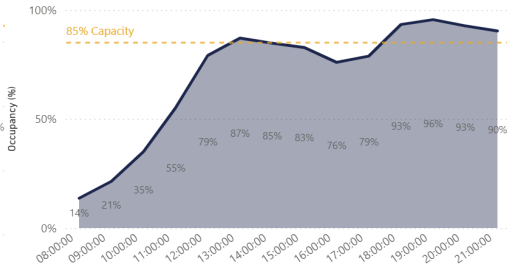

Figure 5.5: Glen Waverley Consolidated Area – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and capacity (excluding private parking areas) within this area is shown in Table 5.1.

Table 5.1: Glen Waverley Core Area – Existing Parking Restrictions in Zones 4, 5, 6, 7 and 8

STREET	RESTRICTION	CAPACITY
Coleman Parade	1 1/2P 8am-8pm	26
	Loading Zone	2
	P 2Min Commercial Vehicle	1
	P 2mins Taxi Excepted	6
	P Disabled Only	2
CP1 (Glendale Street East Parking Area) **SRLA to acquire this car park, with parking to be offset by expanded Bogong car park - 1,037 spaces*	2P	99
	RSL Disabled	2
	RSL Member Unrestricted	29
	RSL Staff Only	5
CP2 (Glendale Street West Parking Area) **SRLA to acquire this car park, with parking to be offset by expanded Bogong car park - 1,037 spaces*	2P 8am-6pm	6
	3P 8am-6pm	172
	3P Disabled Only	5
	P Disabled	1
	Unrestricted	10
CP5 (Glen Waverley Central Parking Area) **Car park sold for future redevelopment, with parking to be offset by expanded Bogong car park - 1,037 spaces*	2P 8am-8pm	243
	4P Disabled Only 8am-8pm	2
	P Disabled	2
CP6 (Glen Waverley Library and Monash Civic Centre Parking)	1 1/2P 8am-8pm Mon-Fri Civic Centre Library Users Only	34
	1/2P 8am-5pm Mon-Fri	5
	1/4P 8am-5pm	4
	1P Disabled Only	1
	2P Disabled Only	2
	Loading Zone 15mins	1
	No Parking 8am-4pm Mon-Fri Authorised Vehicles Excepted	49
Kingsway	1 1/2P 8am-8pm	135
	1P	1
	2P 8am-8pm	11
	2P Disabled	6
	P 10mins	2
Montclair Ave	Loading Zone 15mins	1
	Loading Zone 15mins	1
Myrtle St	2P 8am-6pm Mon-Sat	8
	Bus Zone 8am-8pm	1

STREET	RESTRICTION	CAPACITY
Railway Pde N	P 2mins 7am-9am, 3:30pm-6pm Sat, 1P 9am-3:30pm Sat	6
	P2 Minute	5
	TOTAL:	**886**

Compliance with Parking Restrictions

In-ground sensor data from Thursday 25 July 2024 was extracted to align with the weekday parking survey. The analysis focused specifically on vehicle stay durations within the designated restriction hours, excluding parking activity outside these times. This targeted approach aims to accurately assess compliance with time-limited parking restrictions during enforced periods.

It was observed that parking overstays were most common where short time limits apply especially in 2 minute parking zones. Where compliance levels are exceptionally low it is recommended to either increase enforcement or explore updating restrictions in line with the expected user group. For example, for 2 minute spaces intended as drop off – pick up spaces for public transport interchanges, explore 5 – 10 minute restrictions to allow for a reasonable time to pick up or drop off a passenger.

Glen Waverley Core – Recommended Locations to Modify Parking Controls

Review of the existing parking restrictions and occupancy across the core area suggests peak occupancy exceeds the target 85% target.

Review of individual off-street parking areas and on-street parking reveals modifications to parking management are recommended in the following areas:

- Off-street parking:
  - Glen Waverley Central Parking Area
  - Monash Civic Centre and library parking
  - Glendale St East Parking Area
  - Glendale St West Parking Area
- On-street parking:
  - Kingsway
  - Railway Parade North
  - Coleman Parade

It is noted that specific streets and off-street parking areas reached capacity (100% occupancy). Notably, 389 of the 851 parking spaces within the area have time restrictions cease between 6-8pm. Consideration could be given to increasing the time restrictions beyond 6-8pm to increase the availability of parking in the evening peak periods.

It is noted that the expanded Bogong car park was under construction and may have altered parking conditions at the time of the review. Parking should be monitored once the car park opens, and in the short to medium term, to offset the future closure of Central car park, and Glendale Street East and West car parks.

5.3.2 Outer Area

The Glen Waverley outer area is predominately residential, the car parking survey results indicate an inventory of 1,970 parking spaces and an occupancy well below the target 85% occupancy.

Existing Car Parking Conditions

The car parking areas surveyed within the outer area and peak occupancy is shown in Figure 5.6. The occupancy results for the outer area is shown in Figure 5.7 and Figure 5.8.

Figure 5.6: Car Parking Areas Included within Outer Area – Occupancy on Thursday 25 July 2024

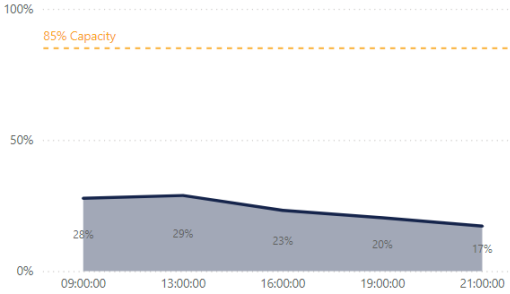

Figure 5.7: Glen Waverley Outer Area – Occupancy Thursday 25 July 2024

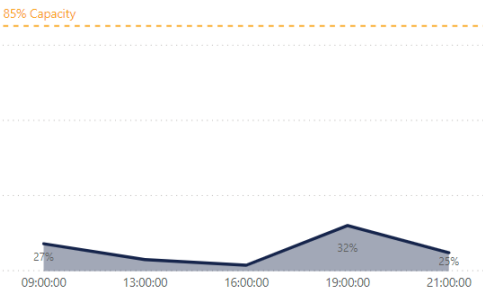

Figure 5.8: Glen Waverley Outer Area – Occupancy Saturday 27 July 2024

The existing car parking restrictions in the Glen Waverley outer area is shown in Table 5.2.

Table 5.2: Glen Waverley Outer Area – Existing Parking Restrictions

STREET NAME	RESTRICTION	CAPACITY
Adams Ave	Unrestricted	12
Barbara Ave	Permit Zone 8am-6pm Mon-Sat	17
	Unrestricted	21
Berley Ct	2P 8am-8pm	4
Blair Rd	2P 8am-6pm Mon-Fri, 8am-1pm Sat	4
	No Parking	1
	Permit Zone 7am-6pm Mon-Sat	15
	Unrestricted	10
Bogong Ave	1P 8am-6pm Mon-Fri	21
	2P 8am-8pm	21
	2P 8am-8pm Authorised Vehicles Excepted	30
	Unrestricted	9
Brent St	Permit Zone 8am-6pm Mon-Fri	8
Brent St	Unrestricted	6
Carramar Ave	2P 8am-8pm	4
Charlotte St	2P 8am-6pm Mon-Sat	21
	Permit Zone 8am-6pm Mon-Sat	10
	Unrestricted	8
Chester St	Permit Zone 7am-6pm Mon-Sat	6
Clifford St	2P 8am-6pm Mon-Sat	8
	Permit Zone 8am-6pm Mon-Sat	10
	Unrestricted	20
Coleman Pde	2P 8am-6pm Mon-Fri	17
	Bus Zone	1
CP4 (Glen Waverley Railway Parking)	P	40
Evelyn St	2P 8am-6pm Mon-Sat	10
	Permit Zone 8am -6pm Mon-Sat	10
Fairhills Pde	2P 8am-6pm Mon-Sat	18
	Permit Zone 8am-6pm Mon-Fri	22
	Unrestricted	15
	Work Zone 7am-5pm Mon-Fri, 9am-5pm Sat	2
Fernhill St	2P 8am-6pm Mon-Fri	39
	Unrestricted	36
Florence St	1P 8am-6pm Mon-Fri	50

STREET NAME	RESTRICTION	CAPACITY
	2P 8am-8pm	17
	2P 8am-8pm Authorised Vehicles Excepted	7
	Unrestricted	2
Glen Rd	2P 8am-6pm Mon-Fri	15
	4P 8am-6pm Mon-Fri	12
Goodin Grove	1P 9am-7pm Mon-Sat	7
	Unrestricted	8
	Work Zone 7am-5pm Mon-Fri, 9am-1pm Sat	2
Grace St	No Parking on Grass	2
	Permit Zone 6am-6pm	11
	Unrestricted	17
Hinkler Rd	2P 8am-6pm Mon-Fri	24
	4P 8am-6pm Mon-Fri	7
	Unrestricted	20
	Work Zone 7am-5pm Mon-Fri, 9am-5pm Sat	2
Hogan Rd	Permit Zone 6pm-midnight, midnight-9am, 2P 9am-6pm	10
Ingram Ave	2P 8am-6pm Mon-Sat	14
	2P 8am-8pm Authorised Vehicle Excepted	12
Kennedy St	2P 9:30am-3pm Mon-Sat	8
	Permit Zone 8am-6pm Mon-Fri	15
	Unrestricted	3
Lincoln Ave	2P 8am-6pm Mon-Fri	57
	2P 8am-8pm Authorised Vehicles Excepted	20
	Unrestricted	25
Lisbon St	2P 8am-6pm Mon-Fri	26
	Unrestricted	33
Little St	Permit Zone 6am-9am, 1P 9am-6pm	11
	Permit Zone 6pm-9am Mon-Fri All Day Sat-Sun	10
	Permit Zone 6pm-9am Mon-Fri, All Day Sat-Sun	6
Marriot Pda	2P 8am-8pm	13
	2P 8am-8pm Authorised Vehicles Excepted	23
	Permit Zone 8pm-midnight, midnight-8am, 2P 8am-8pm	4

STREET NAME	RESTRICTION	CAPACITY
	Permit Zone Resident 8pm-midnight, midnight-8am, 2P 8am-8pm Authorised Vehicles Excepted	4
Montclair Ave	2P 8am-8pm	8
	2P 8am-8pm Authorised Vehicles Excepted	26
Mount St	2P 8am-6pm Mon-Fri	42
	2P 8am-6pm Mon-Sat	6
	2P 8am-8pm Authorised Vehicle Excepted	22
	4P 8am -6pm Mon-Fri	7
	4P 8am-6pm Mon-Fri	17
	Permit Zone 8am-6pm Mon-Fri	40
Myers Ave	1P 8am-6pm Mon-Fri, 8am-12noon Sat	9
	2P 8am-6pm Mon-Fri	15
	4P 8am-6pm Mon-Fri	9
	Unrestricted	40
Myrtle St	2P 8am-6pm Mon-Sat	7
	2P 8am-8pm	18
	2P 8am-8pm Authorised Vehicles Excepted	28
	Unrestricted	5
O'Sullivan Rd	2P 9am-2pm Mon-Fri, 9am-6pm Sat	5
	4P 8:30am-5:30pm Mon-Fri	1
	4P 8am-6pm Mon-Fri	7
	Bus Zone	1
Panoramic Grove	2P 8am-6pm Mon-Fri	5
	4P 8am-6pm Mon-Fri	5
	4P 8am-8pm Mon-Fri	12
	Permit Zone 8am-8pm Mon-Fri	12
Park St	2P 8am-6pm Mon-Fri	16
	2P 8am-8pm Authorised Vehicle Excepted	17
Petter St	2P 8am-8pm	13
	2P 8am-8pm Authorised Vehicles Excepted	14
Railway Pde N	2P 8am-6pm Mon-Fri, 8am-1pm Sat	14
	Unrestricted	12
Rose Ave	4P 8am-6pm Mon-Fri	44
	Unrestricted	41

STREET NAME	RESTRICTION	CAPACITY
Short St	2P 8am-8pm	8
	2P 8am-8pm Authorised Vehicles Excepted	11
Southdown Ave	No Parking	4
	Permit Zone Resident	16
	Permit Zone Resident 8pm-midnight, midnight-8am, 2P 8am-8pm Authorised Vehicles Excepted	15
	Work Zone 7am-5pm Mon-Fri, 9am-5pm Sat	1
Springvale Rd	1 1/2P 8am-8pm	9
	1/4P 8am-8pm	3
The Outlook	2P 8am-6pm Mon-Fri	7
	Unrestricted	9
Victoria Ave	2P 8am-6pm Mon-Fri	8
	Unrestricted	7
Wilson Rd	1P 8am-6pm Mon-Fri	7
	Unrestricted	12
	Work Zone 7am-5pm Mon-Fri	2
	TOTAL	**1,610**

Glen Waverley Outer – Recommended Locations to Modify Parking Controls

Review of the existing restrictions and parking occupancy across the outer Glen Waverley area suggests parking occupancy is generally well below the target 85% occupancy as indicated within Figure 5.7 and Figure 5.8.

Considerations could be given to easing or removing existing parking restrictions within the outer area. Filtering the occupancy data for car parking spaces in the Glen Waverley outer area with existing time restrictions, reveals a low peak occupancy well below 50% as shown in Figure 5.9. It is recommended to ease or remove the restrictions in these areas whilst considering the car parking hierarchy in residential areas which prioritises residential parking over customer parking, employees and commuters. The roads where timed restrictions could be eased include:

- Ross Avenue, Myers Avenue, Fernhill Street, Lisbon Street, Goodin Grove, Blair Road, Kennedy Street, Fairhills Parade, Clifford Street, Charlotte Street, Hinkler Road, Evelyn Street, Panoramic Grove, Glen Road, Mount Street, Victoria Avenue, Wilson Road, Lincoln Avenue, Marriott Parade and Petter Street

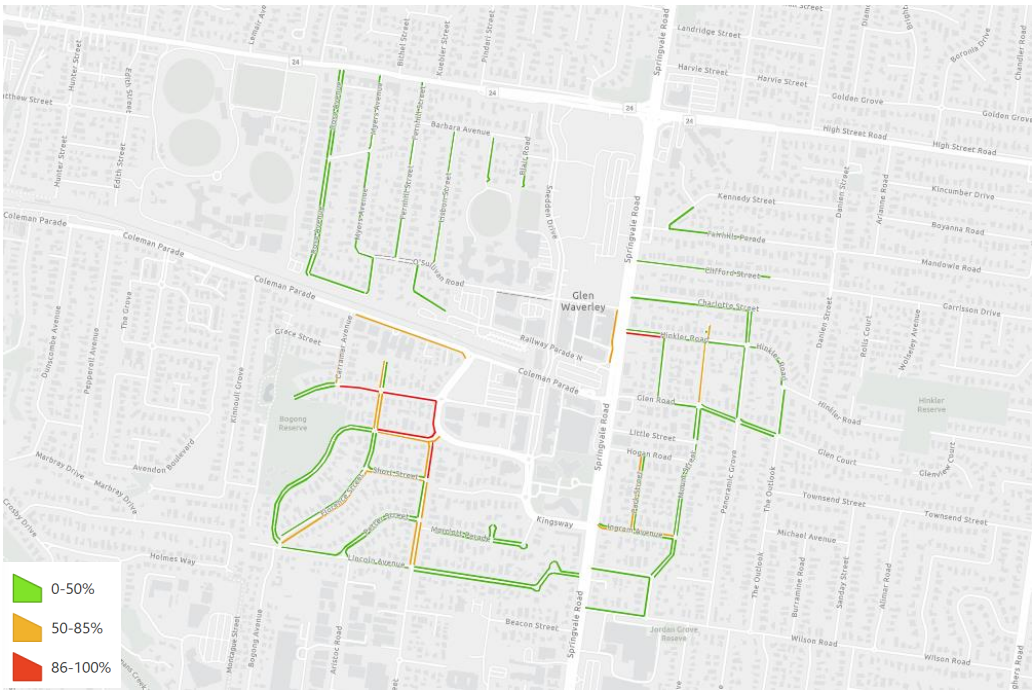

Figure 5.9: Glen Waverley Outer Area – Peak Occupancy – Spaces with Existing Time Restrictions

Furthermore, considering car parking spaces with existing permit restrictions within Glen Waverley reveals significant capacity. It is recommended to review the extent of permit parking spaces and consider easing restrictions. A map of roads with existing permit restrictions is provided in Figure 5.10.

The roads where consideration to easing permit restrictions in the Glen Waverley outer area include:

- Mount Street, Hogan Road, Little Street, Panoramic Grove, Charlotte Street, Clifford Street, Fairhills Parade, Kennedy Street, Barbara Avenue, Blair Road and Grace Street

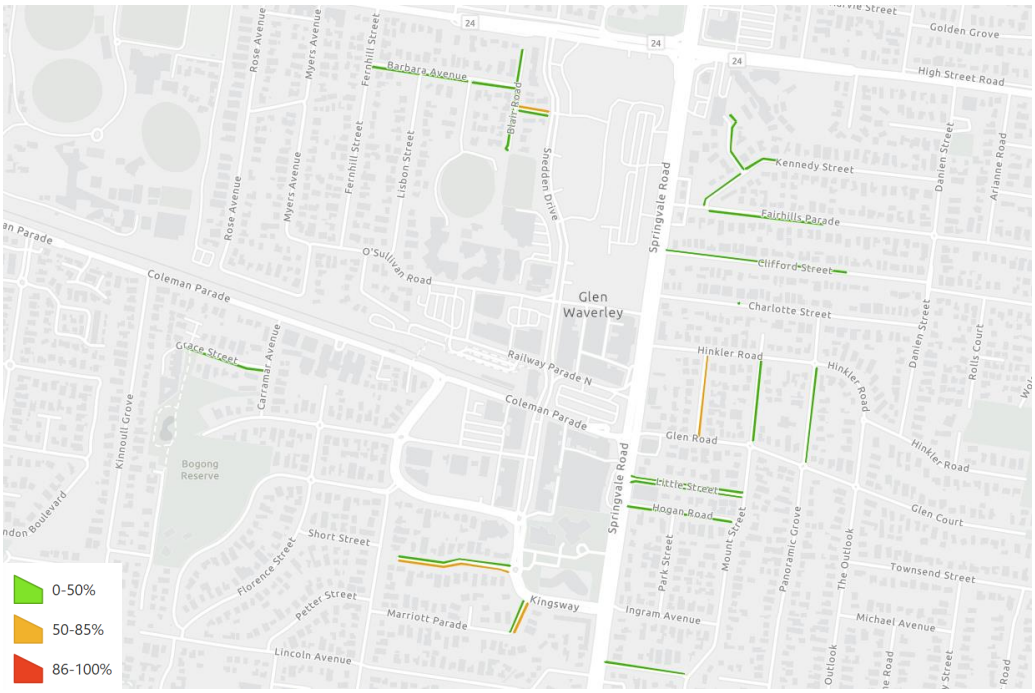

Figure 5.10: Glen Waverley Outer – Parking Occupancy Spaces with Existing Permit Restrictions

5.4 Summary of Glen Waverley Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 5.3.

Table 5.3: Glen Waverley – Summary of Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	Glen Waverley Central Parking Area	2P 8am-8pm	98% 8pm-9pm Thur 25 July 2024 100% 6pm-9pm Sat 27 July 2024	• Explore extending parking restrictions beyond 8pm • Consider dynamic signage • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is now in private ownership and some of the recommendations may not be practical depending on the timing of any redevelopment of the site
	Monash Civic Centre and Library Parking	1 ½ P 8am-8pm Mon-Fri	95% 1pm Sat 27 July 2024	• Consider applying parking restrictions on weekends • Consider dynamic signage • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking
	Glendale St East Parking Area	2P 8am-6pm	76% 6pm Thur 25 July 2024 96% 6pm-8pm Sat 27 July 2024	• Explore extending parking restrictions beyond 6pm • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is to be acquired by the SRLA and some of the recommendations may not be practical depending on the timing of any redevelopment of the site

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
	Glendale St West Parking Area	3P 8am-6pm	90% 7pm-8pm Thur 25 July 2024 97% 6pm-9pm Sat 27 July 2024	• Explore extending parking restrictions beyond 6pm • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is to be acquired by the SRLA and some of the recommendations may not be practical depending on the timing of any redevelopment of the site
	Kingsway, Coleman Parade, Railway Parade North	Timed Restrictions	–	• Consider shortening parking restrictions • Increase parking enforcement • Explore paid parking
OUTER	Mount Street, Hogan Road, Little Street, Panoramic Grove, Charlotte Street, Clifford Street, Fairhills Parade, Kennedy Street, Barbara Avenue, Blair Road , Grace Street, Bogong Avenue, Florence Street, Rose Avenue, Myers Avenue, Fernhill Street, Lisbon Street, Goodin Grove, Hinkler Road, Evelyn Street, Glen Road, Victoria Avenue, Wilson Road, Lincoln Avenue, Marriott Parade, Petter Street	Permit and Timed Restrictions	All streets specified have peak occupancies below 50%	• Consider implementing consistent parking time restrictions • Consider easing permit and / or time restrictions

5.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations and residential areas. Where in activity locations priority should be given to safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Installing dynamic and wayfinding parking signage to detail the location and availability of parking in specific areas
- Existing Streetscape
- Review of user allocation
- Promoting car sharing across the area and providing car share only spaces
- Consideration to the car parking hierarchy in activity location areas and residential areas
- For any major changes to parking restrictions a trial implementation period could be undertaken where the controls are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the parking management changes

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter. This is particularly the case with the opening of the expanded Bogong car park and short to medium term changes at Central car park, and Glendale Street East and West car parks.

6 CLAYTON ACTIVITY CENTRE

6.1 Background

Clayton Activity Centre is a designated Major Activity Centre under the Victorian Government's 'Plan Melbourne' strategy. It holds a significant strategic transport importance due to the following factors:

- **Key Activity Hub**: As a major focal point for shopping, business, and community services, the Clayton Activity Centre generates significant local and regional traffic. This drives the need for effective transport planning and sufficient parking capacity.
- **Proximity to Employment and Education:** The activity centre's proximity to Monash University and Monash Medical Centre further intensifies the need for accessible transport routes and parking, as these institutions are key employment hubs that attract daily commuters, students, and visitors.
- **Public Transport Integration**: With Clayton Railway Station located nearby, the activity centre serves as a critical transit-oriented development zone. It connects rail and bus services, facilitating smooth transitions between modes of transport and reducing reliance on private vehicles.
- **Planned Growth:** Clayton Activity Centre is expected to experience further urban development and population growth, particularly with the development and eventual launch of the Suburban Rail Loop (SRL). This will require forward-thinking transport solutions, enhanced public transport access, and the optimisation of current parking facilities to ensure the area remains accessible and sustainable.

6.2 Survey Results Snapshot

There are a total of 1,787 parking spaces within the Clayton study area. Of the 1,787 parking spaces available within the study area 1,000 are on-street and 787 off-street spaces.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 6.1.

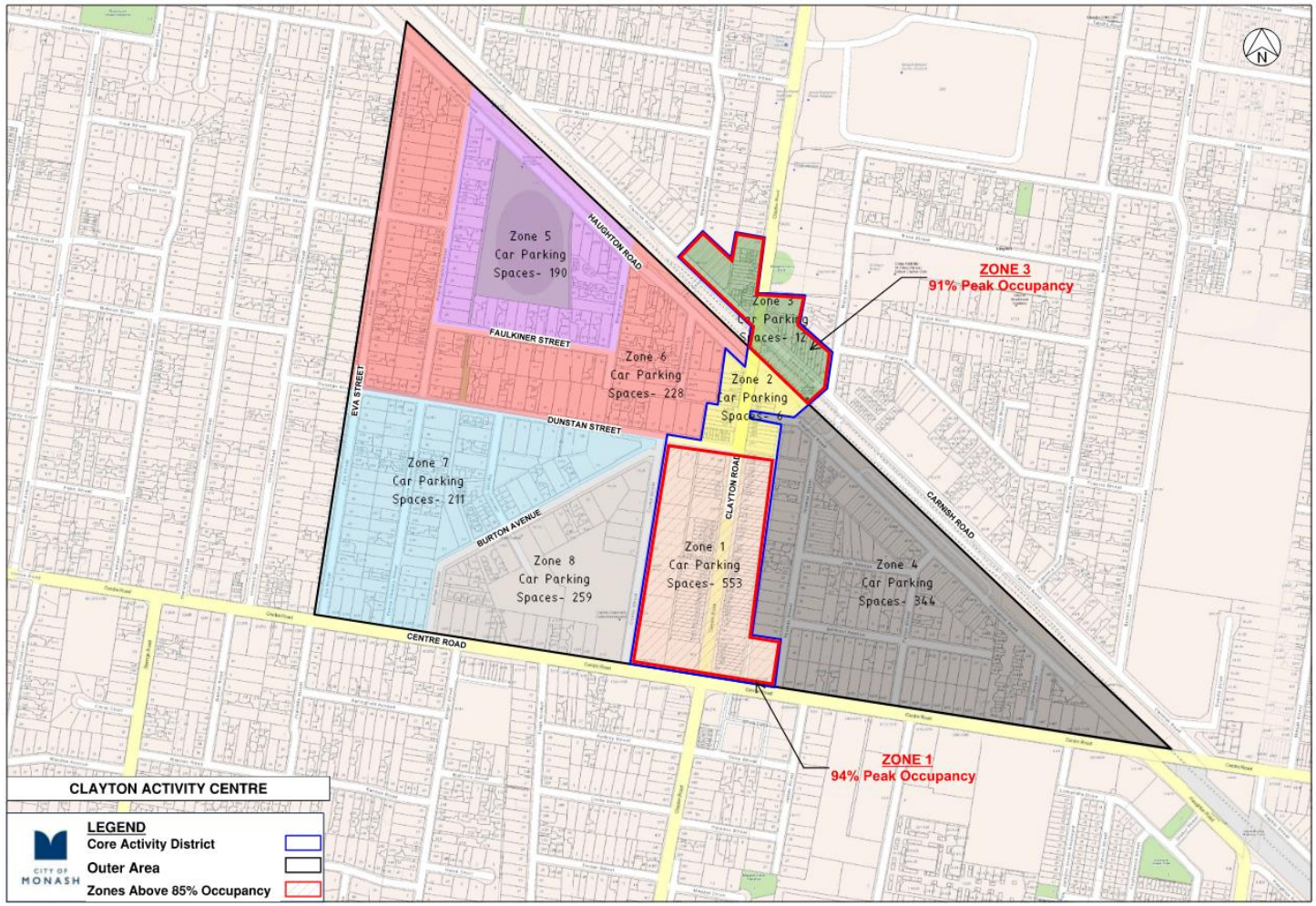

Figure 6.1: Clayton Core – Zones with Peak Occupancy Exceeding 85% Occupancy

6.3 Analysis - Parking Management in Clayton

6.3.1 Core Area

Parking data analysed in Figure 6.1, shows peak occupancy in Zones 1 and 3 exceed the 85% target occupancy.

Zone 1 – Context

The Clayton Zone 1 includes the Clayton Road retail shopping district and Clayton Shopping Plaza. Car parking in Zone 1 and the immediate surrounds includes the Cooke Street east parking area, Cooke Street west parking area, Thomas Street South car park, Dunstan Street parking area and on-street spaces on Clayton Road, and Dunstan Street.

Existing Parking Conditions

Zone 1 includes 553 car parking spaces understood to be primarily managed and operated by Council as shown in Figure 6.2. The occupancy results for Zone 1 are shown in Figure 6.3 and Figure 6.4.

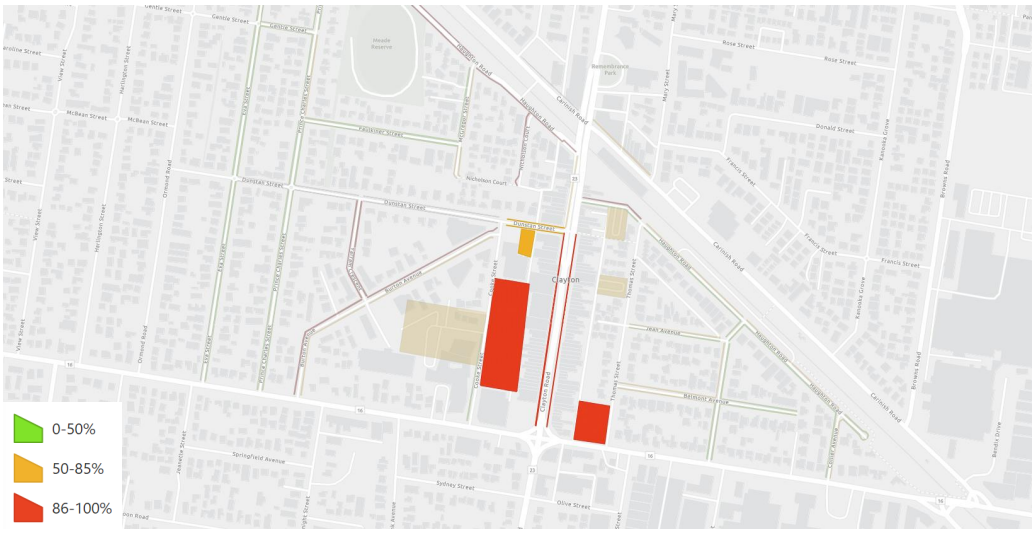

Figure 6.2: Car Parking Areas Included within Zone 1

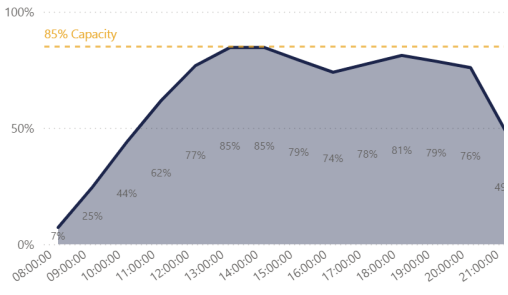

Figure 6.3: Clayton Zone 1 – Occupancy Thursday 25 July 2024

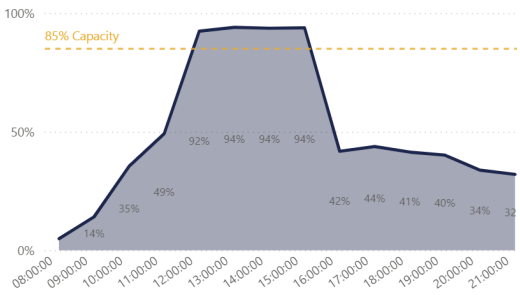

Figure 6.4: Clayton Zone 1 – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within this area is shown in Table 6.1.

Table 6.1: Clayton Core Area – Existing Restrictions in Zone 1

STREET NAME	RESTRICTION	CAPACITY
Clayton Rd	1P 8am-6pm Mon-Fri, 8am-1pm Sat	64
	Bus Zone	2
	Mail Zone 2pm-9pm Mon-Sun, 1P 8am-2pm Mon-Sat	1
CP1 (Cooke St East Parking Area)	2P 8am-6pm Mon-Sat	296
	Reserved	20
	2P Disabled	11
	Loading Zone 7am-11pm Mon-Sat, 2P 11am-6pm Mon-Sat	6
	Loading Zone	5
CP2 (Dunstan St Parking Area)	2P 8am-6pm Mon-Sat	37
	Loading Zone	5
	Reserved	4
CP4 (Thomas Street South Carpark)	2P 8am-6pm Mon-Sat	94
	2P Disabled	2
Dustan St	¼ P 8am-6pm Mon-Fri, 8am-1pm Sat	4
	½ P 8am-6pm Mon-Sat	2
	TOTAL	**553**

Compliance With Parking Restrictions

In-ground sensor data from Thursday 25 July 2024 was extracted to align with the weekday parking survey. The analysis focused specifically on vehicle stay durations within the designated restriction hours, excluding parking activity outside these times. This targeted approach aims to accurately assess compliance with time-limited parking restrictions during enforced periods.

The compliance rate observed in the Clayton core area was high, with the overwhelming majority of car park users complying with the relative restriction. The parking area with the lowest observed compliance rate was the ¼ P parking spaces in zone 1 with 84% of parked vehicles complying with parking restrictions.

6.3.1.1 Zone 3 – Context

The Clayton Zone 3 includes off-street parking spaces on Carinish Road which includes 12 car parking spaces.

The existing restrictions and inventory within this area is shown in Table 6.2 and occupancy in Figure 6.5 and Figure 6.6.

Table 6.2: Clayton Core Area – Existing Restrictions Zone 3

STREET NAME	RESTRICTION	CAPACITY
Carinish Rd	Unrestricted	5
	¼ P	4
	1P 8am-7pm Mon-Fri, 8am-1pm Sat	3
	TOTAL	**12**

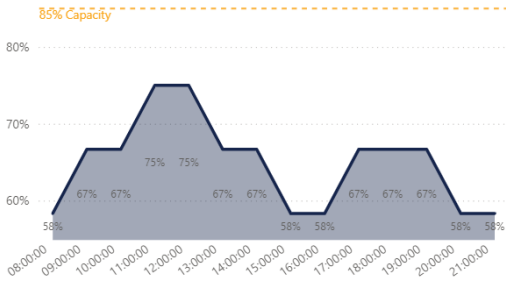

Figure 6.5: Clayton Zone 3 – Occupancy Thursday 25 July 2024

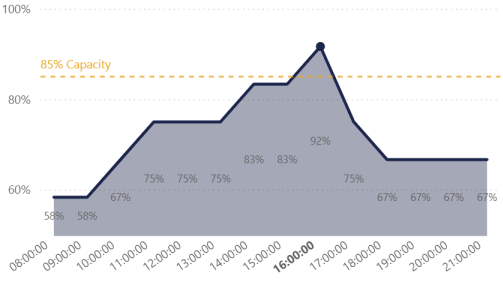

Figure 6.6: Clayton Consolidated Area – Occupancy Saturday 27 July 2024

Clayton Core – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the area suggests the weekend peak occupancy exceeds the target 85% occupancy.

Analysis of the parking occupancy data suggest modifications to parking management tools are required within the following areas:

- Cooke Street East Parking Area
- Clayton Road (Dunstan Road to Centre Road)
- Thomas Street South Car Park

6.3.2 Outer Area

The Clayton outer area is predominately residential, the car parking surveys results indicate an inventory of 1,216 parking spaces and an occupancy well below the target 85% occupied.

Existing Parking Conditions

The car parking survey within the outer area and occupancy on Thursday 25 July 2024 is provided in Figure 6.7, the occupancy results for the outer area is shown in Figure 6.8 and Figure 6.9.

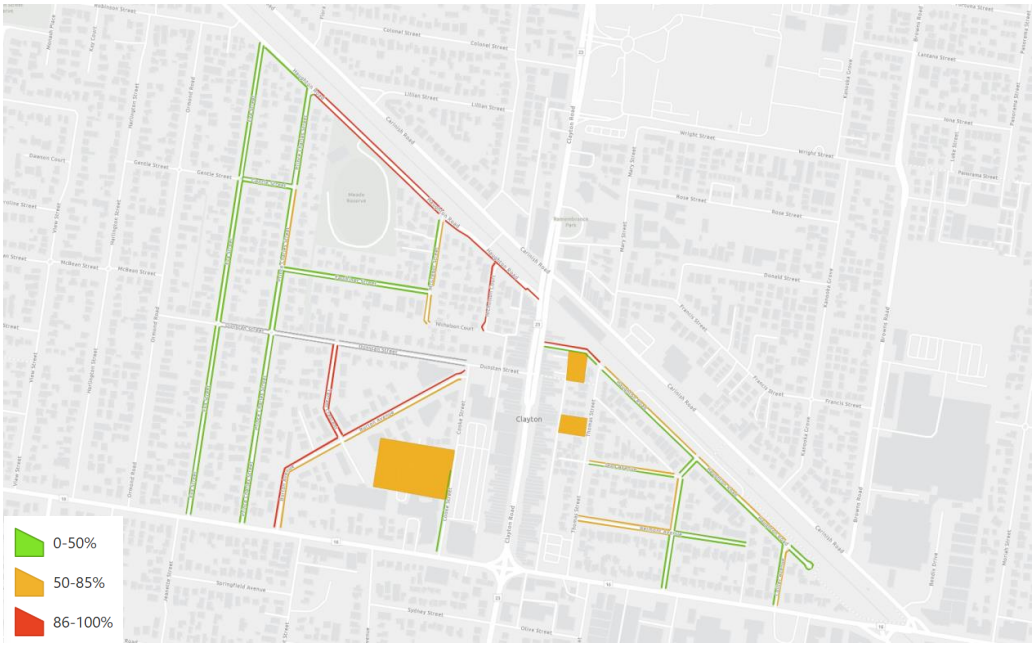

Figure 6.7: Car Parking Areas Included Within Clayton Outer Area – Occupancy on Thursday 25 July 2024

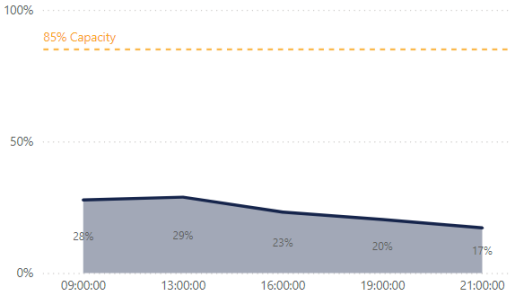

Figure 6.8: Clayton Outer Area – Occupancy Thursday 25 July 2024

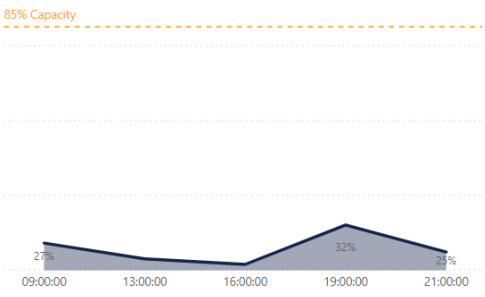

Figure 6.9: Clayton Outer Area – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within this area is shown in Table 6.3.

Table 6.3: Clayton Outer Area Parking Restrictions

STREET NAME	RESTRICTION	CAPACITY
Belmont Ave	2P 8am-6pm Mon-Fri	12
	Unrestricted	37
Burton Ave	4P 8am-6pm Mon-Fri	9
	2P 8am-5pm Mon-Fri	31
	Unrestricted	41
Collier Ave	2P 8am-6pm Mon-Fri	7
	Unrestricted	9
Cooke St	P 5mins	5
CP3 (Cooke Street West Parking Area)	Loading Zone	1
	P 5mins	1
	P Disabled	4
	½ P 8am-6pm Mon-Sat	7
	Private Parking	9
	No Parking 8am-6pm Mon-Sat (Authorised Community Staff Expected)	62
	3P 8am-6pm Mon-Sat	135
CP5 (Thomas Street North Parking Area)	2P 8am-6pm Mon-Sat	42
CP6 (Public Parking at the corner Haughton Road/ Thomas Street)	2P Disabled	4
	2P 8am-6pm	42
Dustan St	Permit Zone 8am-6pm	7
	4P 8am-6pm	11
	Unrestricted	54
Eva St	Unrestricted	116
Faulkiner St	2P 8am-6pm Mon-Fri	20
	Unrestricted	22
Gentle St	Unrestricted	18
Haughton Rd	2P 8am-6pm Mon-Fri Council Maintenance Vehicles Excepted	2
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	3
	P 5mins	3
	2P 8am-6pm Mon-Fri	20
	Unrestricted	93
Haughton Rd (Clayton Rd to Nicholson Ct) (Construction)	Unrestricted	8
	2P 8am-6pm Mon-Sat Authorised Vehicles Excepted	9

STREET NAME	RESTRICTION	CAPACITY
	2P 8am-6pm Mon-Fri	10
	Unrestricted	31
	P	79
Jean Ave	2P 8am-6pm Mon-Fri	16
	Unrestricted	18
McGregor St	2P 8am-6pm Mon-Fri	13
	Unrestricted	21
Nicholson Ct	4P 8am-6pm Mon-Sat	10
Princecharles St	Unrestricted	125
Pullyn St	2P 8am-6pm Mon-Fri	3
	2P 8am-6pm Mon-Sat	4
	2P	9
	Unrestricted	20
Yarram Cres	Unrestricted	13
	TOTAL	**1,216**

Clayton Outer - Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Clayton area suggests parking occupancy is generally well below the target 85% occupancy as indicated within Figure 6.8 and Figure 6.9.

Considerations should be given to easing/removing existing parking restrictions within the outer area. Filtering the occupancy data for car parking spaces in the Clayton outer area with existing time restrictions reveals peak parking occupancy between 50-85% as shown in Figure 6.10 and Figure 6.11. However, an analysis of occupancy levels on individual streets reveals that some have exceeded the 85th percentile threshold. Recommendations are therefore being sought for these streets (see Table 6.4).

Therefore, it is recommended to retain the existing parking restrictions across the Clayton outer area.

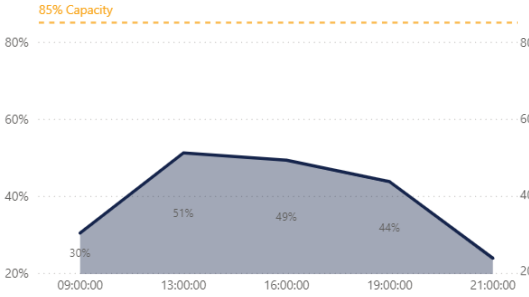

Figure 6.10: Clayton Outer Area – Occupancy Thursday 25 July 2024 – Spaces with Existing Time Restrictions

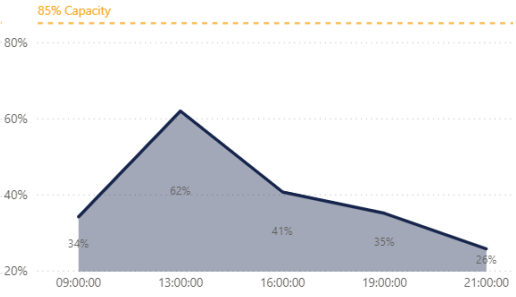

Figure 6.11: Clayton Outer Area – Occupancy Saturday 27 July 2024 – Spaces with Existing Time Restrictions

6.4 Summary of Clayton Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 6.4.

Table 6.4: Clayton – Summary of Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	Cooke Street East Parking Area	2P 8am-6pm Mon-Sat	100% Occupancy - 1:00pm-3:00pm 25 July 2024 100% Occupancy - 12:00pm-3:00pm	• Consider adjusting time restrictions for some spaces • Consider extending current restrictions to 8pm and on Sundays • Consider sensors and dynamic signage at vehicle entry to car park on Cooke Street to indicate car park availability and direct to additional car parks within surrounds (Cooke St West parking area, Dunstan St parking area) • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking
	Clayton Road (Dunstan Road to Centre Road	1P 8am-6pm Mon-Fri, 8am-1pm Sat	100% Occupancy - 8pm 25 July 2024 100% Occupancy - 27 July 2024 12:00pm-6:00pm	• Consider extending restrictions to 8pm including Saturdays and Sundays • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
	Thomas Street South Car Park	2P 8am-6pm Mon-Sat	98% Occupancy - 7pm 25 July 2024 100% Occupancy - 9pm 27 July 2024	• Extend parking restrictions to 8pm and on Sundays • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
OUTER	Haughton Road * (Between Nicholson Court and McGregor Street) Nicholson Court	Unrestricted and Timed Restrictions	All streets specified have peak occupancies above 85%	• Consider adjusting time restrictions to provide shorter and consistent restrictions (*It is noted that the SRLA works may have impacted surveys. Continued monitoring is required following the SLRA changes including the Carinish Road East closure)

6.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances, changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Installing dynamic and wayfinding parking signage to detail the location and availability of parking in specific areas
- Promoting car sharing across the area and providing car share only spaces
- Consider the car parking hierarchy in residential areas
- For any major changes to parking restrictions a trial implementation period could be undertaken where the controls are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

7 OAKLEIGH ACTIVITY CENTRE

Oakleigh Activity Centre is designated as a Major Activity Centre under the Victorian Government's '*Plan Melbourne'* strategy, reflecting its strategic transport significance due to the following factors:

- **Transport Hub:** Oakleigh serves as a vital public transport node, featuring the Oakleigh Railway Station with direct connections to Melbourne's CBD and multiple bus routes linking surrounding suburbs. These robust transport links encourage public and active transport use, reducing reliance on private vehicles.
- **Commuter Parking:** The centre's proximity to the railway station attracts long-term commuter parking, creating challenges in maintaining short-term parking availability for local businesses.
- **High Parking Demand:** The diverse mix of retail, dining, and entertainment options, along with residential developments, generates high parking demand, particularly around key areas like Oakleigh Central.
- **Sustainable Transport Goals:** The City of Monash aims to enhance sustainable transport through improved public transport services, pedestrian-friendly infrastructure, and cycling facilities. Effective parking management is crucial to balancing high demand with the promotion of alternative transport modes.

7.1 Survey Results Snapshot

The Oakleigh study area has a total of 3,707 parking spaces, comprising 1,987 on-street and 1,720 off-street spaces.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 7.1.

7.1.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to Council parking only. Private car parks within the core area of note include:

- **Oakleigh Central shopping Centre:** Zone 2
- **VicTrack Commuter Parking:** Zones 1, 2, 11
- Private car parking areas is shown within Figure **7.2**.

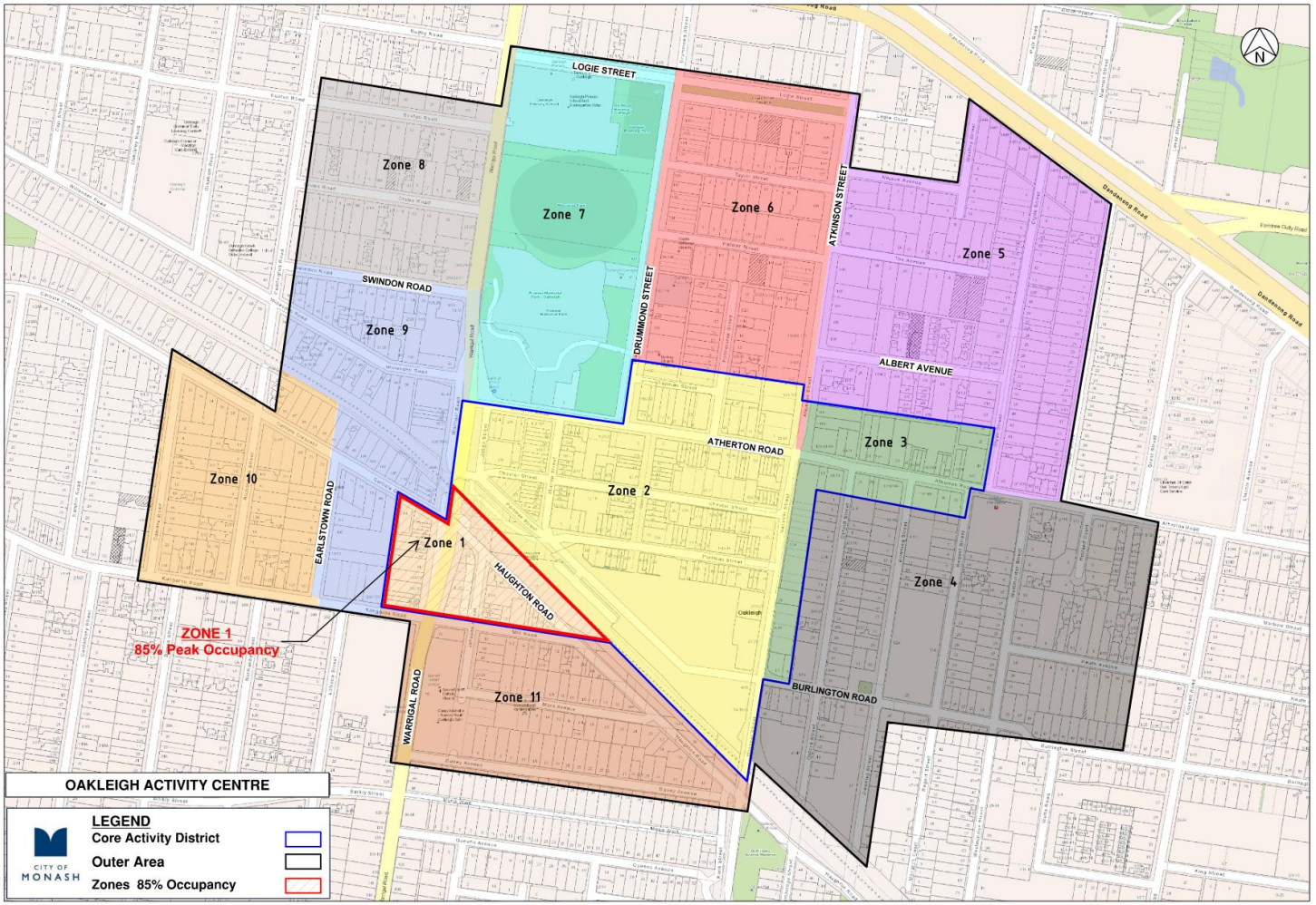

Figure 7.1: Oakleigh Core – Zones with Peak Occupancy Exceeding 85% Occupancy

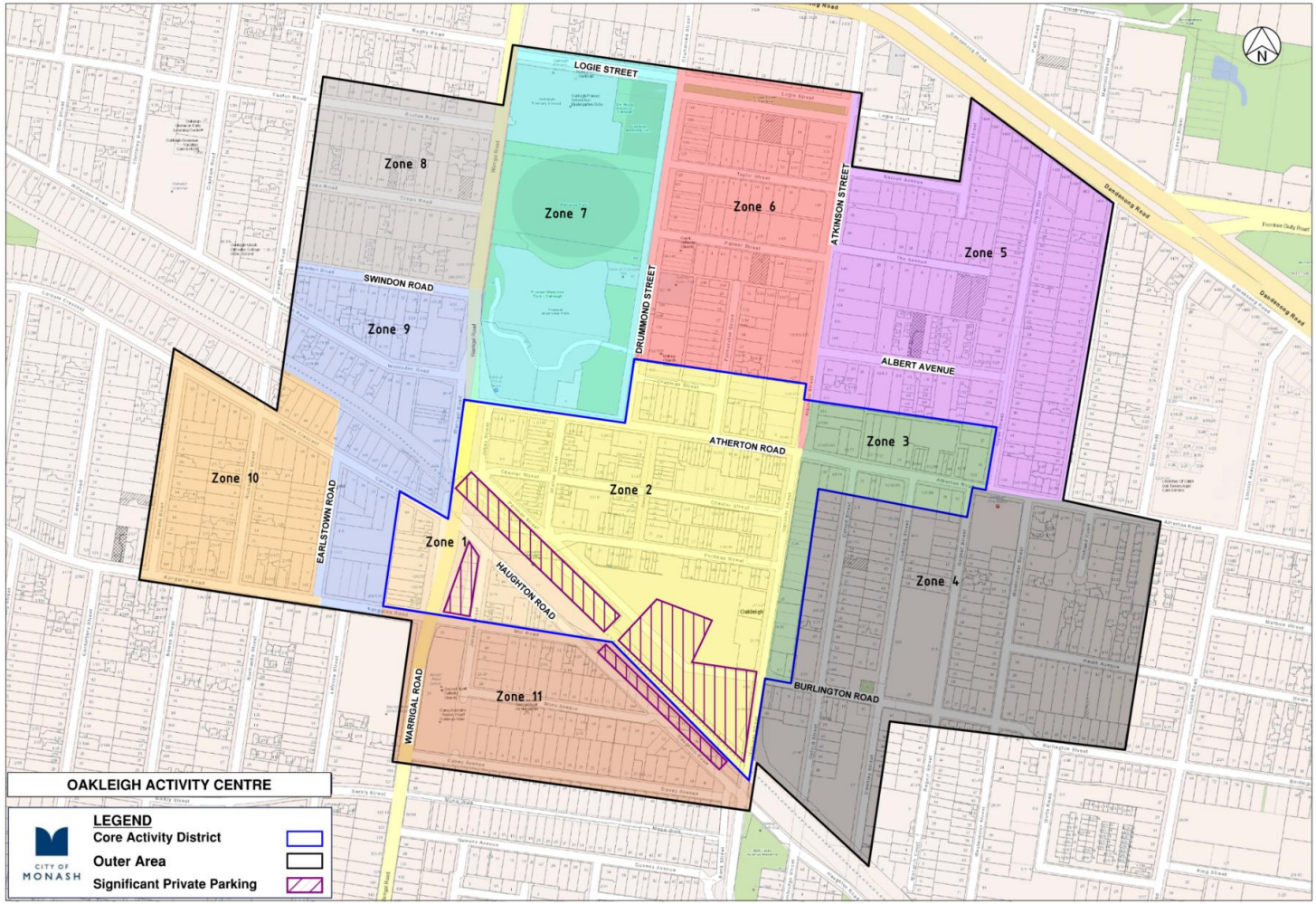

Figure 7.2: Private Parking in Oakleigh Activity Centre

7.2 Analysis – Parking in Oakleigh

7.2.1 Core Area

Parking data analysed in Figure 7.1 indicates that Zone 1 peak occupancy was 85%, and all other zones are within the 85% target peak occupancy.

Oakleigh Core Context

The Oakleigh core area includes the Oakleigh railway station, Oakleigh Central shopping centre and retail shopping on Portman Street and Eaton Mall. Car parking in the Oakleigh core and the immediate surrounds includes:

- Commuter parking on:
  - Haughton Road, Portman Street, Johnson Street
- Patron parking in Oakleigh Central
- Off-street Parking on:
  - Hanover Street, Chester Street, Atkinson Street
- On-street parking on:
  - Portman Street, Chester Street, Atherton Road, Station Street, Johnson Street, Haughton Road

Existing Car Parking Conditions

The Oakleigh core includes 1,084 car parking spaces understood to be managed and operated by Council as shown in Figure 7.3. The occupancy across the core area is shown in Figure 7.4 and Figure 7.5.

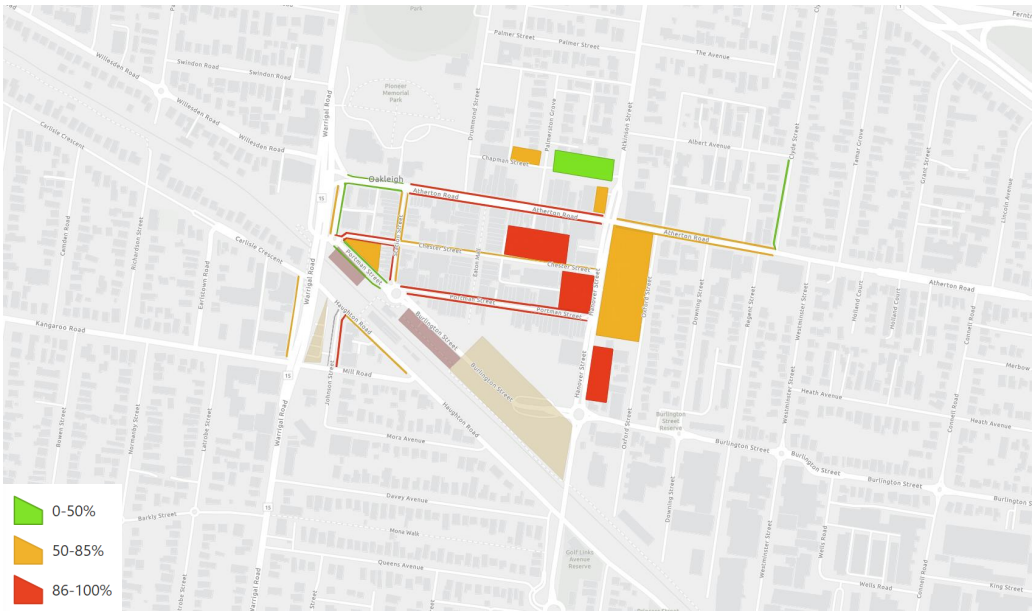

Figure 7.3: Car Parking Areas Included within Oakleigh Core

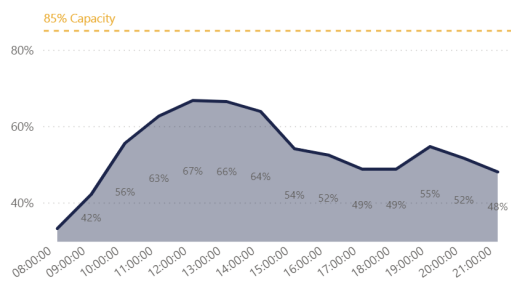

Figure 7.4: Oakleigh Core – Occupancy Thursday 25 July 2024

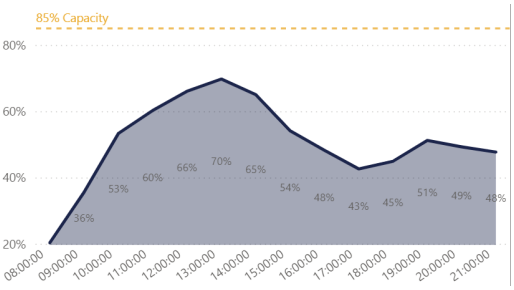

Figure 7.5: Oakleigh Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within this area is shown in Table 7.1.

Table 7.1: Oakleigh Core Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Atherton Rd	¼ P 8am-8pm Mon-Sat	1
	1P 8am-6pm Mon-Sat	1
	Bus Zone	1
	No Parking Police Vehicles Excepted	1
	No Standing	1
	¼ P 8am-8pm	2
	2P 8am-8pm	3
	¼ P 8am-10pm	5
	1P 8am-8pm Mon-Sat	12
	1P 8am-8pm	49
Chester St	1P DDA Only	1
	30min Loading Zone 8am-6pm Mon-Fri, 8am-1pm Sat	1
	Loading Zone 30 min 8am-6pm Mon-Fri, 8am-1pm Sat	2
	Loading Zone 8am-6pm Mon-Fri, 8am-1pm Sat	2
	¼ P 8am-8pm	3
	Drop-off 2 mins Only	3
	Loading Zone 5am-8am, Mon-Fri, 1P 8am-8pm	5
	Motorcycle Only Angle Parking	6
	½ P 8am-8pm	10
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	14
	1P 8am-8pm	25
Clyde St	2P 8am-6pm Mon-Sat, Authorised Vehicles Excepted	14
CP1 (Atkinson Street Parking Area)	3P 8am-8pm DDA Only	3
	3P 8am-8pm	273
CP10 (Chester Street West Parking Area)	2P Disabled	1
	2P Casual	19
CP12 (3 Palmerston Grove)	2P 8am-8pm	31
CP2 (61 Atherton Road)	Loading Zone	1
	Customer Parking Only	18
CP3 (Chester St Carpark)	2P 8am-8pm Disabled Only	6
	2P 8am-8pm	72
CP4 (Hanover St Parking Area-carpark 2)	Loading Zone 6am-11am Mon-Fri, 2P 11am-8pm Mon-Fri, 8am-8pm Sat-Sun	1
	2P 8am-8pm DDA Only	2

STREET NAME	RESTRICTION	CAPACITY
	2P 8am-8pm	51
CP5 (30-36 Hanover St Carpark)	4P Disabled Only	1
	4P	27
	4P 8am-6pm Mon-Sat, Authorised Vehicles Excepted	34
CP6 (Hanover St Parking Area)	2P 8am-8pm, Authorised Vehicles Excepted	22
	2P 8am-8pm, Sunday Keep Clear 6am-2pm	223
Haughton Rd	Bus	1
	P 2min Railway Replacement Excepted	3
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	6
Johnson St	Bus Zone	1
	1P	3
	2P	9
Jones St	2P 8am-8pm	12
Portman St	1P Disabled Only	1
	¼ P 8am-8pm	2
	1P 8am-8pm Mon-Sat	2
	Loading Zone 30 min 8am-8pm Mon-Fri, 1P Sat-Sun	2
	Loading Zone 30 min Mon-Fri, 1P 8am-8pm	2
	Loading Zone 30mins	2
	Loading Zone 5am-11:30am Mon-Sat, ½ P 11:30am-8pm	2
	Loading Zone 6am-10am Mon-Fri, P 10min All Other Times	2
	Loading Zone 8am-6pm Mon-Fri, 8am-1pm Sat	2
	Bus Zone	3
	1P 8am-6pm Mon-Thu, 8am-9pm Fri, 8am-1pm Sat	7
	1P 8am-8pm	37
Station St	Loading 8am-6pm Mon-Sat	1
	Loading Zone 15mins 8am-6pm Mon-Sat	2
	1P 8am-8pm	21
Warrigal Service Rd	½ P	2
	P15mins	3
	2P	9
	TOTAL	**1,084**

Compliance with Parking Restrictions

In-ground sensor data from Thursday 25 July 2024 was extracted to align with the weekday parking survey. The analysis focused specifically on vehicle stay durations within the designated restriction hours, excluding parking activity outside these times. This targeted approach aims to accurately assess compliance with time-limited parking restrictions during enforced periods.

It was observed that parking overstays were most common where short time limits apply especially in parking restrictions 15 minutes and under in zones 2 & 3.

It is recommended to review areas with low compliance, and either increase enforcement or update restrictions to better align parking demands of the areas. For example, for the 15min spaces in zone 3 (near corner of Atherton Road and Atkinson Street) which had a compliance rate of 44%, update restrictions to either loading zone to service the retail businesses or update restrictions to serve short term customers (1/2 P or 1P).

Oakleigh Core – Recommended Locations to Modify Parking Management:

Review of the existing restrictions and parking occupancy across the core area suggests whilst the peak parking occupancy across any particular zone nor the core holistically does not exceed the target 85%, some individual parking areas do exceed 85% and may require additional parking management.

Parking areas in the Oakleigh core that require additional parking management include:

- On-street parking on:
  - Portman Street (Station Street to Hanover Street)
  - Atherton Road
  - Chester Street
  - Station Street
- Off-street parking on:
  - Hanover Street (west)
  - Chester Street (north)

Maps showing the parking occupancy in the Oakleigh Core area are provided in Figure 7.6.

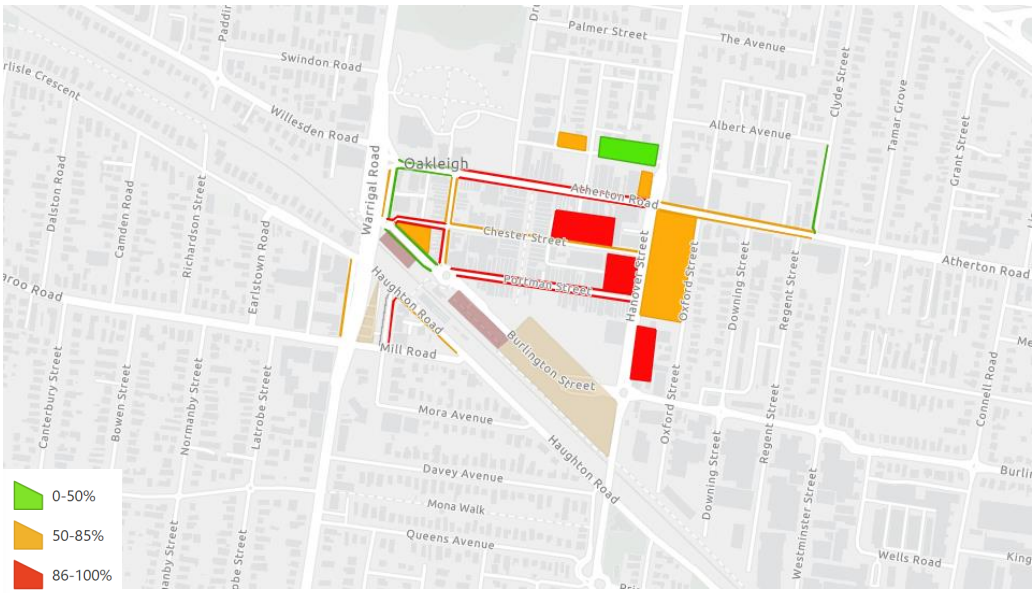

Figure 7.6: Oakleigh Core – Peak Parking Occupancy

7.2.2 Outer Area

The Oakleigh outer area is predominately residential, noting the open sports ground (Warrawee Park) and education (Sacred Heart Girls College and Sacred Heart Primary School) land uses. The car parking survey results indicate an inventory or 1,725 spaces and an occupancy well below the target 85%.

Existing Parking Conditions

The car parking surveyed within the outer area and occupancy on Thursday 25 July 2024 is shown in Figure 7.7. The occupancy results for the outer area in Figure 7.8 and Figure 7.9.

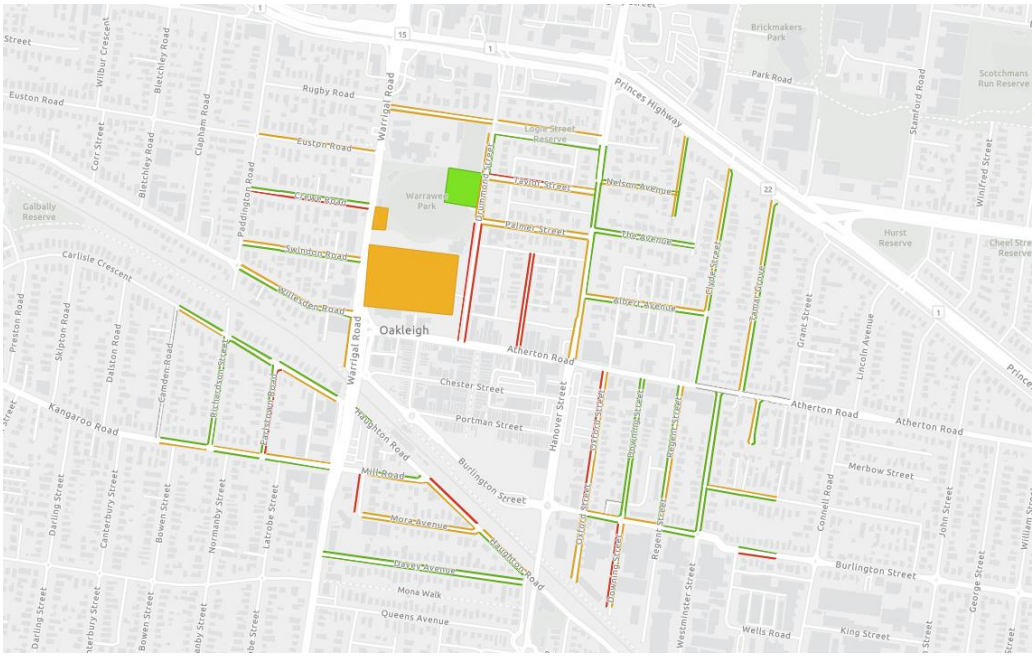

Figure 7.7: Car Parking Areas Included Within Oakleigh Outer Area – Occupancy on Thursday 25 July 2024

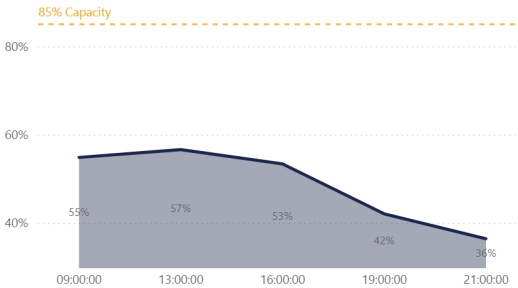

Figure 7.8: Oakleigh Outer Area – Occupancy Thursday 25 July 2024

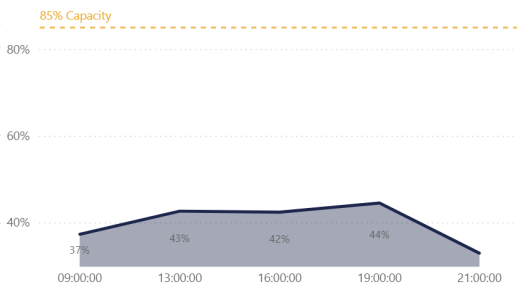

Figure 7.9: Oakleigh Outer Area – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within the Oakleigh outer area is shown in Table 7.2.

Table 7.2: Oakleigh Outer Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Albert Ave	1P 8am-6pm Mon-Sat	21
	1P 8am-6pm Mon-Sat, Authorised Vehicles Excepted	26
Atherton Rd	Bus Zone	4
	2P 8am-6pm Mon-Fri	9
	Unrestricted	16
Atkinson St	1P 8am-6pm Mon-Fri	1
	Bus Zone	2
	2P 8am-6pm Mon-Fri	7
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	11
	2P 8am-6pm Mon-Fri Authorised Vehicles Expected	29
	2P 8am-6pm Mon-Fri, Authorised Vehicles Excepted	35
Burlington St	Bus Zone	1
	P15mins 8am-5pm Mon-Fri	2
	¼ P	3
	2P 8am-6pm Mon-Sat	7
	2P 8am-6pm Mon-Fri	10
	Unrestricted	11
Camden Rd	2P 8am-6pm Mon-Fri	14
	Unrestricted	18
Carlisle Cres	Bus Zone	1
	½ P	4
	2P 8am-6pm Mon-Fri	9
	Unrestricted	9
	2P	18
Clyde St	2P 8am-6pm Mon-Fri	6
	Unrestricted	9
	2P 8am-6pm Mon-Fri, Authorised Vehicle Excepted	13
	Permit Zone 8am-6pm Mon-Fri	17
	Permit Zone 8am-6pm	25
CP13 (Warrawee Park Carpark)	4P Disabled	2
	No Parking 8am-6pm Mon-Fri Oakleigh Centre Service Staff Expected	11
	4P 8am-8pm Authorised Vehicle Excepted	19
	4P 8am-8pm	54
	2P 8am-6pm Mon-Fri	10

STREET NAME	RESTRICTION	CAPACITY
CP14 (D W Nicoll Reserve Carpark)	4P 8am-6pm Mon-Fri Authorised Vehicle Excepted	10
	4P 8am-6pm Mon-Fri	20
CP15 (D W Nicoll Reserve Parking- next to Oakleigh Cricket Club)	Unrestricted	10
Crewe Rd	½ P 8am-6pm	4
	1P 8am-6pm	6
	Permit Zone	13
	Unrestricted	17
Davey Ave	P2 Min 8am-9am, 3pm-4pm School Days	5
	Permit Zone	30
	2P 8am-5pm, Mon-Fri, 8am-12noon Sat	51
Downing St	1P 8am-6pn Mon-Sat	1
	½ P 8am-6pm Mon-Sat	2
	No Stopping 8am-6pm Mon-Fri, 2P 8am-6pm Sat	2
	No Parking	8
	Residential Permit Zone	9
	2P 8am-6pm Mon-Sat	18
	2P 8am-6pm Mon-Sat, Authorised Vehicles Excepted	28
	Unrestricted	31
Drummond St	2P DDA Only	2
	Unrestricted DDA Only	3
	2P 8am-8pm	5
	4P 8am-6pm Mon-Fri Oak PS/K & Oak BC Vehicle Excepted	7
	2P 8am-8pm Mon-Sat, 4P 8am-8pm Sun	9
	2P 8am-8pm, Authorised Oakleigh Halls Users Excepted	12
	4P 8am-6pm Mon-Fri	15
	1P 8am-8pm	29
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	38
	2P 8am-6pm Mon-Fri Authorised Vehicle Excepted	39
Earlstown Rd	Bus Zone	1
	3P	7
	Permit Zone	9
Euston Rd	1/2P 8am-10am, 3pm-6pm Mon-Fri	6
	Unrestricted	32
Haughton Rd	P2 Min	1
	2P 8am-6pm Mon-Sat	3
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	4

STREET NAME	RESTRICTION	CAPACITY
	4P 8am-6pm Mon-Sat	10
Health Ave	2P 8am-6pm Mon-Fri	10
	Unrestricted	11
Holland Ct	2P 8am-6pm Mon-Fri	18
Johnson St	4P 8am-5pm Mon-Fri, 8am-12noon Sat	12
	Permit Zone 8am-5pm School Days	13
Kangaroo Rd	Bus Zone	1
	1P 9am-3pm	3
	Bus Zone 8am-9am, 3pm-4pm Mon-Fri, 2P 9am-3pm Mon-Fri	3
	2P 8am-6pm Mon-Fri	28
Logie St	4P Disabled Only 8am-6pm Mon-Fri	1
	P Disabled Only	1
	2P All Other Times	3
	Residential Permit Zone 8am-6pm	5
	½ P Mon-Fri	10
	4P 8am-6pm Mon-Fri Oak Ps/K Vehicles Excepted	23
	4P 8am-6pm Mon-Fri	32
Mill Rd	Permit Zone 3pm-7pm Mon-Fri	9
	2P Mon-Fri	12
Mora Ave	4P 8am-5pm Mon-Fri, 8am-12noon Sat	6
	P2 min 8:15am-8:45am, 3:15pm-3:45pm School Days	9
	2P 8am-5pm Mon-Fri, 8am-12noon Sat	31
Nelson Ave	2P 8am-6pm Mon-Fri	16
Oxford St	¼ P 8am-6pm Mon-Sat	2
	Residential Permit Zone	6
	2P 8am-8pm, Permit Zone All Other Times	22
	Unrestricted	22
	2P 8am-8pm, Authorised Vehicles Excepted	28
Palmer St	Unrestricted	5
	2P 8am-6pm Mon-Fri Authorised Oakleigh Halls User Excepted	8
	2P 8am-6pm Mon-Fri Authorised Vehicle Excepted	17
	2P 8am-6pm Mon-Sat	19
Palmerston Grove	1P 8am-8pm	3
	1P Disabled Only	3
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	7
	Residential Permit Zone	19
	Permit Zone Residential & Trader	23
Regent St	2P 8am-6pm Mon-Sat	23

STREET NAME	RESTRICTION	CAPACITY
	2P 8am-6pm Mon-Sat Authorised Vehicle Excepted	23
Richardson Rd	Bus Zone	1
	2P 8am-6pm Mon-Fri	27
ROW	2P 8am-6pm Mon-Fri	2
	2P 8am-6pm, Mon-Fri	2
Swindon Rd	¼ P 8am-6pm	2
	2P 8am-6pm	6
	Residential Permit Zone	13
	Unrestricted	13
Tamar Grove	Work Zone 8am-6pm Mon-Fri	1
	No Stopping Mon-Fri	5
	Unrestricted	12
	2P 8am-6pm Mon-Fri Authorised Vehicles Expected	17
	2P 8am-6pm Mon-Fri	21
Taylor St	Unrestricted	4
	2P 8am-6pm Mon-Sat Authorised Vehicle Excepted	15
	2P 8am-6pm Mon-Sat	16
The Avenue	2P 8am-6pm Mon-Fri	41
Warrigal Service Rd	P 15mins 8am-6pm Mon-Sat	1
	2P 8am-6pm Mon-Sat	8
Westley St	Unrestricted	11
	Permit Zone 8am-8pm Mon-Fri	12
Westminster St	2P 8am-6pm Mon-Fri Authorised Vehicles Excepted	19
	2P 8am-6pm Mon-Fri	22
Willesdon Rd	P Disabled	1
	Permit Zone	7
	1P 8am-6pm Sat & Sun, 2P 8am-6pm Mon-Fri	8
	Unrestricted	20
	TOTAL	**1,725**

Oakleigh Outer – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Oakleigh area suggests parking occupancy is generally well below the target 85% occupancy as indicated within Figure 7.8 and Figure 7.9.

Analysis of specific parking areas (zones as shown in Figure 7.1) and on-street parking within the Oakleigh outer area suggests sufficient occupancy across each zone. Noting the peak occupancy exceeds 50%.

Filtering the occupancy data for parking spaces with permit zones, reveals 205 car parking spaces within the Oakleigh outer area have permit restrictions. The occupancy data for theses spaces is shown in Figure 7.10 and Figure 7.11.

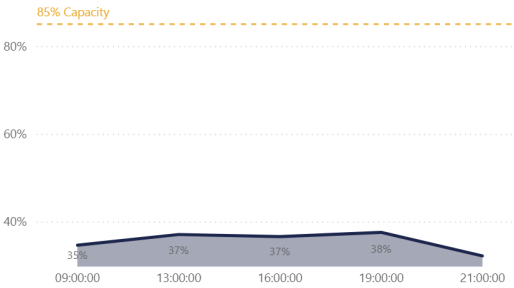

Figure 7.10: Oakleigh Outer Area – Occupancy Thursday 25 July 2024 – Spaces with Permit Restrictions

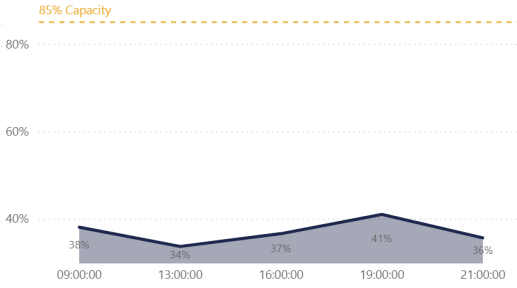

Figure 7.11: Oakleigh Outer Area – Occupancy Saturday 27 July 2024 – Spaces with Permit Restrictions

Considering the low occupancy of parking spaces with permit zone restrictions applied, consideration could be given to removing some permit parking restrictions, this is especially relevant on Clyde Street, Westley Street, Willesden Road, Swindon Road, Earlstown Road and Davey Avenue, as they all have occupancy lower than 50% with existing residential permits.

7.3 Summary of Oakleigh Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 7.3.

Table 7.3: Oakleigh – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	Portman Street (Station Street to Hanover Street)	1P 8am-8pm	100% Occupancy - 8:00pm 25 July 2024 100% Occupancy 11am 27 July 2024	• Consider extending parking restrictions beyond 8pm • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
	Atherton Road (Station Street to Atkinson Street)	1P 8am-8pm	91% Occupancy - 11am to 12 midday 25 July 2024 97% Occupancy 11am to 12 midday 27 July 2024	• Consider extending parking restrictions beyond 8pm • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
	Station Street	1P 8am-8pm	95% Occupancy 11:00am & 4:00-6:00pm 25 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
	Hanover Street (West off Street parking area)	2P 8am-8pm	100% Occupancy 1pm 25 July 2024 98% Occupancy 3:00pm 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Consider dynamic signage to indicate car park availability and direct to surrounding car parks • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
OUTER	Chester Street	1P 8am-8pm	78% occupancy 11am 25 July 2024 66% occupancy 6pm 27 July 2024	• Apply an area based approach that considers the impact of wider parking change in the surrounding area • • Provide consistent restrictions on-street and consolidate underutilised 2-minute, 1/4P and 1/2P restricted spaces • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
	Chester Street (North off Street parking area)	2P 8am-8pm	100% Occupancy 11am-1pm 25 July 2024 100% Occupancy 11am 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Consider dynamic signage to indicate car park availability and direct to surrounding car parks • Explore paid parking
	Clyde Street, Westley Street, Willesden Road, Swindon Road, Earlstown Road and Davey Avenue,	Permit Zones (Various Times)	All streets specified have peak occupancies below 50%	• Consider easing permit restrictions and/or time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing/adjusting restrictions
	Drummond Street (Between Palmer Streer – Atherton Road	2P 8am-8pm Mon-Fri, 8am-1pm Sat	92% 7pm 25 July 2024 91% 7pm 27 July 2024	• Provide consistent restrictions on-street • Consider extending current restrictions to 8pm Saturday and on Sundays • Explore paid parking
	Palmerston Grove	Permit Zones 1P at retail frontages	91% 1pm-4pm 25 July 2024 87% 1pm 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Explore paid parking at retail frontages

7.3.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in industrial/commercial areas and residential areas.
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes.

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

8 MOUNT WAVERLEY ACTIVITY CENTRE

8.1 Background

Mount Waverley Activity Centre is recognized for its strategic transport significance due to the following factors:

- **Transport Hub:** Mount Waverley features the Mount Waverley Railway Station, providing direct access to Melbourne's CBD and connecting bus routes, facilitating efficient public transport options and reducing reliance on private vehicles.
- **Local Parking Pressures:** The centre experiences steady parking demand driven by its mix of retail, dining, and community services. While parking availability supports local businesses, growing residential density in the surrounding area poses challenges in balancing commuter and local parking needs.
- **Suburban Growth and Accessibility:** As an activity centre surrounded by established residential areas, Mount Waverley plays a critical role in providing local services, reducing the need for long-distance travel, and supporting environmentally sustainable transport behaviours.
- **Sustainable Mobility Focus:** Mount Waverley is well-positioned to contribute to the City of Monash's sustainable transport goals. Investments in pedestrian-friendly pathways, enhanced cycling infrastructure, and improved connections to public transport are key priorities for reducing car dependency and promoting active and public transport.

8.2 Survey Results Snapshot

There are a total of 2,476 parking spaces available within the Mount Waverly Activity Centre study area. Of the 2,476 parking spaces available within the study area 1,093 spaces are located on-street with the remaining 1,383 spaces located off-street.

A summary of car parking survey results of zones with the highest occupancies during the peak period is shown in Figure 8.1. No zones in Mount Waverley Activity Centre area had a peak occupancy exceeding 85%.

8.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **VicTrack Commuter Parking:** Zone 5, 7 and 3

Private car parking areas is shown within Figure 8.2.

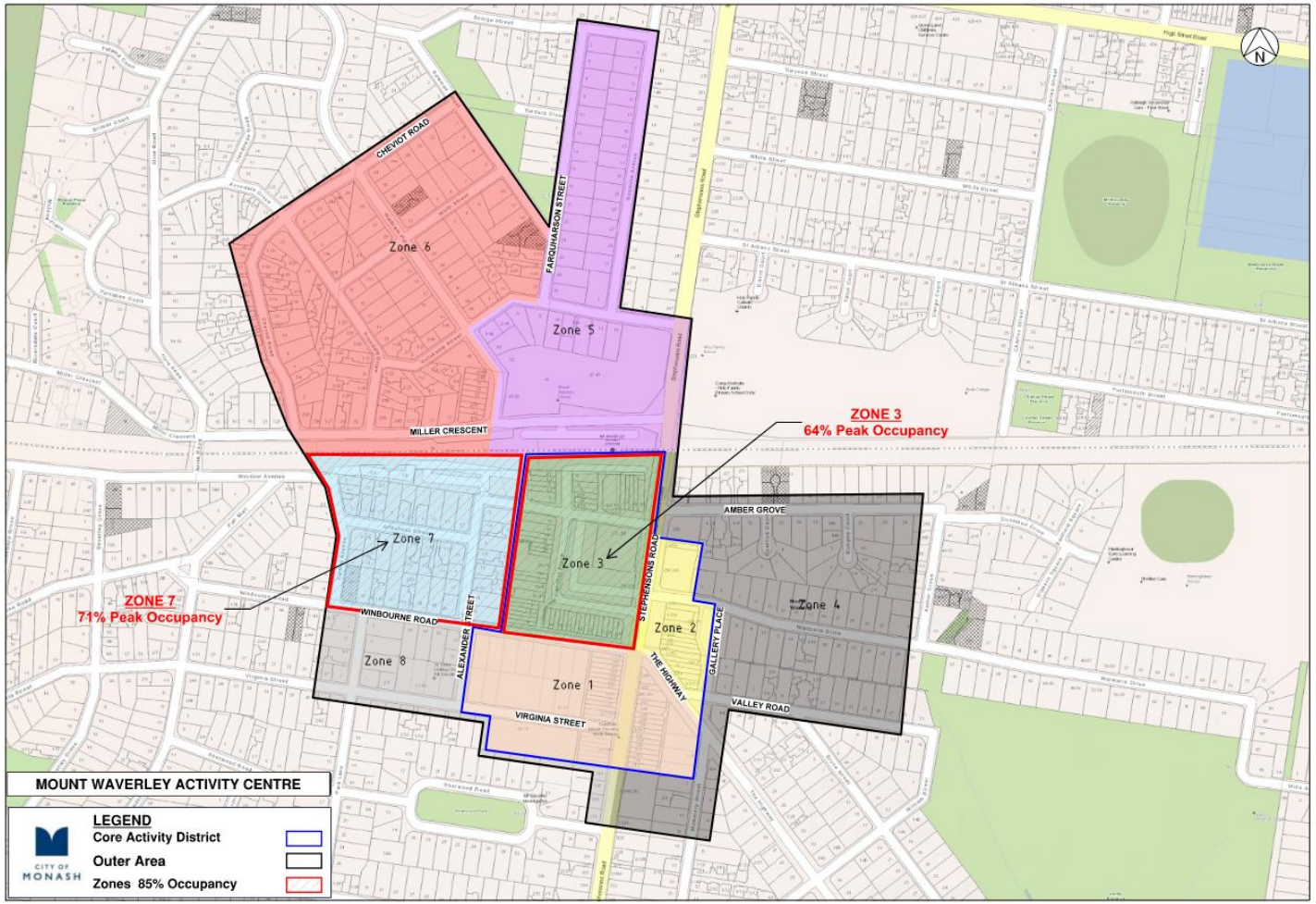

Figure 8.1: Mount Waverley Core – Zones with Highest Peak Occupancy

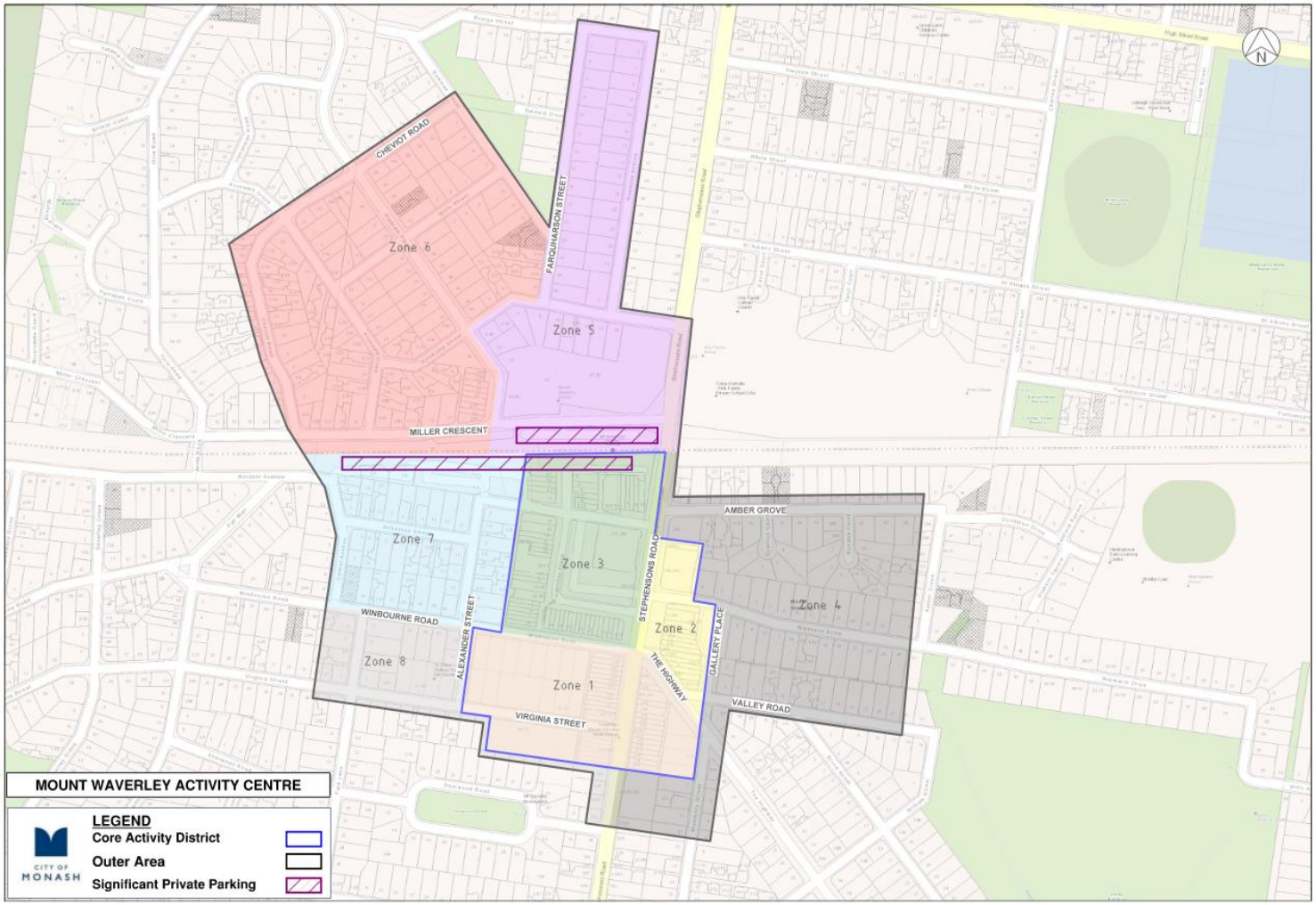

Figure 8.2: Private Parking in Mount Waverley Activity Centre

8.3 Analysis – Parking in Mount Waverly Activity Centre

8.3.1 Core Area

Parking data analysed in Figure 8.1 indicated all zones were within the 85% target occupancy.

Mount Waverley Core Context – Zone 3

The Mount Waverley core area includes the Mount Waverley railway station, commercial/retail precinct on Stephensons Road and Hamilton Place. Car parking within the core includes:

- Commuter parking on:
  - Hamilton Place
- Off-street patron/customer parking on:
  - Hamilton Place, Winbourne Road / Virginia Street
- On-street parking on:
  - Winbourne Road, Valley Road, Hamilton Place

Existing Car Parking Conditions

The Mount Waverley zone 3 includes 256 car parking spaces understood to be managed and operated by Council as shown in Figure 8.3. The occupancy across the core area is shown in Figure 8.4 and Figure 8.5.

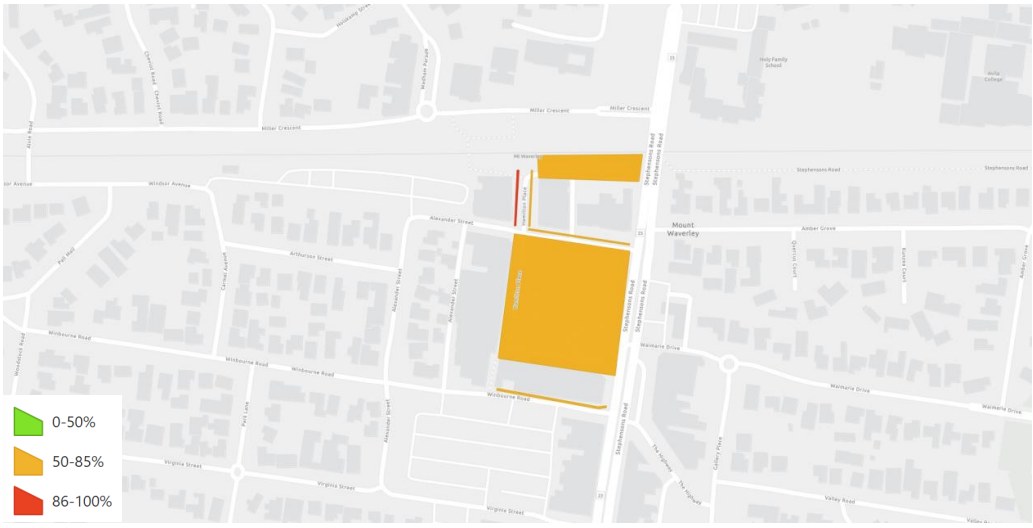

Figure 8.3: Car Parking Areas Included within Mount Waverley Core

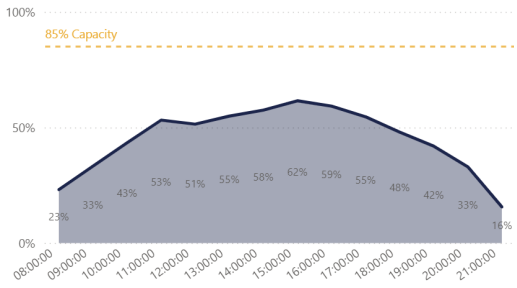

Figure 8.4: Mount Waverley Core – Occupancy Thursday 25 July 2024

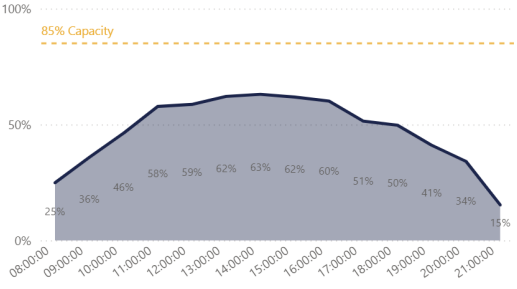

Figure 8.5: Mount Waverley Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within the Mount Waverley core area is shown in Table 8.1.

Table 8.1: Mount Waverley Core Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
CP16 (Mount Waverley Commuter Parking)	Permit Rail Staff	1
	Loading Zone No Parking	1
	Disabled Only	2
CP9 (Hamilton Place Carpark)	Taxi Zone	2
	2P Disabled Only 8am-6pm Mon-Sat	3
	2P Disabled Only	2
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	110
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	90
	15 mins P	3
Hamilton Pl	P Disabled Only	1
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	22
	1P 8am-6pm	9
	¼ P 8am-6pm	2
Winbourne St	No Parking	1
	Loading Zone	2
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	5
	TOTAL	**256**

Mount Waverley Core - Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the core area suggests the peak parking occupancy across all zones falls in the range of 50-85%.

It is therefore recommended to retain the existing parking restrictions within the Mount Waverley core area.

8.3.2 Outer Area

The Mount Waverley outer area is predominately residential noting the community centre use north of Mount Waverley railway station and the Holy Family School on Stephensons Road. The car parking survey results indicate an inventory of 1,198 parking spaces (excluding VicTrack).

Existing Parking Conditions

The car parking surveyed within the outer area and occupancy is shown in Figure 8.6. The occupancy results for the outer area is shown in Figure 8.7 and Figure 8.8.

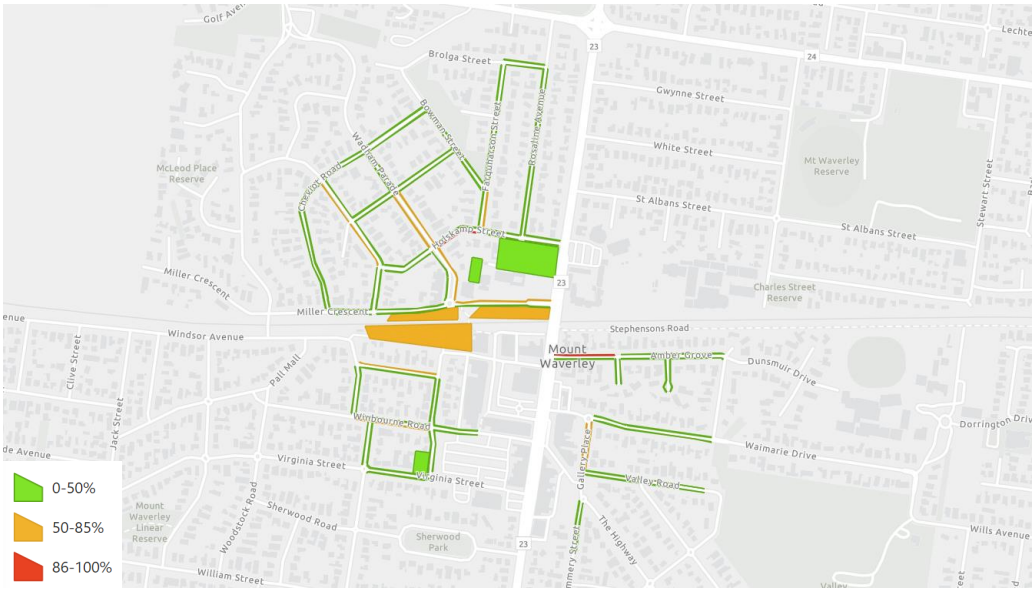

Figure 8.6: Car Parking Areas Included Within Mount Waverley Outer Area

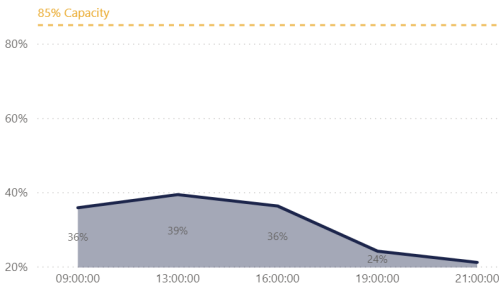

Figure 8.7: Mount Waverley Outer – Occupancy Thursday 25 July 2024

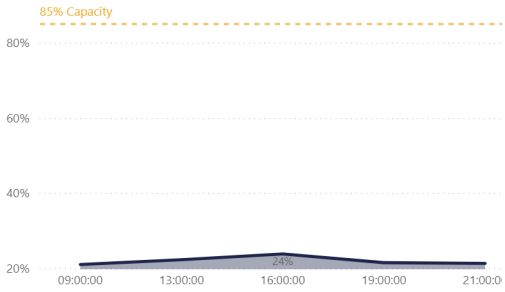

Figure 8.8: Mount Waverley Outer – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within the Mount Waverley outer area is shown in Table 8.2.

Table 8.2: Mount Waverley Outer Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Alexander St	Unrestricted	34
Amber Gr	Unrestricted	30
	2P 8am-6pm Mon-Fri	26
	2P 8am-3pm Mon-Fri, No Stopping 3-4pm Mon-Fri	6
Arthurson St	Unrestricted	10
	2P 8am-6pm Mon-Fri	7
Avondale Gr	Unrestricted	26
	2P 8am-6pm Mon-Fri	24
Bowman St	Unrestricted	31
	2P 8am-6pm Mon-Fri	16
Brolga St	Unrestricted	20
Carmel Ave	Unrestricted	10
	2P 8am-6pm Mon-Fri	7
Cheviot Rd	Unrestricted	57
	2P 8am-6pm Mon-Fri	48
CP10 (St John's Uniting Church Carpark)	Unrestricted	24
	Disabled	2
CP11 (5 Alexander St Parking-Commuter Parking)	4P 8am-6pm Mon-Sat Authorised Vehicles Excepted	51
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	43
CP12 (Mount Waverley Community Centre Parking)	Unrestricted	3
	P Disabled	6
	3P 8am-6pm Mon-Fri Authorised Mount Waverley Centre Users Excepted	38
CP13 (Wadham Parade Off-street Carpark)	Wadham House Users Vehicles Excepted	12
	Unrestricted	8
	No Parking Vehicles Whilst Unloading Excepted	2
	3P 8am-6pm Mon-Fri Authorised Mount Waverley Centre Users Excepted	14
Farquharson St	Unrestricted	31
	4P 8am-6pm Mon-Fri Authorised Mount Waverley Centre Users Excepted	19
	2P 8am-6pm Mon-Fri	23
Gallery Pl	3P Mon-Fri Permit Vehicles Excepted	10
	2P 8:30am-5:30pm Mon-Fri, 8:30am-12:30pm Sat Authorised Vehicles Excepted	7

STREET NAME	RESTRICTION	CAPACITY
Holskamp St	Unrestricted	5
	4P 8am-6pm Mon-Fri Authorised Mount Waverley Centre Users Excepted	11
	4P 8am-6pm Mon-Fri	7
	2P 8am-6pm Mon-Fri	38
Kunzea Ct	2P 8am-6pm Mon-Fri	10
Miller Cres	Unrestricted	24
	P 2 mins	2
	P 10 mins	2
	No Parking on Nature Strip	6
	Bus Zone	8
	2P Electric car	2
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	28
	2P 8am-6pm Mon-Fri	13
	½ P 8am-8pm Mon-Fri, 8am-1pm Sat	3
Mummery St	Unrestricted	10
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	10
Park Ln	2P 8am-6pm Mon-Fri	12
Quercus Ct	Unrestricted	3
	2P 8am-6pm Mon-Fri	12
Rosaline Ave	Unrestricted	38
	2P 8am-6pm Mon-Fri	43
Valley Rd	Unrestricted	58
Virginia St	No Parking	11
	2P 8am-6pm Mon-Fri	11
Wadham Pde	Unrestricted	16
	P Disabled	2
	2P 8am-8pm Mon-Fri, 8am-1pm Sat	18
	2P 8am-6pm Mon-Fri Authorised Mount Waverley Centre Users Excepted	3
	2P 8am-6pm Mon-Fri	21
	¼ P 8am-8pm Mon-Fri, 8am-1pm Sat	5
Waimarie Dr	Work zone 9am-3pm Mon-Fri	2
	2P 8am-6pm Mon-Fri	33
Winbourne St	Unrestricted	8
	¼ P 8am-6pm Mon-Fri	1
	P 5 mins 8am-6pm Mon-Fri	1
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	13
	2P 8am-6pm Mon-Fri	4

STREET NAME	RESTRICTION	CAPACITY
Wirth St	Unrestricted	30
	2P 8am-6pm Mon-Fri	29
	TOTAL	**1,198**

Mount Waverley Outer - Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Mount Waverley area suggests parking occupancy is generally well below the target 85% occupancy as indicated within Figure 8.7 and Figure 8.8.

Analysis of the existing parking restrictions as shown in Figure 8.2 reveals the majority of parking in the outer area have time restrictions.

Filtering the occupancy data for spaces with time restrictions reveals significant capacity consideration could be given to easing the time restrictions in the following areas as shown in Figure 8.9.

- On-street parking on:
  - Rosaline Avenue, Farquharson Street, Bowman Street, Cheviot Road, Wirth Street, Holskamp Street, Miller Crescent, Amber Grove, Quercus Court, Kuzea Court, Waimarie Drive, Valley Road, Mummery Street, Alexander Street and Camel Avenue

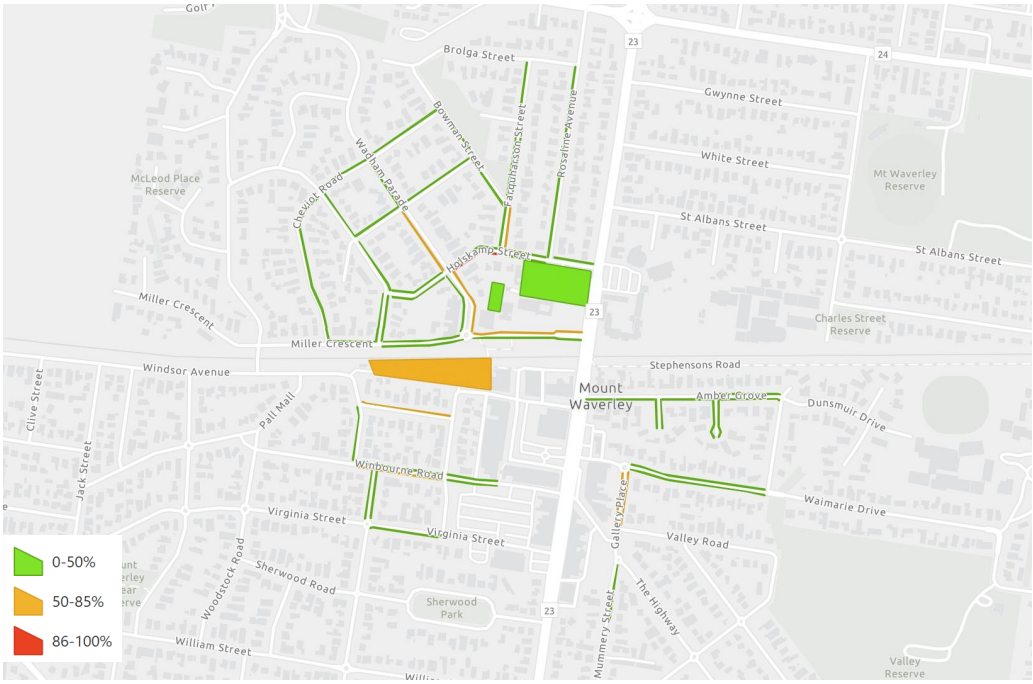

Figure 8.9: Mount Waverley Outer Area – Occupancy Thursday 25 July 2024 – Spaces with Existing Time Restrictions

8.4 Summary of Mount Waverley Activity Centre Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 8.3.

Table 8.3: Mount Waverley – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	All	Timed Restrictions	All streets/ car parks specified have peak occupancies between 50% and 85%	• Retain existing parking controls • Continue to monitor parking conditions, if occupancy consistently below 50% easing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions
OUTER	Rosaline Avenue, Farquharson Street, Bowman Street, Cheviot Road, Wirth Street, Holskamp Street, Miller Crescent, Amber Grove, Quercus Court, Kuzea Court, Waimarie Drive, Valley Road, Mummery Street, and Carmel Avenue	Timed restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions

8.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in residential areas.
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes.

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

9 HUNTINGDALE ACTIVITY PRECINCT

9.1 Background

The Huntingdale Activity Centre is recognised for its strategic transport significance, characterized by several key factors:

- **Key Activity Hub:** As a focal point for retail, business, and community services, Huntingdale generates substantial local and regional traffic. This necessitates effective transport planning and adequate parking to accommodate the needs of visitors and residents.
- **Proximity to Educational Institutions:** The centre's closeness to Monash University increases the demand for accessible transport routes. These institutions draw a large number of students, staff, and visitors daily, underscoring the need for efficient transport links.
- **Public Transport Accessibility:** Huntingdale Station's proximity makes the activity centre a vital transit-oriented area, connecting rail and bus services. This integration facilitates smooth transitions between transport modes, encouraging public transport use and reducing dependence on cars.
- **Urban Development Potential:** Anticipated urban growth in the Huntingdale area will further heighten the demand for transport infrastructure. Ongoing developments, including potential enhancements to public transport services, will require innovative transport solutions and expanded parking facilities to support the area's accessibility and sustainability.

9.2 Survey Results Snapshot

There are a total of 2,090 parking spaces available within the Huntingdale Activity Centre study area. Of the 2,090 parking spaces available within the study area 1,743 spaces are located on-street with the remaining 347 spaces located off-street.

No zones exceeded 85% during the peak period, the zones with the highest peaks is shown in Figure 9.1

9.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **Huntingdale Station Commuter Parking**

Private car parking areas is shown within Figure 9.2.

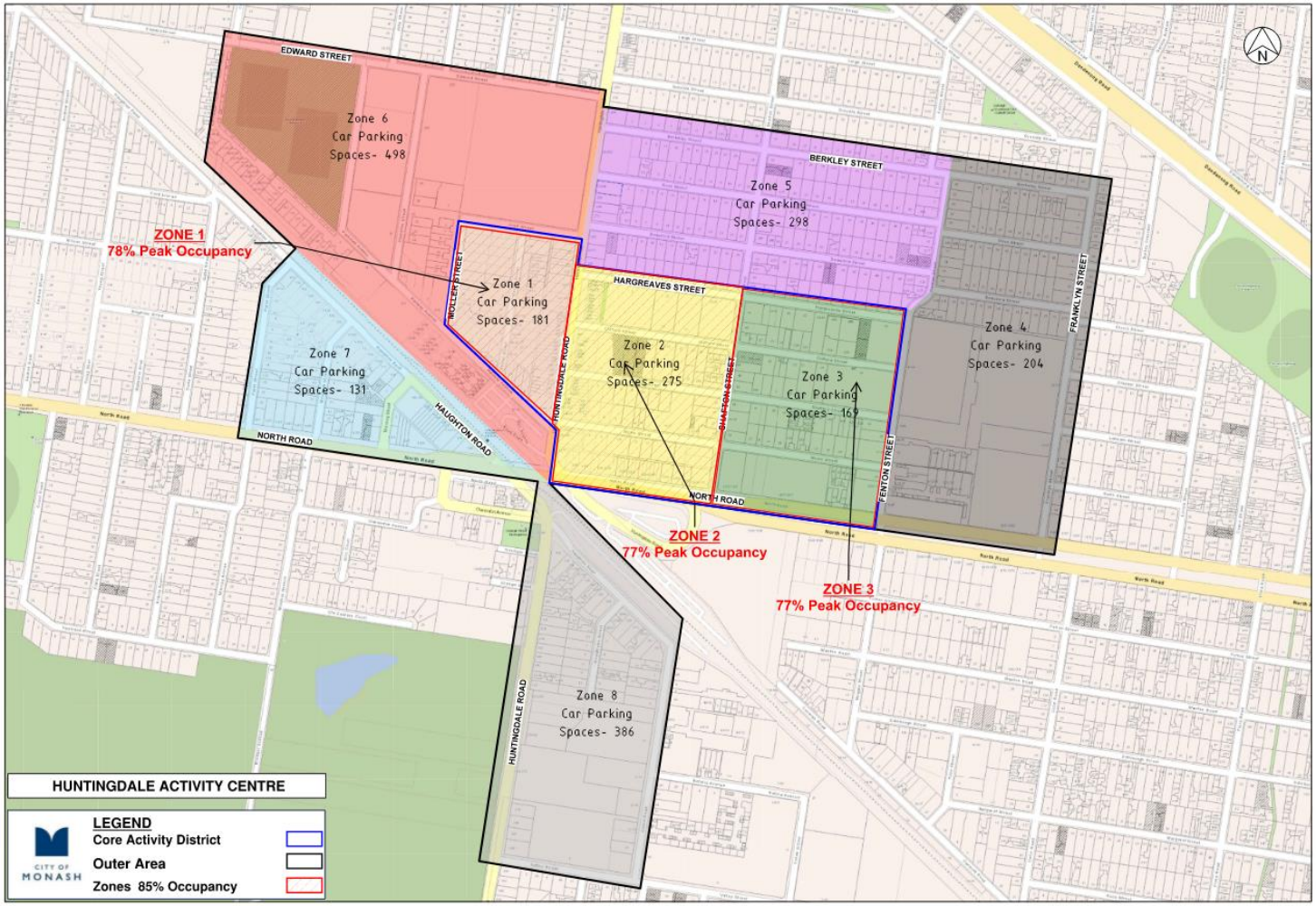

Figure 9.1: Huntingdale Core – Zones with Highest Peak Occupancy

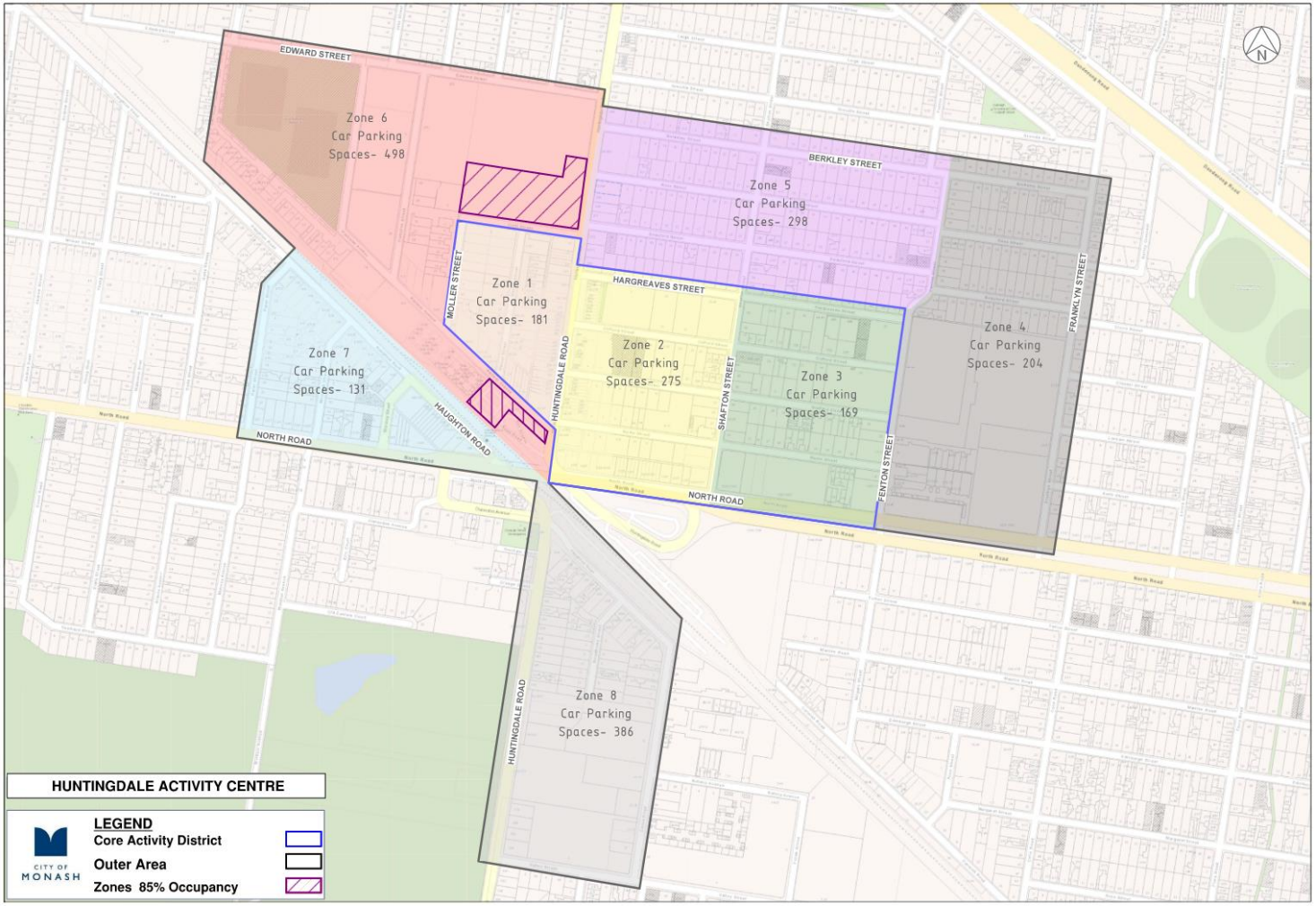

Figure 9.2: Private Parking in Huntingdale Activity Centre

9.3 Analysis – Parking in Huntingdale Activity Centre

9.3.1 Core Area

Parking data analysed in Figure 9.1 indicate that no zones exceed the 85% target peak occupancy. The zones with the highest occupancies were 1,2 and 3.

Huntingdale Core Context

The Huntingdale core area includes the Huntingdale railway station, commercial and industrial areas. Parking within the core includes:

- Commuter Parking:
  - On Railway Avenue, North Road, Haughton Road
- On-street parking
  - On all roads within the Huntingdale Core
- Off-street parking
  - Huntingdale Road

Existing Car Parking Conditions

The Huntingdale core includes 573 car parking spaces understood to be managed and operated by Council as shown in Figure 9.3. The occupancy across the core area is shown in Figure 9.4 and Figure 9.5.

Figure 9.3: Car Parking Areas Included within Huntingdale Core

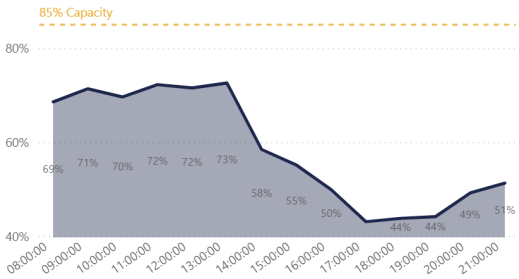

Figure 9.4: Huntingdale Core – Occupancy Thursday 25 July 2024

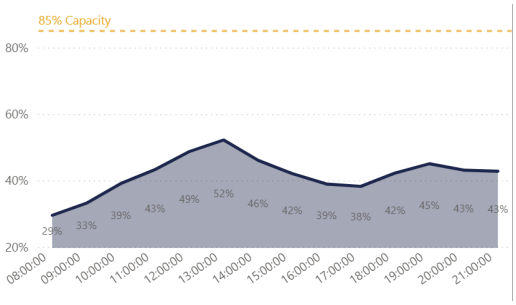

Figure 9.5: Huntingdale Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing car parking restrictions and inventory (excluding private parking areas) within the Huntingdale care area is shown in Table 9.1.

Table 9.1: Huntingdale Core Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Clifford St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	28
	P15 Minute 8am-6pm Mon-Fri, 8am-1pm Sat	2
	Unrestricted	37
CP1 (Shell Off-street Carpark)	2P 8am-6pm Mon-Fri, 8am-1pm Sat	13
	P Disabled	1
	Unrestricted	2
Hargreaves St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	40
	Unrestricted	41
Hume St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	39
	2P Mon-Fri	48
	No Parking	2
	Unrestricted	2
Huntingdale Rd	¼ P 8am-6pm Mon-Fri	3
	¼ P 8am-6pm Mon-Fri, 8am-12noon Sat	2
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	19
	1P 8am-6pm Mon-Sat	6
	1P 8am-6pm Mon-Sat, ½ P 6pm-10pm Sat-Sun	3
	1P Disabled Only	2
	2P 8am-6pm Mon-Fri	4
	2P 8am-6pm Mon-Fri, 8am-12noon Mon-Sat	6
	2P 8am-6pm Mon-Fri, 8am-12noon Sat	23
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	16
	2P Disabled Only 8am-6pm	1
	Bus Zone	12
	P 10mins 8am-6pm Mon-Fri, 8am-12noon Sat	1
Moller St	6P 8am-6pm Mon-Fri	38
North Rd Service Rd	4P 8am-6pm Mon-Fri	29
	Loading Zone	3
Shafton St	Unrestricted	29
Stafford St	½ P 8am-6pm Mon-Fri	1
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	19
	Loading Zone	2
	Unrestricted	47

STREET NAME	RESTRICTION	CAPACITY
Warner St	½ P 7am-6pm	1
	4P 8am-6pm Mon-Fri	17
	Loading Zone	6
	Unrestricted	28
	TOTAL	**573**

Huntingdale Core – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the core area suggests the peak parking occupancy across all zones falls in the range of 50-85% .

However, review of individual streets and off-street areas reveals parts of Huntingdale Road, Hume Street, Stafford Street, Clifford Street approach or exceed the 85% peak occupancy target.

9.3.2 Outer Area

The Huntingdale outer area is predominantly industrial to the north and east and residential to the south and west. The car parking survey results indicate an inventory of 1,186 (excluding Victrack).

Existing Parking Conditions

The car parking surveyed within the outer area and peak occupancy is shown in Figure 9.6. The occupancy results for the outer area is shown in Figure 9.7 and Figure 9.8.

Figure 9.6: Car Parking Areas Included Within Huntingdale Outer Area

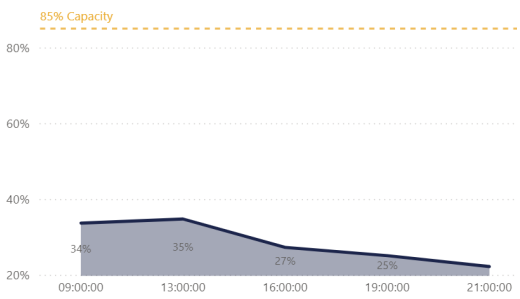

Figure 9.7: Huntingdale – Occupancy Thursday 25 July 2024

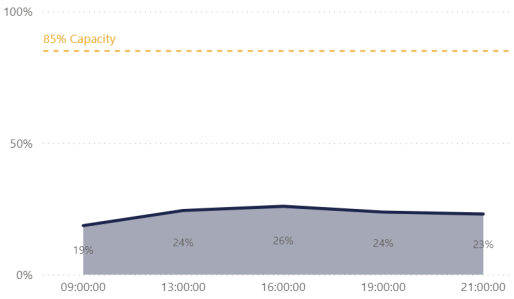

Figure 9.8: Huntingdale – Occupancy Thursday 27July 2024

Existing Restrictions

The existing parking restrictions inventory (excluding private parking areas) within the Huntingdale outer area is shown in Table 9.2.

Table 9.2: Huntingdale Outer Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Beauford St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	36
	Unrestricted	83
Berkeley St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	29
	Permit Zone 8am-6pm Mon-Fri, 8am-1pm Sat	7
	Unrestricted	95
Coora Rd	1P 8am-6pm Mon-Fri, 8am-1pm Sat	2
	2P 8am-6pm Mon-Fri	18
	Bus Zone	4
	Unrestricted	22
	Work Zone 9am-5pm Mon-Fri	1
Croft St	Unrestricted	42
Edward St	Permit Zone 8am-6pm Mon-Fri	27
	Unrestricted	95
Fenton St	Unrestricted	45
Franklyn St	Permit Zone 8am-6pm	18
	Unrestricted	34
Hamilton St	4P 8am-6pm Mon-Fri	28
	No Parking	7
	Unrestricted	28
Haughton Rd	2P 8am-6pm Mon-Fri	12
	2P 8am-6pm Mon-Sat Authorised Vehicle Excepted	12
	4P 8am-6pm Mon-Sat	18
	Unrestricted	11
Huntingdale Rd	2P 8am-6pm Mon-Fri	69
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	6
	Unrestricted	18
	2P 8am-6pm Mon-Fri, 8am-12noon Sat	29
McIntosh St	2P 8am-6pm Mon-Fri	16
	Unrestricted	12
Moroney Ave	4P 8am-6pm Mon-Fri	7
Parer St	2P 8am-6pm Mon-Fri	25
	Unrestricted	18
Parkside Ave	4P 8am-6pm Mon-Fri	12

STREET NAME	RESTRICTION	CAPACITY
	Unrestricted	75
Railway Ave	¼ P 8am-6pm Mon-Fri	3
	4P 8am-6pm Mon-Fri	40
	Loading Zone	2
	P 15mins 8am-6pm Mon-Fri	2
Ross St	2P 8am-6pm Mon-Fri, 8am-1pm Sat	38
	Permit Zone 8am-6pm Mon-Fri, 8am-1pm Sat	12
	Unrestricted	62
Shafton St	Permit Zone 7:30am-4:30pm	11
	Unrestricted	15
Stradbroke St	2P 8am-6pm Mon-Fri	28
Valley St	2P 8am-6pm Mon-Fri, 8am-12noon Sat	6
	Unrestricted	6
	TOTAL	**1,517**

Huntingdale Outer – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Huntingdale area suggests parking occupancy is generally well below the target 85% occupancy.

Further analysis of data suggest modifications to parking management tools are required within the following areas:

- Berkeley Street, Ross Street, Beuford Street, Parer Street, Huntingdale Road, Fenton Street

Maps showing the parking occupancy of the occupancy in the outer Huntingdale area are provided in Figure 9.9.

Figure 9.9: Huntingdale Outer Area – Peak Occupancy Streets with Existing Time Restrictions

9.4 Summary of Huntingdale Activity Centre Recommendations

A summary of recommended parking management tools to be implemented in Huntingdale is provided in Table 9.3.

Table 9.3: Huntingdale – Summary of Recommended Parking Management Tools

	LOCATION	PARKING CONTROLS	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	Huntingdale Core Area	Time Restrictions	73% 1pm 25 July 2024	• Retain existing parking controls • Continue to monitor parking conditions, especially on Huntingdale Road, Hume Street, Stafford Street, Clifford Street if occupancy consistently exceeds 85% consider adjusting restrictions or implementing paid parking
OUTER	Berkeley Street, Ross Street, Beuford Street, Parer Street, Huntingdale Road (Beauford St to Edward Street, & Clarendon Avenue to Valley Street))	Time Restrictions	All streets specified have peak occupancies below 50%	• Ease or remove the time restrictions for the streets identified • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

9.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in industrial/commercial areas and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

10 PINEWOOD SHOPPING CENTRE

10.1 Background

The Pinewood Shopping Centre holds significant strategic transport importance due to several key factors:

- **Community Hub:** As a local centre for shopping, dining, and community services, Pinewood generates substantial traffic, necessitating effective transport planning and sufficient parking facilities to serve staff, residents and visitors.
- **Proximity to Education and Employment:** The centre's location near schools and business parks enhances its role as a transport nexus, increasing the demand for accessible transport routes and parking to accommodate students, staff, and local employees.
- **Public Transport Accessibility:** Pinewood is well-connected to public transport options, including bus services that link to nearby train stations. This integration promotes public transport usage and eases reliance on private vehicles, aligning with sustainability objectives.
- **Future Development Potential:** As urban development continues in the area; the Pinewood Activity Centre is poised for growth. This will require forward-thinking transport solutions and expanded parking capacity to ensure ongoing accessibility and support increased activity.

10.2 Survey Results Snapshot

The Pinewood study area has a total of 1,415 parking spaces, comprising 515 on-street and 900 off-street spaces.

A summary of car parking survey results of zones nearing the 85% occupancy during the peak period is shown in Figure 10.1.

10.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **Toombah Street off Street Parking**
- **Pinewood Shopping Village Parking**

Private car parking areas is shown within Figure 10.2.

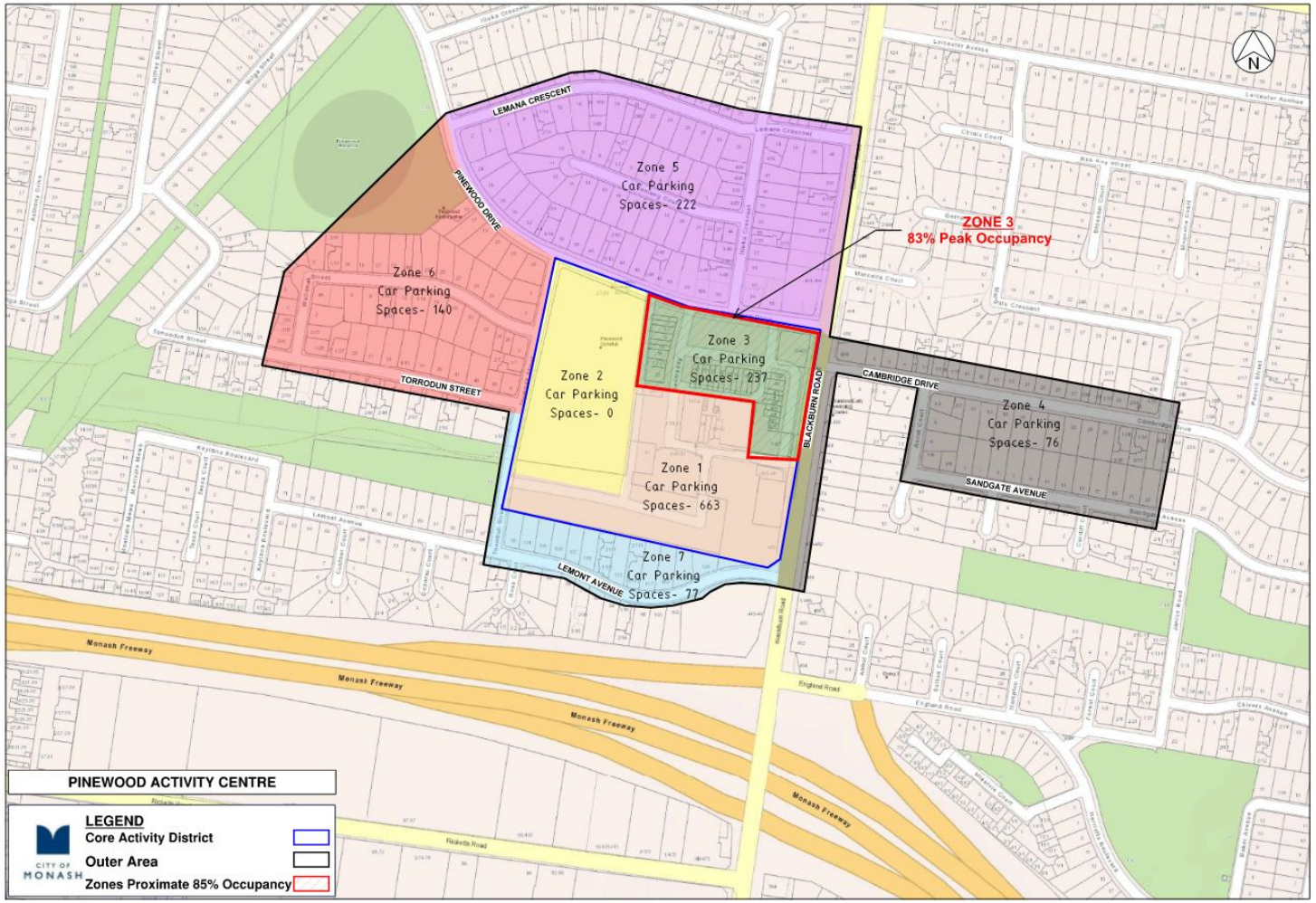

Figure 10.1: Pinewood Core – Zones with Highest Peak Occupancy

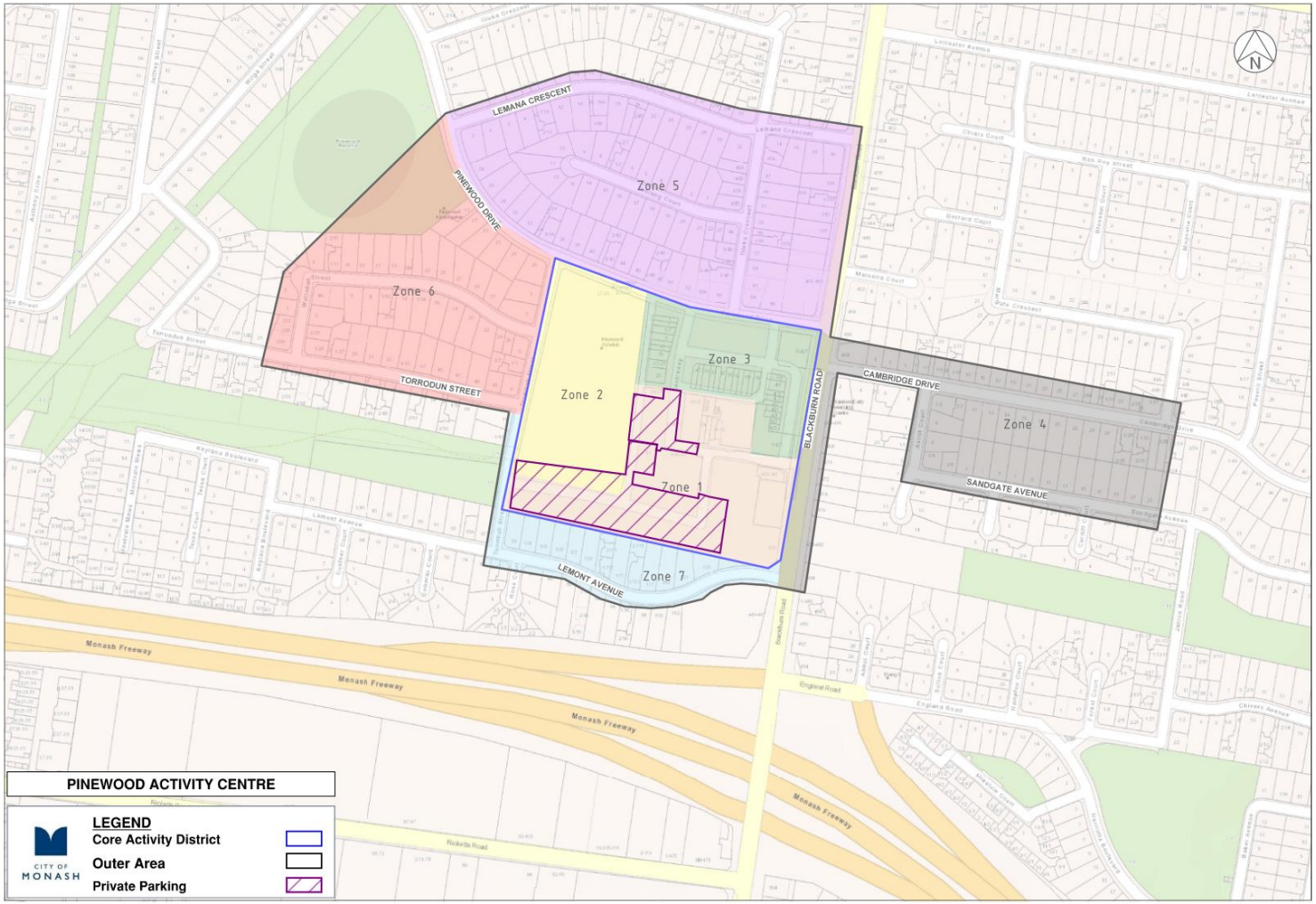

Figure 10.2: Private Parking in the Pinewood Activity Centre

10.3 Analysis – Parking in Pinewood

10.3.1 Core Area

Parking data analysed in Figure 10.1, shows peak occupancy in all areas remain below the target 85% occupancy. However, zone 3 has a peak occupancy of 83% on the surveyed Friday.

Pinewood Core Context

Car parking in the Pinewood core include off-street spaces accessed from Centreway, on-street spaces on Centreway.

Existing Parking Conditions

The Pinewood core includes 534 car parking spaces understood to be primarily managed and operated by Council as shown in Figure 10.3. The occupancy results for the Pinewood core are shown in Figure 10.4 and Figure 10.5.

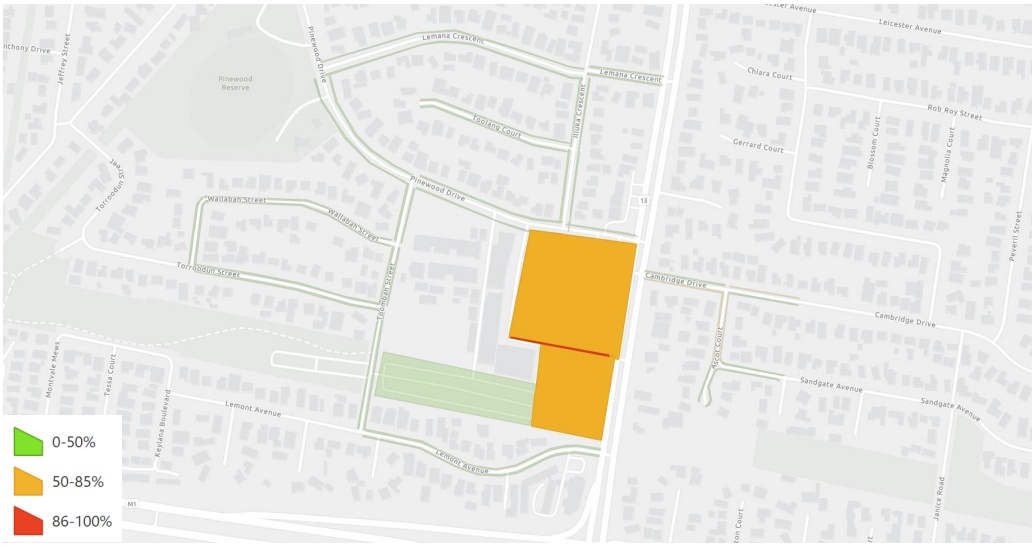

Figure 10.3: Car Parking Areas Included in the Pinewood Core

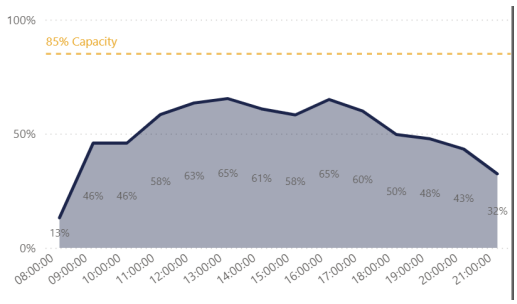

Figure 10.4: Pinewood Core – Occupancy Friday 25 July 2024

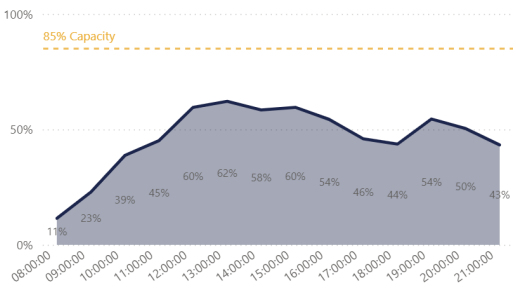

Figure 10.5: Pinewood Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within this area is shown in Table 10.1.

Table 10.1: Pinewood Core Area – Existing Restrictions

STREET	RESTRICTION	CAPACITY
Centre Way	¼ P 8am-6pm Mon-Sat	4
CP1 (Pinewood Shopping Village Carpark- between Pinewood Drive & Centreway)	½ P 8am-10pm	4
	1P 8am-6pm Mon-Fri	29
	1P 8am-6pm Mon-Sat	81
	1P 8am-6pm Mon-Sun	17
	2P 8am-6pm Mon-Fri	96
	2P Disabled Only 8am-6pm Mon-Fri	2
	2P Disabled Only 8am-8pm	2
	4P Disabled Only	2
	Loading Zone 15 minutes	1
	Mail Zone 1pm-6pm Sun-Fri	2
	P Disabled Only	1
CP2 (Pinewood Shopping Village Carpark- edge of Centreway & Blackburn Road)	2P 8am-6pm Mon-Sat	140
	2P 8am-6pm Mon-Sat Authorised Cinema Users Excepted	50
	2P 8am-6pm Mon-Sat Authorised Vehicles Excepted	80
	2P Disabled Only	2
	P Disabled Only	1
	Unrestricted	20

Pinewood Core - Recommended Locations to Modify Parking Management

Review of the existing restrictions and occupancy across the Pinewood core area suggest the peak parking occupancy across all zones falls in the range of 50-85%.

any particular zone nor the core holistically does not exceed the target 85% and exceeds 50%.

It is therefore recommended to retain the existing parking restrictions within the Pinewood core area.

10.3.2 Outer Area

The Pinewood outer area is predominately residential, the car parking surveys results indicate an inventory of 511 parking spaces and an occupancy well below the target 85% occupied.

Existing Parking Conditions

The car parking survey within the outer area showing the peak occupancy is provided in Figure 10.6. The full occupancy results for the outer area are shown in Figure 10.7 and Figure 10.8.

Figure 10.6: Car Parking Areas Included within Outer Area – Peak Occupancy

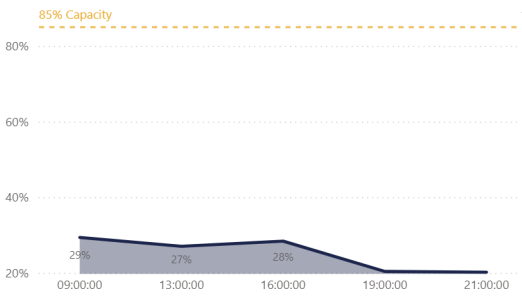

Figure 10.7: Pinewood Outer Area – Occupancy Friday 26 July 2024

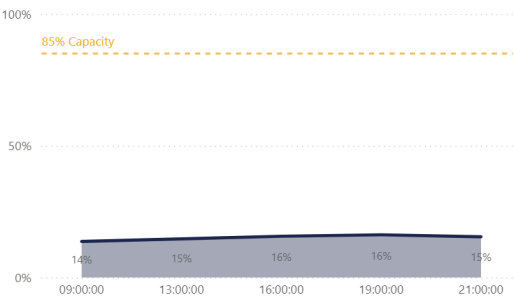

Figure 10.8: Pinewood Outer Area – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within this area is shown in Table 10.2.

Table 10.2: Pinewood Outer Area – Existing Restrictions Zone 1

STREET	RESTRICTION	CAPACITY
Ascot Ct	2P 8am-6pm Mon-Fri	4
	Unrestricted	21
Cambridge Dr	2P 8am-6pm Mon-Fri	21
	Unrestricted	15
Illuka Cres	2P 8am-6pm Mon-Fri	4
	Unrestricted	24
Lemana Cres	2P 8am-8pm Mon-Fri	13
	Unrestricted	73
Lemont Ave	2P 8am-6pm Mon-Fri	19
	Permit Zone 8am-6pm Mon-Fri	24
Pinewood Dr	2P 8am-5pm Mon-Fri, 8am-12noon Sat	12
	2P 8am-6pm Mon-Fri	24
	P 2mins 8:30am-4pm School Days, School Buses Excepted, Pick Up and Drop Off Only Drivers to Stay in Vehicles	4
	P 2mins 8:30am-9:30am 3pm-4pm School Days, Pick Up and Drop Off Only Drivers to Stay in Vehicles	2
	Unrestricted	46
Sandgate Ave	Unrestricted	15
Toolang Ct	1P 8am-6pm Mon-Fri	27
	Unrestricted	18
Toombah St	2P 9:30am-3pm Mon-Fri	19
	P 2mins 8:30am-9:30am 3pm-4pm School Days, 2P 9:30am-3pm Mon-Fri, Pick Up and Drop Off Only Drivers to Stay in Vehicles	16
	P 2mins 8:30am-9:30am 3pm-4pm School Days, Pick Up and Drop Off Only Drivers to Stay in Vehicles	8
	Permit Zone 8am-6pm Mon-Fri	7
	Unrestricted	13
Torroodun St	2P 8am-6pm Mon-Fri	14
	Unrestricted	18
Wallabah St	2P 8am-6pm Mon-Fri	25
	Unrestricted	25

Pinewood Outer – Recommended Location to Modify Parking Management

The parking occupancy across the outer Pinewood area is generally well below the target 85% occupancy as indicated within Figure 10.7 and Figure 10.8.

Considerations should be given to easing/removing existing parking restrictions within the outer area.

The following roads have been identified with time restrictions and a peak occupancy below 50%. Consideration could be given to easing restrictions in the following areas as shown in green in Figure 10.9.

- Toolang Court, Illuka Crescent, Lemana Crescent, Lemont Avenue, Pinewood Drive, Toombah Street, Torroodun Street, Wallabah Street

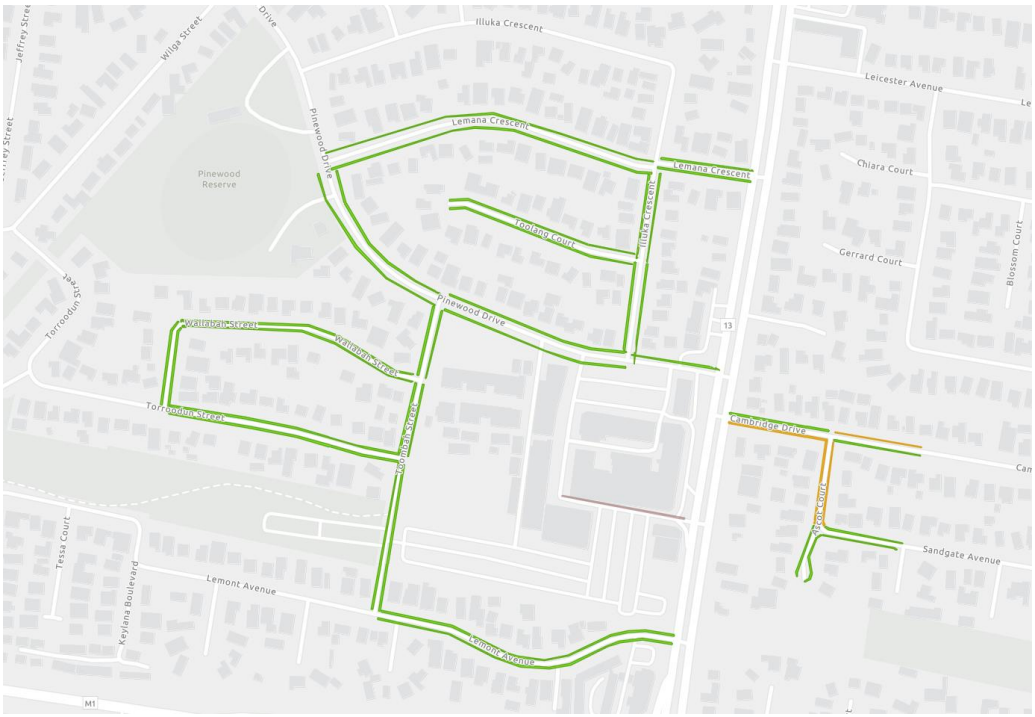

Figure 10.9: Pinewood Outer Area – Peak Occupancy On-Street Parking with Existing Time Restrictions

10.4 Summary of Pinewood Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 10.3.

Table 10.3: Pinewood – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	All	Timed Restrictions	65% 4pm Fri 26 July 2024 62% 1pm Sat 27 July 2024	• Retain existing parking controls • Continue to monitor parking conditions if occupancy consistently below 50% consider easing/removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions
OUTER	Toolang Court, Illuka Crescent, Lemana Crescent, Lemont Avenue, Toombah Street, Torroodun Street, Wallabah Street	Time Restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

10.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in commercial areas and residential areas
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

11 SYNDAL SHOPPING CENTRE

11.1 Background

The Syndal Shopping Centre plays a crucial role in the local transport landscape due to several key factors:

- **Local Activity Hub:** Serving as a key destination for shopping, dining, and community services, Syndal generates significant foot and vehicle traffic. This highlights the need for effective transport planning and adequate parking to meet the demands of shoppers and visitors.
- **Proximity to Educational Institutions**: Located near several schools, the shopping centre attracts a diverse crowd, including students, staff, and families. This proximity increases the necessity for accessible transport routes and ample parking options.
- **Public Transport Connectivity**: Syndal Railway Station is in close proximity, enhancing the centre's role as a transit-oriented location. This connection to train and bus services encourages public transport use, reduces reliance on cars, and supports sustainable transport initiatives.
- **Growth and Development Potential**: As the surrounding area continues to develop, the Syndal Shopping Centre is expected to experience increased activity. This will necessitate forward-thinking transport strategies and potentially expanded parking facilities to maintain accessibility and support community growth.

11.2 Survey Results Snapshot

There are a total of 2,284 parking spaces available within the Syndal Shopping Centre study area. Of the 2,284 parking spaces available within the study area 990 spaces are located on-street with the remaining 1,294 spaces located off-street.

A summary of car parking survey results shows that no zones exceeded 85% occupancy during the peak period as shown in Figure 11.1.

11.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **Syndal Station Commuter Parking**
- **Syndal Baptist Church Private Parking**
- **Fitness First Private Parking**
- **Supercheap Auto Private Parking**

Private car parking areas is shown within Figure 11.2.

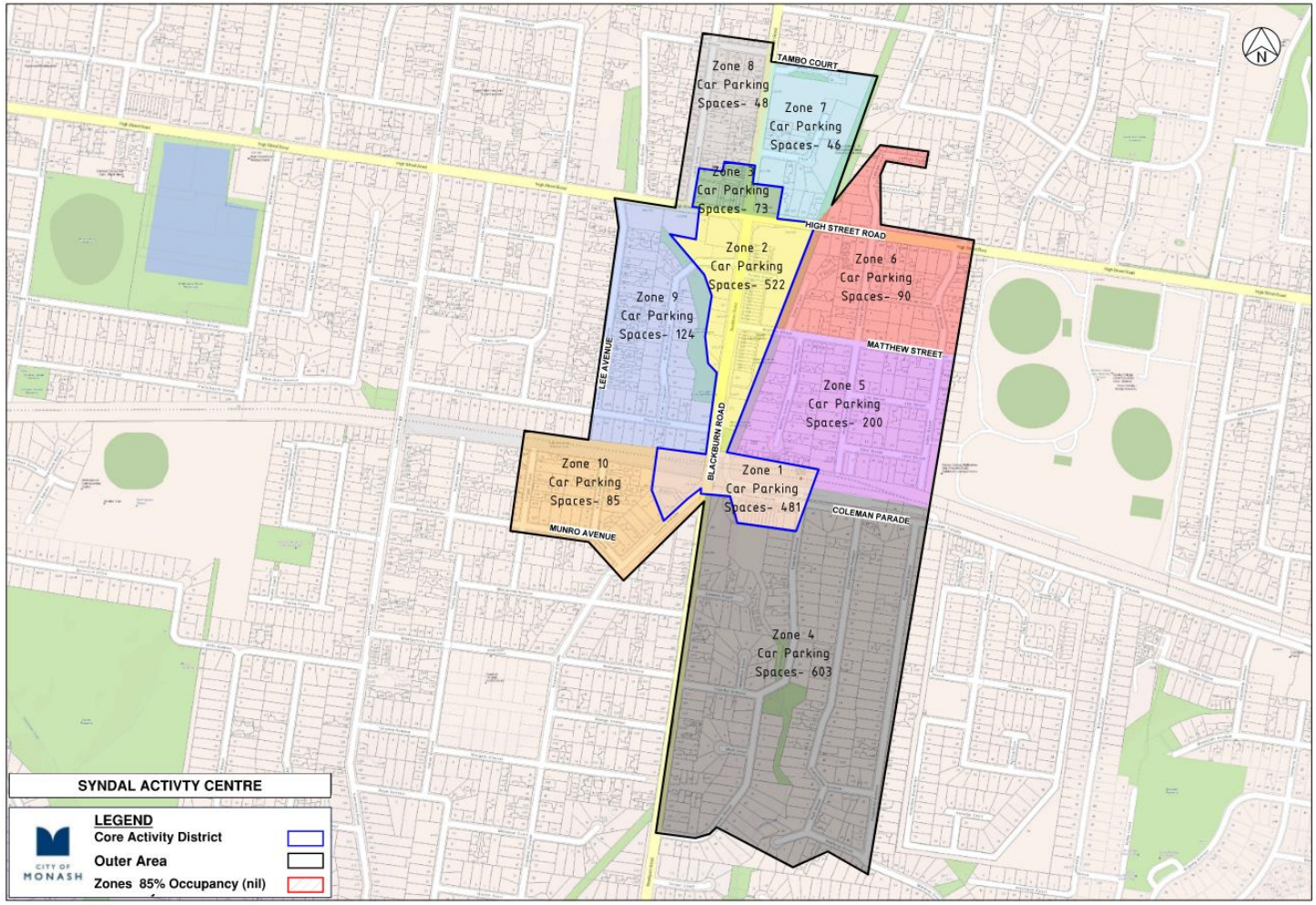

Figure 11.1: Syndal Overview (No Council Parking Zones Approaching 85% Peak Occupancy)

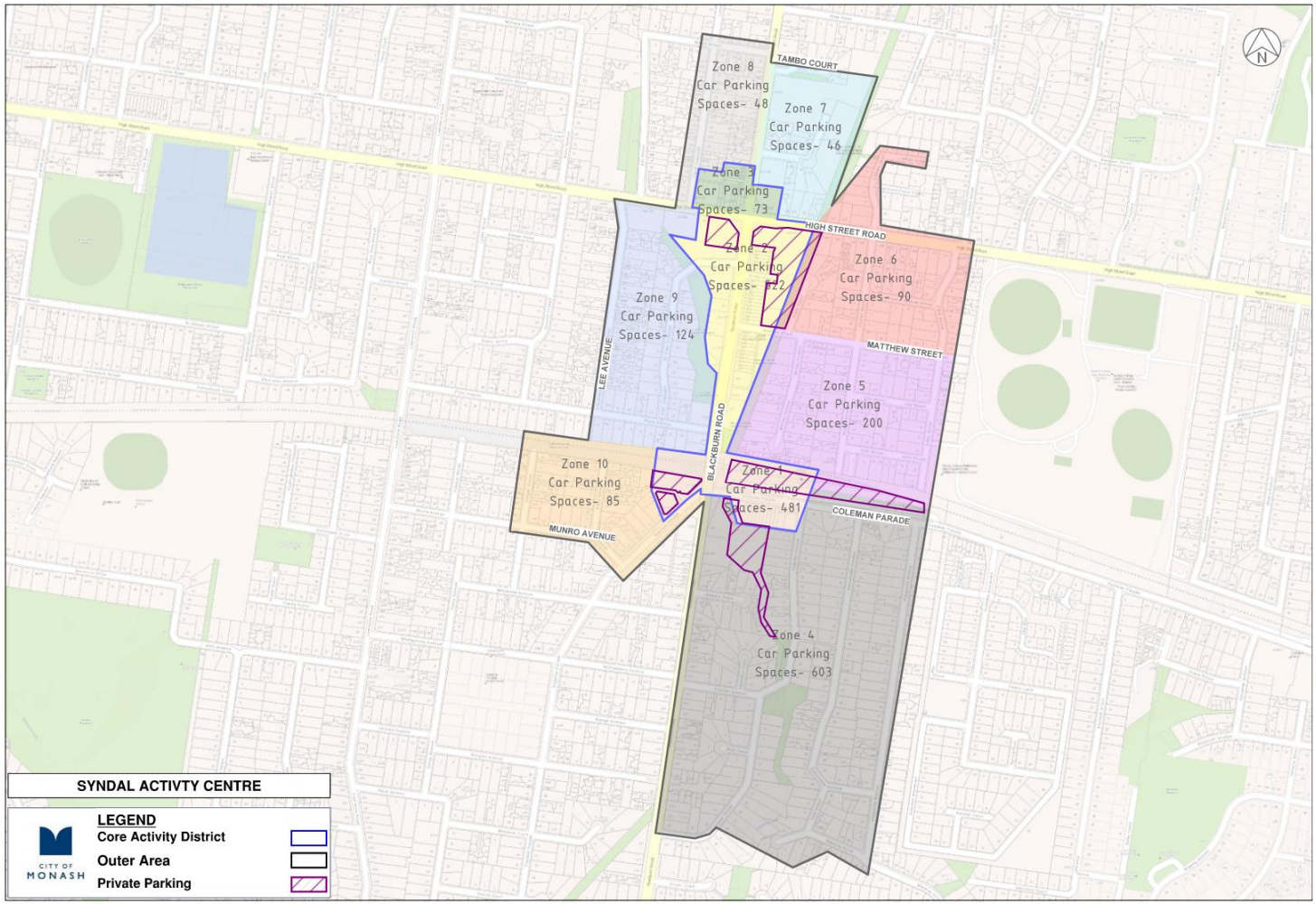

Figure 11.2: Private Parking in Syndal Activity Centre

11.3 Analysis - Parking Management in Syndal

11.3.1 Core Area

Parking data analysed in Figure 11.3, show no zones exceed or approach the 85% target occupancy.

Syndal Core Context

The Syndal core area includes Syndal railway station and the retail shopping strip on Blackburn Road. Car parking in the Syndal Core area includes commuter parking for Syndal Station, off-street parking accessed from Blackburn Road, on-street spaces on Blackburn Road and Coleman Parade.

Existing Parking Conditions

The Syndal core includes 179 car parking spaces understood to be primarily managed and operated by Council as shown in Figure 11.3. The occupancy results for the Syndal core are shown in Figure 11.4 and Figure 11.5.

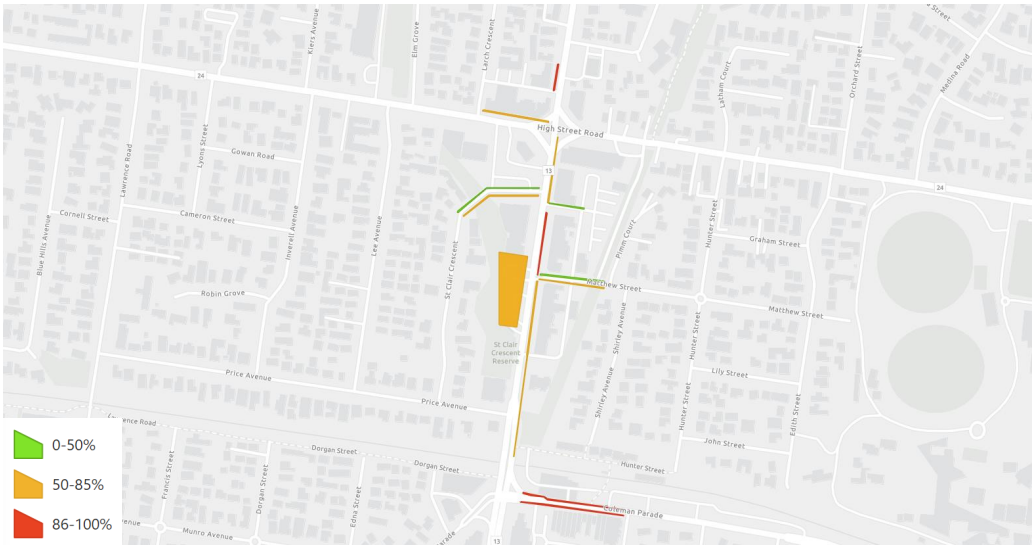

Figure 11.3: Car Parking Areas Included within Syndal Core

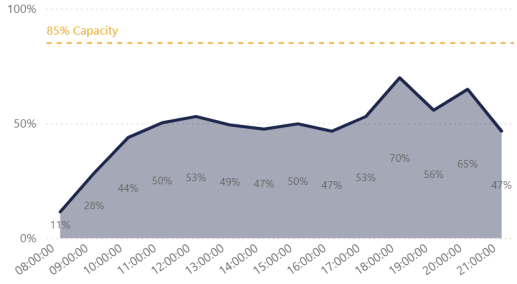

Figure 11.4: Syndal Core – Occupancy Friday 25 July 2024

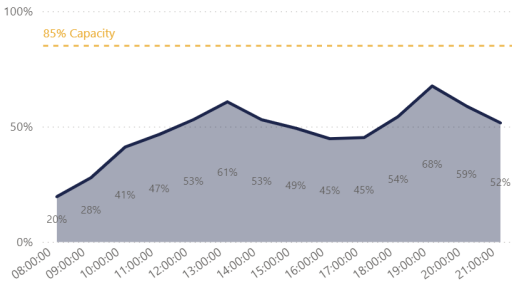

Figure 11.5: Syndal Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory (excluding private parking areas) within the Syndal core area is shown in Table 11.1.

Table 11.1: Existing Parking Restrictions Syndal Core

STREET NAME	RESTRICTION	CAPACITY
Blackburn Rd	1P 8am-6pm	33
	1P 8am-6pm Mon-Sat	7
	1P 8am-6pm, ½ P 6pm-10pm	16
	2P 8am-6pm	14
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	6
	Mail Zone 12:30pm-1:30pm, 4:30pm-5:30pm Mon-Fri	1
Coleman Parade	1P 8am-6pm Mon-Fri, 8am-1pm Sat	6
	1P 9am-6pm Mon-Fri, 8am-1pm Sat	3
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	5
	P 2Min 7am-9am, 3:30pm-6pm Mon-Sat, 1P 9am-3:30pm Mon-Sat	5
CP7 (Larch Crescent Carpark)	2P 8am-6pm Mon-Sat	25
	Private	15
CP9 (209-211 Blackburn Rd Off-street Carpark)	2P 8am-6pm	9
	4P 8am-6pm Mon-Fri	12
	P	18
	P Disabled	2
High St	1P 8am-6pm Mon-Fri, 8am-12:30pm Sat	4
Mathew St	2P 8am-6pm Mon-Fri	9
	Unrestricted	3
St Clair Cres	Unrestricted	7
Trick Ct	1P 8am-6pm Mon-Sat	3
	No Parking	1
	TOTAL	**204**

Syndal Core – Recommended Locations to Modify Parking Management

No areas in the Syndal core were identified to consistently exceed 85% occupancy, it is recommended to retain existing restrictions throughout the core area.

11.3.2 Outer Area

The Syndal outer area is predominately residential. The car parking survey results indicate an inventory of 1,208 spaces.

Existing Parking Conditions

The car parking surveyed within the outer area and peak occupancy is shown in Figure 11.6. The occupancy results for the outer area in Figure 11.7 and Figure 11.8.

Figure 11.6: Car Parking Areas Included within Syndal Outer Area

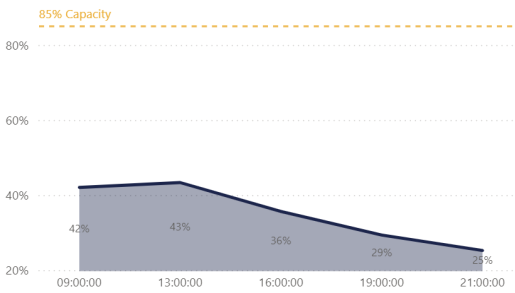

Figure 11.7: Syndal – Occupancy Thursday 25 July 2024

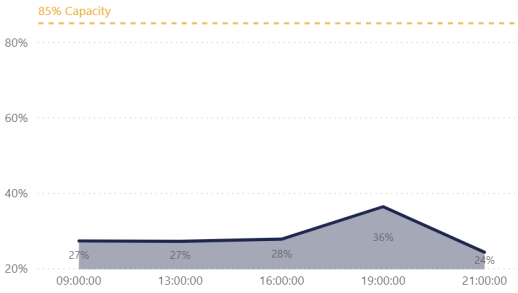

Figure 11.8: Syndal – Occupancy Thursday 27July 2024

Existing Restrictions

The existing parking restrictions inventory (excluding private parking areas) within the Syndal outer area is shown in Table 11.2.

Table 11.2: Syndal Outer Area

STREET	RESTRICTION	CAPACITY
Doon Ave	Unrestricted	16
Dorgan St	Unrestricted	16
Doynton Parade	Unrestricted	21
Dunscombe Ave	2P 8am-5:30pm Mon-Fri, 8am-12:30pm Sat	10
	2P 8am-6pm Mon-Fri	26
	Unrestricted	25
	Work Zone 7am-5pm Mon-Fri, 9am-1pm Sat	2
Edith St	4P 8am-6pm Mon-Fri	22
	4P 8am-6ppm Mon-Fri	2
	Unrestricted	35
Edna St	2P 8am-6pm Mon-Fri	11
	Unrestricted	8
Falconer St	2P 8am-6pm Mon-Fri	45
	Unrestricted	6
Fiander Ave	2P 8am-6pm Mon-Fri	23
	2P 8am-6pm Mon-Fri, Permit Zone All Other Times	4
	Unrestricted	15
Graham St	4P 8am-6pm Mon-Fri	6
	Unrestricted	8
Huff St	2P 8am-6pm Mon-Fri	5
	Unrestricted	4
Hunter St	2P 8am-6pm	4
	4P 8am-6pm Mon-Fri	15
	No Parking	6
	P 10mins 8am-4pm Mon-Sat	2
	Unrestricted	31
	Working Zone 7am-5pm Mon-Fri	1
Jones St	2P 8am-6pm Mon-Fri	8
	Unrestricted	11
Larch Cres	Unrestricted	37
Latham Ct	2P 8am-6pm Mon-Fri Authorised Vehicles Excepted	20
Lee Ave	2P 8am-6pm Mon-Fri	28
	Unrestricted	30
Lily St	4P 8am-6pm Mon-Fri	9

STREET	RESTRICTION	CAPACITY
	Unrestricted	14
Maple St	Unrestricted	11
Marbray Dr	2P 8am-6pm Mon-Fri	11
	Unrestricted	11
Mathew St	2P 8am-6pm Mon-Fri	18
	Unrestricted	22
Mott Ct	2P 8am-6pm Mon-Fri	5
	Unrestricted	4
Munro Ave	2P 8am-6pm Mon-Fri	20
	Unrestricted	9
Pepperell Ave	2P 8am-6pm Mon-Fri	42
	Unrestricted	40
	Work Zone 7am-5pm Mon-Fri	3
Price Ave	2P 8am-6pm Mon-Fri, 8am-1pm Sat	23
	4P 8am-6pm Mon-Fri	4
	Work Zone 7am-5pm Mon-Fri, 9am-5pm Sat	2
Primm Ct	2P 8am-6pm Mon-Fri	7
	Unrestricted	6
Shirley Ave	4P 8am-6pm Mon-Fri	21
	Unrestricted	22
St Clair Cres	2P 8am-6pm Mon-Fri	17
	2P 8am-6pm Mon-Fri, 8am-1pm Sat	7
	Unrestricted	13
Tambo Ct	Unrestricted	12
Valentine Ct	2P 8am-6pm Mon-Fri	7
	Unrestricted	4
	TOTAL	**867**

Syndal Outer – Recommended Locations to Modify Parking Management:

Review of the existing restrictions and parking occupancy across the outer Syndal area suggests parking occupancy is generally well below the target 85% occupancy.

Further analysis of data suggest modifications to parking management tools are required within the following areas:

- Lee Avenue, St Clair Crescent, Price Avenue, Latham Court, Matthew Street, Pepperell Avenue, Dunscombe Avenue, Marbray Drive, Doyton Parade

Maps showing the parking occupancy in the outer Syndal area are provided in Figure 11.9.

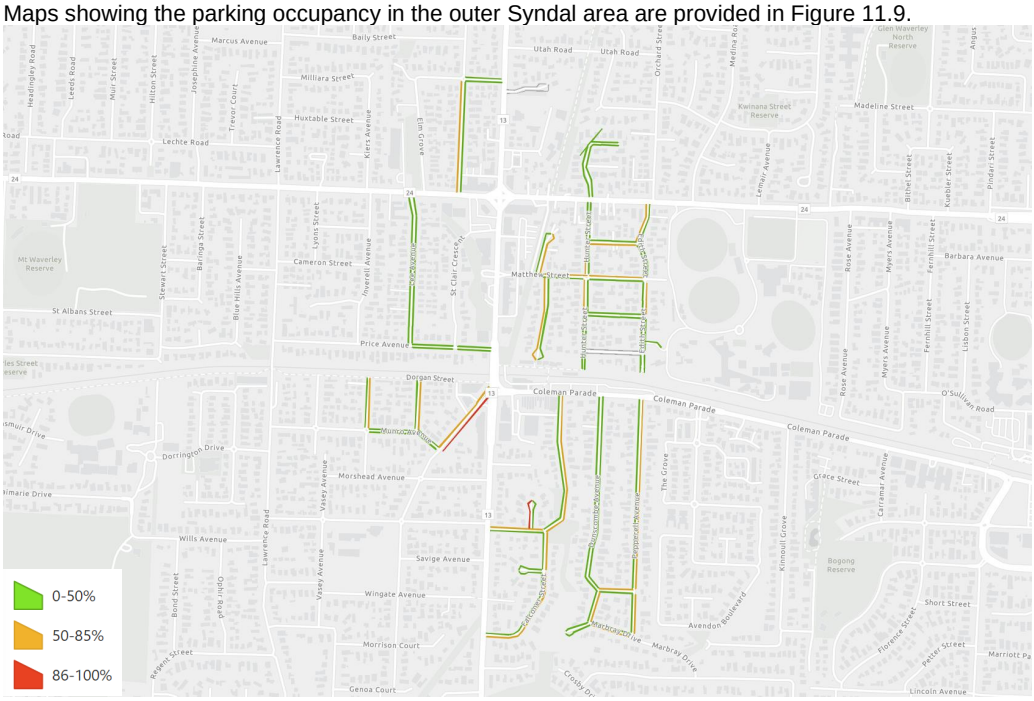

Figure 11.9: Syndal Outer Area – Peak Occupancy Streets

11.4 Summary of Syndal Shopping Centre Recommendations

A summary of recommended parking management tools to be implemented in Syndal is provided in Table 11.3.

Table 11.3: Syndal – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	All	N/A	N/A	• Retain existing parking controls • Continue to monitor parking conditions, if occupancy consistently below 50% consider easing/ removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions
OUTER	Lee Avenue, St Clair Crescent, Price Avenue, Latham Court, Matthew Street, Pepperell Avenue, Dunscombe Avenue, Marbray Drive	Time Restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions
	Doynton Parade (Blackburn Road to Munro Avenue)	Unrestricted	100% 4pm Thur 25 July 2024 57% 1pm Sat 27 July 2024	• Consider implementing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider further adjustment of parking controls

11.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in commercial areas and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

12 HOLMESGLEN NEIGHBOURHOOD ACTIVITY CENTRE

12.1 Background

The Holmesglen Activity Centre is strategically significant in the transport landscape for several key reasons:

- **Retail and Commercial Mix:** The area is home to a variety of large-format retail stores, showrooms, and service-oriented businesses that cater to both local residents and visitors from surrounding suburbs.
- **Proximity to Educational Institutions**: Located near Holmesglen TAFE, the activity centre attracts a diverse crowd, including students and staff . This proximity increases the necessity for accessible transport routes and ample parking options.
- **Public Transport Connectivity**: Holmesglen Railway Station is in close proximity, enhancing the centre's role as a transit-oriented location. This connection to train and bus services encourages public transport use, reduces reliance on cars, and supports sustainable transport initiatives.
- **Retail and Employment Synergy:** The proximity to Chadstone Shopping Centre draws a steady flow of visitors, retail workers, and suppliers. This synergy boosts activity in and around Holmesglen, supporting local businesses and creating opportunities for complementary services.

12.2 Survey Results Snapshot

There are a total of 1,995 parking spaces available within the Holmesglen study area. Of the 1,995 parking spaces available within the study area 326 spaces are located on-street with the remaining 1,669 spaces located off-street.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 12.1.

12.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Zones 1 and 2 consists of only private car parking. Therefore, parking management recommendations are outside of the SPMR and Council scope.

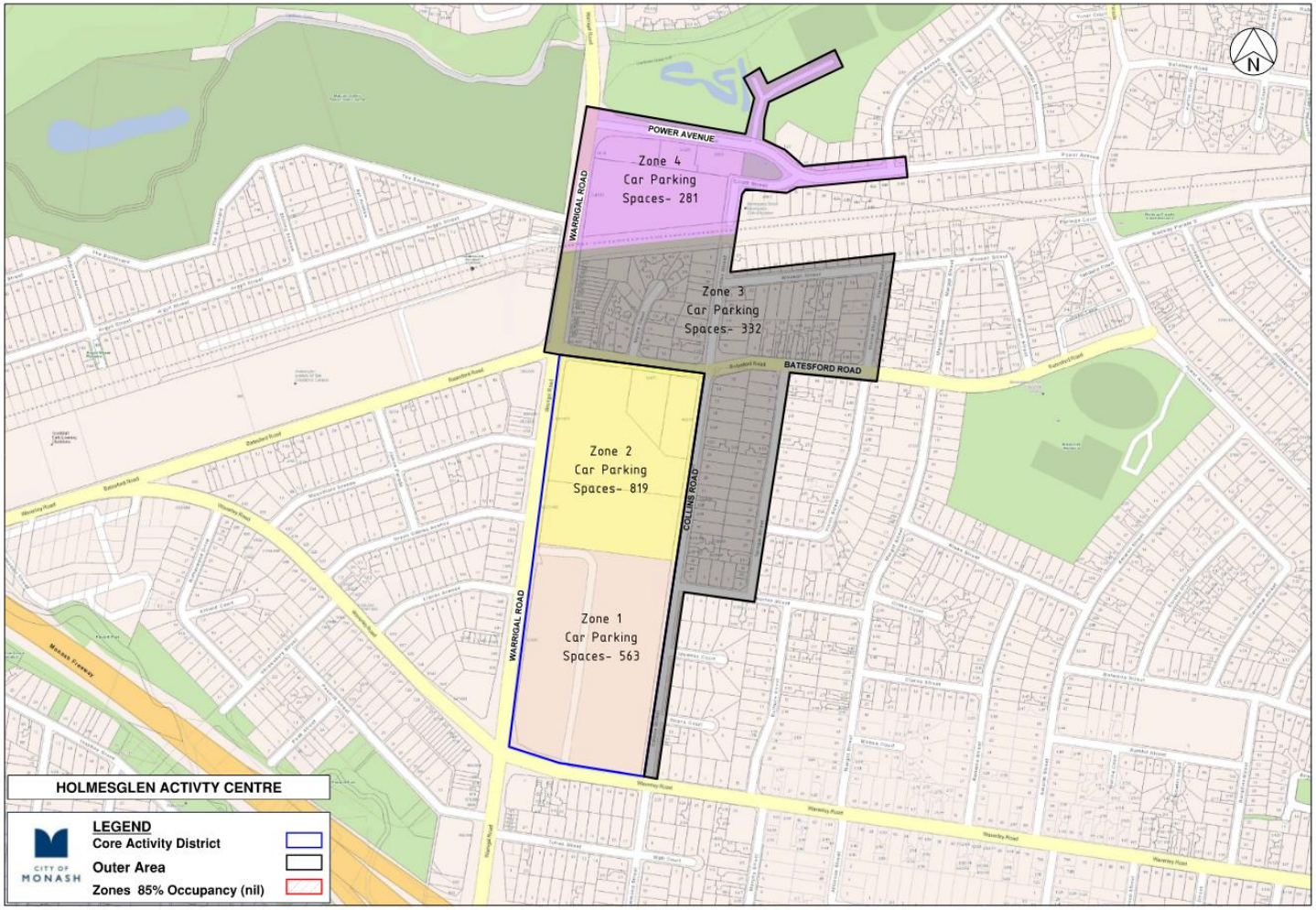

Figure 12.1: Holmesglen Activity Centre – Zones (No Zones Exceed / Approach 85% Peak Occupancy)

12.3 Recommended Parking Management in Holmesglen

12.3.1 Core Area

Parking data analysed in Figure 12.1, show no zones exceed or approach the 85% target occupancy.

Holmesglen Core Context

The Holmesglen core area includes Chadstone Village retail centre.

Existing Car Parking Conditions

The Holmesglen core includes 1,382 car parking spaces that are primarily managed and operated privately as shown in Figure 12.2. The occupancy results for the Holmesglen core are shown in Figure 12.3 and Figure 12.4.

Figure 12.2: Car Parking Areas within Holmesglen Core (all private and not managed by Council)

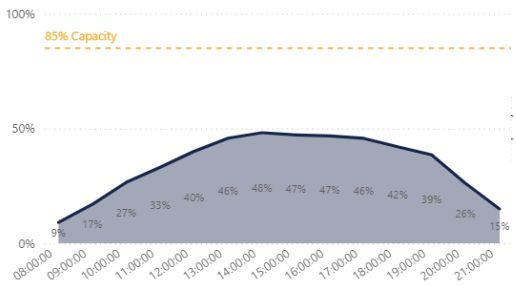

Figure 12.3: Holmesglen Core – Occupancy Thursday 25 July 2024

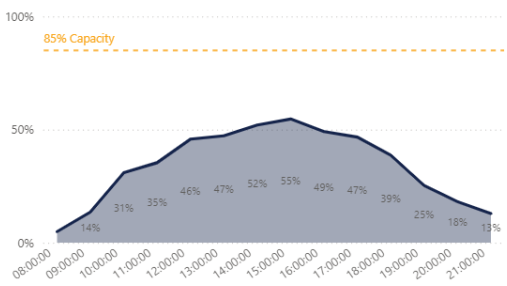

Figure 12.4: Holmesglen Core – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory within the Holmesglen core area is shown in Table 12.1.

Table 12.1: Existing Parking Restrictions Holmesglen Core

STREET	RESTRICTION	CAPACITY
CP1 (Chadstone Village Carpark- adjacent Officeworks)	3 Hours Limit, Staff Excepted	197
	Disabled	6
	Unrestricted	4
CP2 (Chadstone Village Carpark- adjacent Harvey Norman)	15 mins Parking	8
	3 Hours Limit, Staff Excepted	190
	Disabled	4
	Unrestricted	14
CP3 (Chadstone Village - Underground Carpark)	3P	442
	Disabled	10
CP4 (657 Warrigal Road Carpark)	Customer 2P Parking Only	90
	P Disabled Only	10
	Patron Only	264
	Pick Up	2
	Taxi	1
CP9 (Chadstone Village - Undercover Carpark)	Unrestricted	140
	TOTAL	**1,382**

12.3.2 Outer Area

The Holmesglen outer area is predominately residential. The car parking survey results indicate an inventory of 467 spaces.

Existing Car Parking Conditions

The car parking surveyed within the outer area and peak occupancy is shown in Figure 12.5. The occupancy results for the outer area is shown in Figure 12.6 and Figure 12.7.

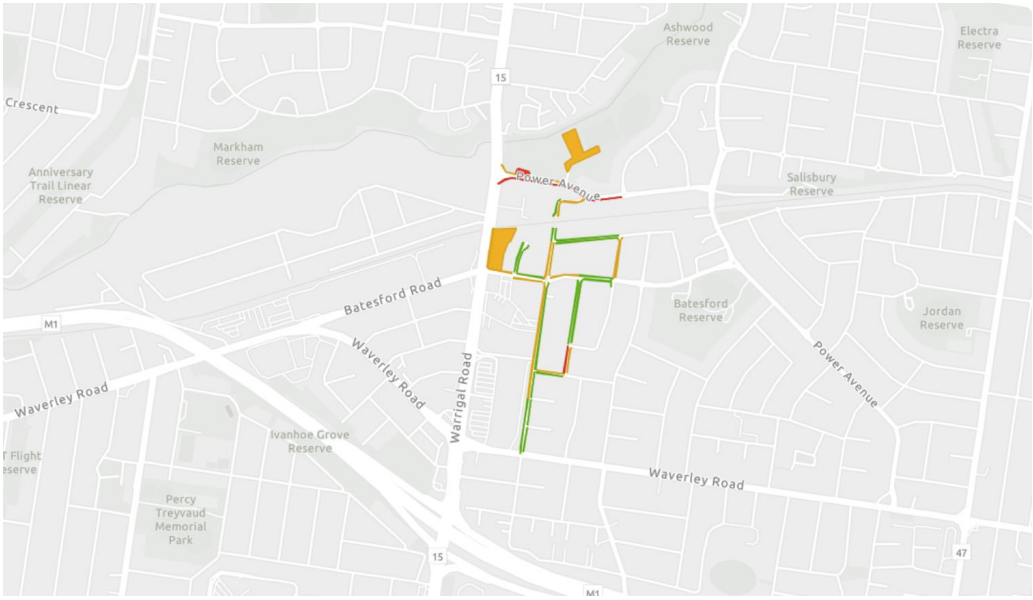

Figure 12.5: Car Parking Areas Included within Holmesglen Outer Area

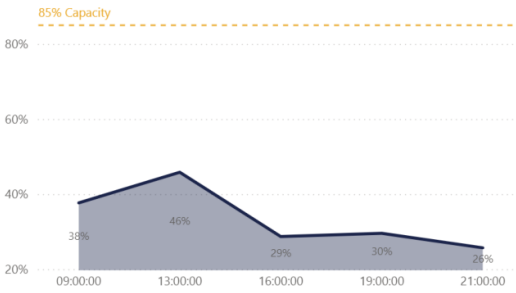

Figure 12.6: Holmesglen Outer – Occupancy Thursday 25 July 2024

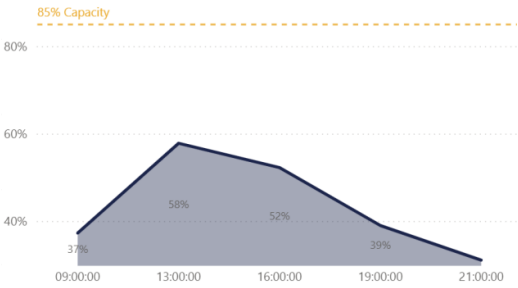

Figure 12.7: Holmesglen Outer – Occupancy Thursday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory within this area is shown in Table 12.2.

Table 12.2: Holmesglen Outer Area – Existing Restrictions

STREET	RESTRICTION	CAPACITY
Batesford Rd	1P	6
	2P	4
	2P 9am-4pm Mon-Fri	18
Collins St	1P 9am-4pm Mon-Fri	43
	Unrestricted	72
	Work Zone 7am-5pm Mon-Fri	2
CP5 (1A Batesford Rd Carparking)	½ P 8am-9pm Permit Vehicles Excepted	7
	1P 8am-12noon, 12noon-9pm Permit Vehicles Excepted	49
	Loading Zone	1
	P Disabled Only	2
CP7 (Holmesglen Reserve Carpark)	2P 8am-5pm	6
	P Disabled	1
CP8 (Carpark on Harlequin Drive)	Authorised Permit Excepted	1
	P Disabled Only	3
	Unrestricted	71
Elliot St	2P 8am-6pm Mon-Fri	13
	Loading Zone	1
Myora Ct	1P 8am-8pm Mon-Fri ,8am-6pm Sat	16
Power Ave	2P 8am-6pm Mon-Fri	10
	Bus Zone	2
	Unrestricted	27
Terrigal St	2P 8am-6pm	18
	Unrestricted	23
Thurloo St	1P 9am-4pm Mon-Fri	4
	Unrestricted	7
	Work Zone 7am-5pm Mon-Fri	1
Vision St	Unrestricted	13
Warrigal Rd	½ P 8am-9pm	10
	Bus Stop	1
	Mail Zone 12pm-1pm, 5pm-5:30pm, P10 mins All Other Times 8am-9pm	2
Woonah St	2P 9am-4pm Mon-Fri	21
	Unrestricted	12
	TOTAL	**467**

Holmesglen Outer– Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Holmesglen area suggests parking occupancy is generally well below the target 85% occupancy.

Further analysis of data suggest modifications to parking management tools are required on Power Avenue.

12.4 Summary of Holmesglen Recommendations

A summary of recommended parking management tools to be implemented in Holmesglen is provided in Table 12.3.

Table 12.3: Holmesglen – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
OUTER	Power Avenue	Unrestricted & 2P 8am – 6pm Mon – Fri	100% 4pm Sat 27 July	• Provide consistent time restrictions on power Avenue • Consider restrictions on Saturdays

12.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of the road and any potential impacts to the traffic flow considering the road cross section (i.e., parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in commercial areas and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

13 KERRIE ROAD STRIP SHOPPING CENTRE

13.1 Background

The Kerrie Road Strip Shopping Centre in Glen Waverley is strategically important for several key reasons:

- **Local Activity Hub:** As a vibrant destination for shopping, dining, and community services, the centre generates considerable local traffic. This highlights the need for effective transport planning and sufficient parking facilities to cater to residents and visitors.
- **Proximity to Residential Areas:** The shopping centre's location within a residential neighbourhood increases accessibility for local residents, making it essential to provide convenient transport options and adequate parking.
- **Public Transport Connectivity:** The shopping strip benefits from nearby bus routes, which provide connectivity to larger activity centres and transport hubs. This ensures access for residents who may not own private vehicles, fostering inclusive mobility.
- **Parking Management:** While the strip offers on-street and nearby off-street parking, the limited supply creates a need for effective parking management to balance turnover for businesses with the needs of long-term users and parking overflow into residential areas.

13.2 Survey Results Snapshot

There are a total of 147 parking spaces available within the Kerrie Road Strip Shopping Centre study area. Of the 147 parking spaces available within the study area 93 spaces are located on-street with the remaining 54 spaces located off-street.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 13.1.

13.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to Council car parking only. Private car parks within the area of note include:

- **Glen Waverley Medical Centre Parking:** Zone 3

Private car parking areas is shown within Figure 13.2.

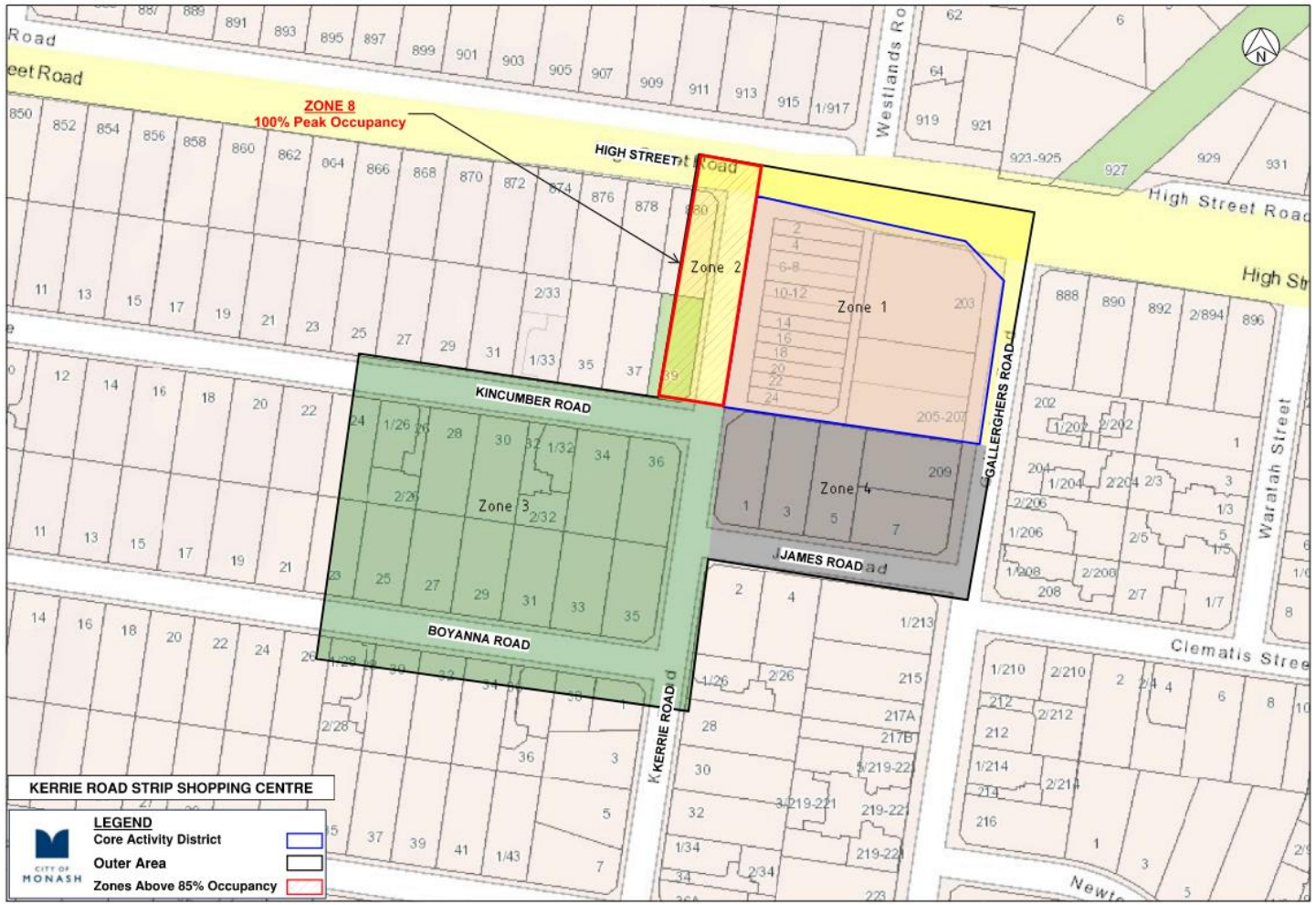

Figure 13.1: Kerrie Road Strip Shopping Centre – Zones with Peak Occupancy Exceeding 85% Occupancy

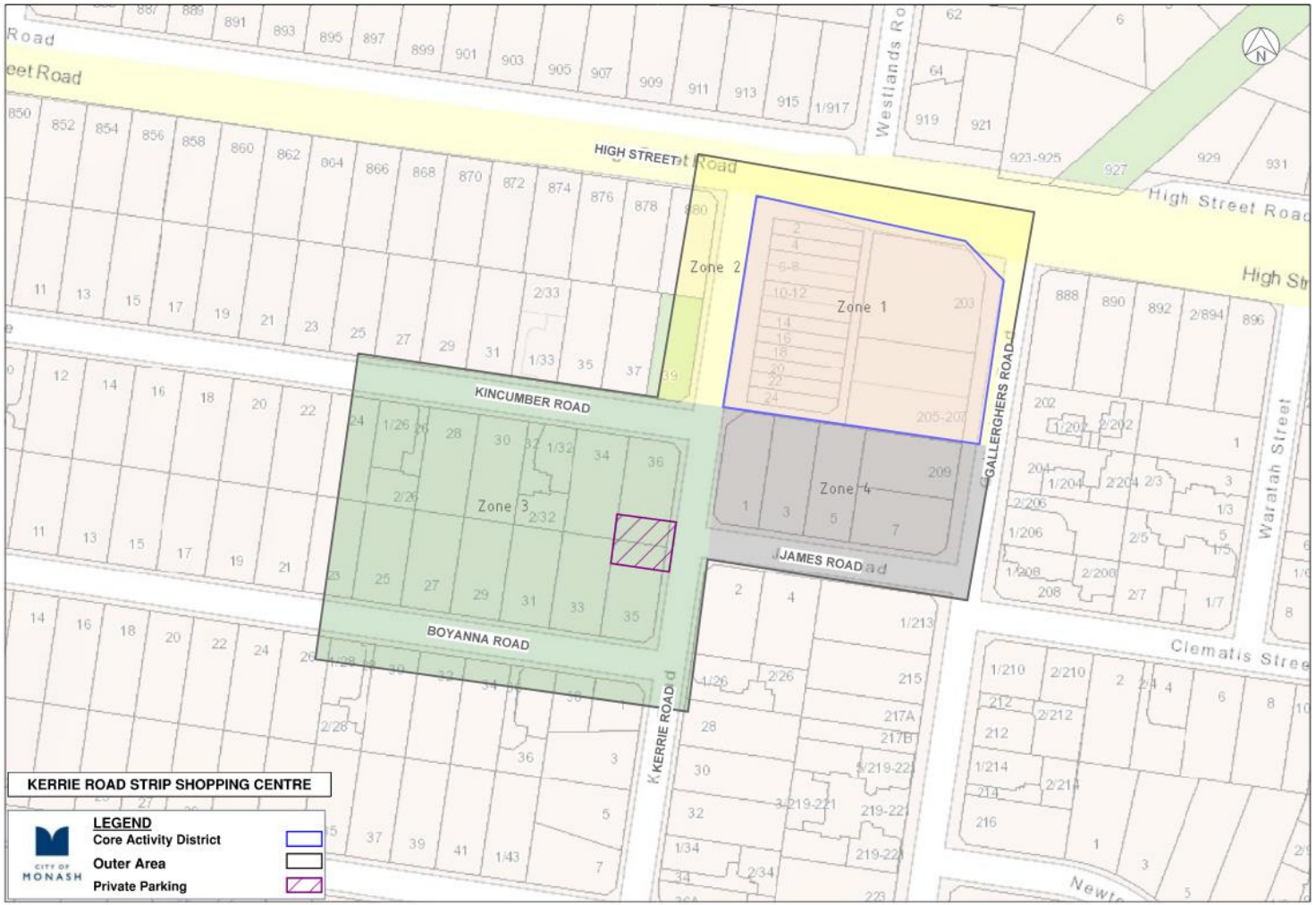

Figure 13.2: Private Parking in the Kerrie Road Strip Shopping Centre

13.3 Recommended Parking Management in the Kerrie Road Strip Shopping Centre

13.3.1 Core Area

The core area within Kerrie Road Strip Shopping Centre consists of an off-street car park providing unrestricted parking. This car park peak occupancy observed was below 85%. Therefore, no time restrictions are required at this stage. The car park could benefit from wayfinding signage as current signage on Kerrie Road directing to the carpark is poor. Further, existing signage to the car park on Gallagher Street could be improved as well to allow better utilisation of the car park.

13.3.2 Outer Area

Parking data analysed in Figure 13.1 indicates zone 2 exceeds the 85% target occupancy.

Zone 2 – Context

Zone 2 consists of on street parking spaces along Kerrie Road in front of the Kerrie Road Shopping Strip. These spaces experience high turn overs as it provides access to local businesses within the Kerrie Road Strip Shopping Centre.

Existing Car Parking Conditions

The zone includes 29 on street car parking spaces operated by Council as shown in Figure 13.3, the occupancy results for Zone 2 in Figure 13.4 and Figure 13.5.

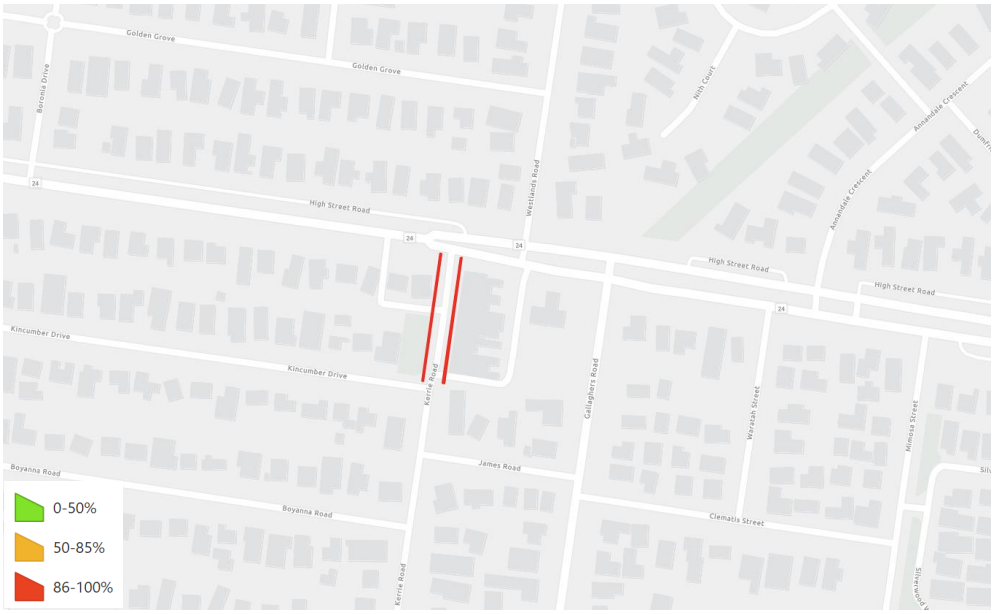

Figure 13.3: Car Parking Areas Included within Zone 2 – Saturday 27 July 2024

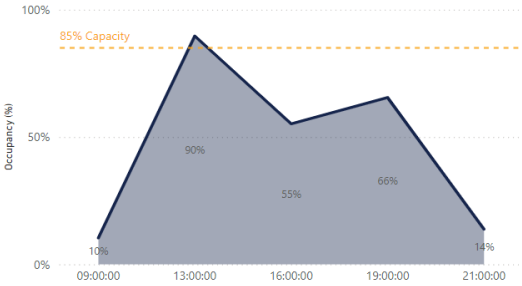

Figure 13.4: Kerrie Road Strip Shopping Centre Zone 2 – Occupancy Friday 26 July 2024

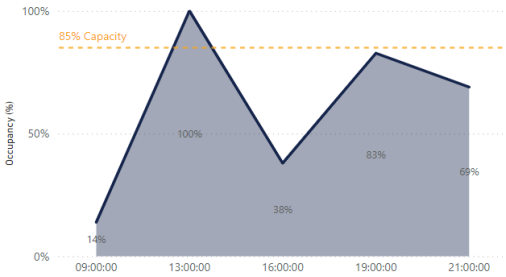

Figure 13.5: Kerrie Road Strip Shopping Centre Zone 2 – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and capacity within Zone 2 is shown in Table 13.1.

Table 13.1: Kerrie Road Strip Shopping Centre – Existing Parking Restrictions in Zone 2

STREET NAME	EXISTING RESTRICTIONS	CAPACITY
Kerrie Rd	½ P 8am-12pm, 12noon-9pm	11
	1P 8am-12pm, 12noon-9pm	8
	2P 8am-6pm Mon-Sat	9
	2P Disabled Only	1
TOTAL		**29**

Kerrie Road Outer – Recommended Locations to Modify Parking Management:

Review of the existing restrictions and parking occupancy across the area suggests parking occupancy throughout the area approximates the target 85% occupancy as indicated within Figure 13.4 and Figure 13.5.

It is noted that the Kerrie Road on-street parking spaces reached capacity (100% occupancy) at 1pm on a Saturday. Notably, 9 of the 29 parking spaces within the area have 2P time restrictions ceasing at 6pm allowing unrestricted parking beyond 4pm. Consideration could be given to increasing the time restrictions beyond 6pm to provide consistent parking restrictions across the zone. Parking occupancy surveys should be undertaken on a Sunday to determine if 2P restrictions are warranted.

13.4 Summary of Kerrie Road Recommendations

A summary of recommended parking management tools to be implemented is provided within Table 13.2.

Table 13.2: Kerrie Road – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	All	–	–	• Retain existing restrictions
OUTER	Kerrie Road (Between High Street and Kincumber Road)	½ P 8am-9pm 1P 8am-9pm 2P 8am-6pm Mon-Sat	100% 1pm 27 July 2024	• Extend 2P on-street parking restrictions beyond 6pm to provide consistent parking restrictions • Provide wayfinding signage directing shop users to off -street car parking between Kerrie Road and Gallaghers Road

13.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for activity locations which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patron/customers and employee parking. In all instances changes to parking management should consider the function of road and any potential impacts to traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in commercial and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

14 MONASH UNIVERSITY PRECINCT

14.1 Background

The Monash University Precinct is strategically vital in the transport landscape due to several key factors:

- **Major Educational Hub:** As a leading institution, Monash University attracts a large population of students, faculty, and staff, generating significant traffic. This necessitates effective transport planning and adequate parking to accommodate the high volume of daily commuters.
- **Proximity to Employment and Research Facilities:** The precinct's proximity to various research centres and business hubs increases the need for efficient transport routes and parking, as these facilities draw additional visitors and professionals.
- **Public Transport Integration:** The area benefits from strong public transport connectivity, including nearby train stations and bus services. This integration promotes public transport use, alleviates congestion, and supports sustainable transport goals.
- **Future Growth and Development:** As Monash University continues to expand its programs and facilities, there will be an increasing demand for innovative transport solutions and enhanced parking capacity to support the growing population and maintain accessibility. Furthermore as part of the proposed Suburban Rail Loop (SRL) orbital rail service a railway station is proposed within the Monash University precinct. The proposed rail station forms part of SRL east, providing rail connection from Cheltenham to Box Hill.

14.2 Survey Results Snapshot

There are a total of 10,171 parking spaces available within the Monash University study area. Of the 10,171 parking spaces available within the study area 2,212 spaces are located on-street with the remaining 7,959 spaces located off-street.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 14.1.

14.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **Monash University Parking:** Zone 1 & 2

Private car parking areas is shown within Figure 14.2.

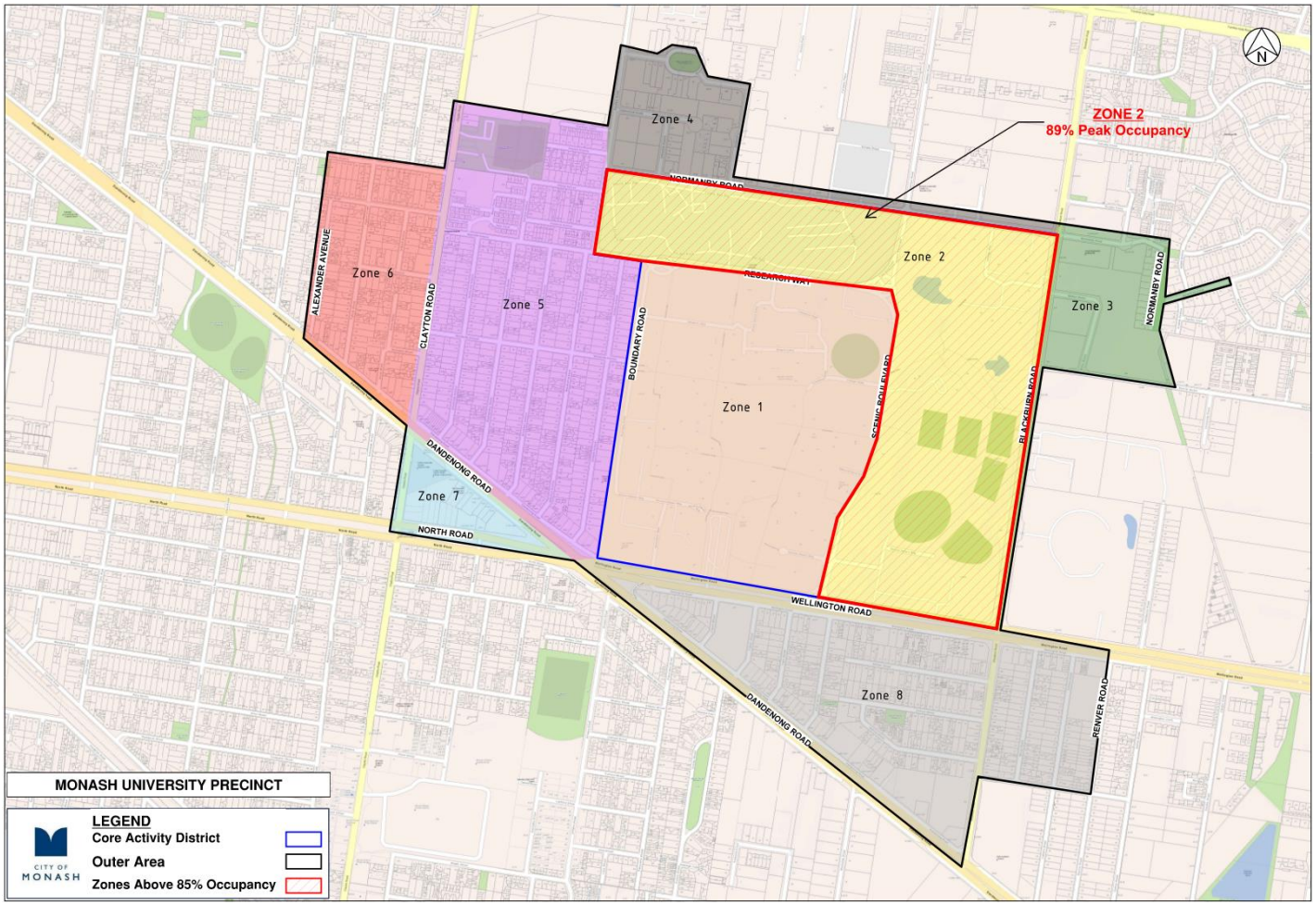

Figure 14.1: Monash University Zones with Peak Occupancy Exceeding 85% Occupancy

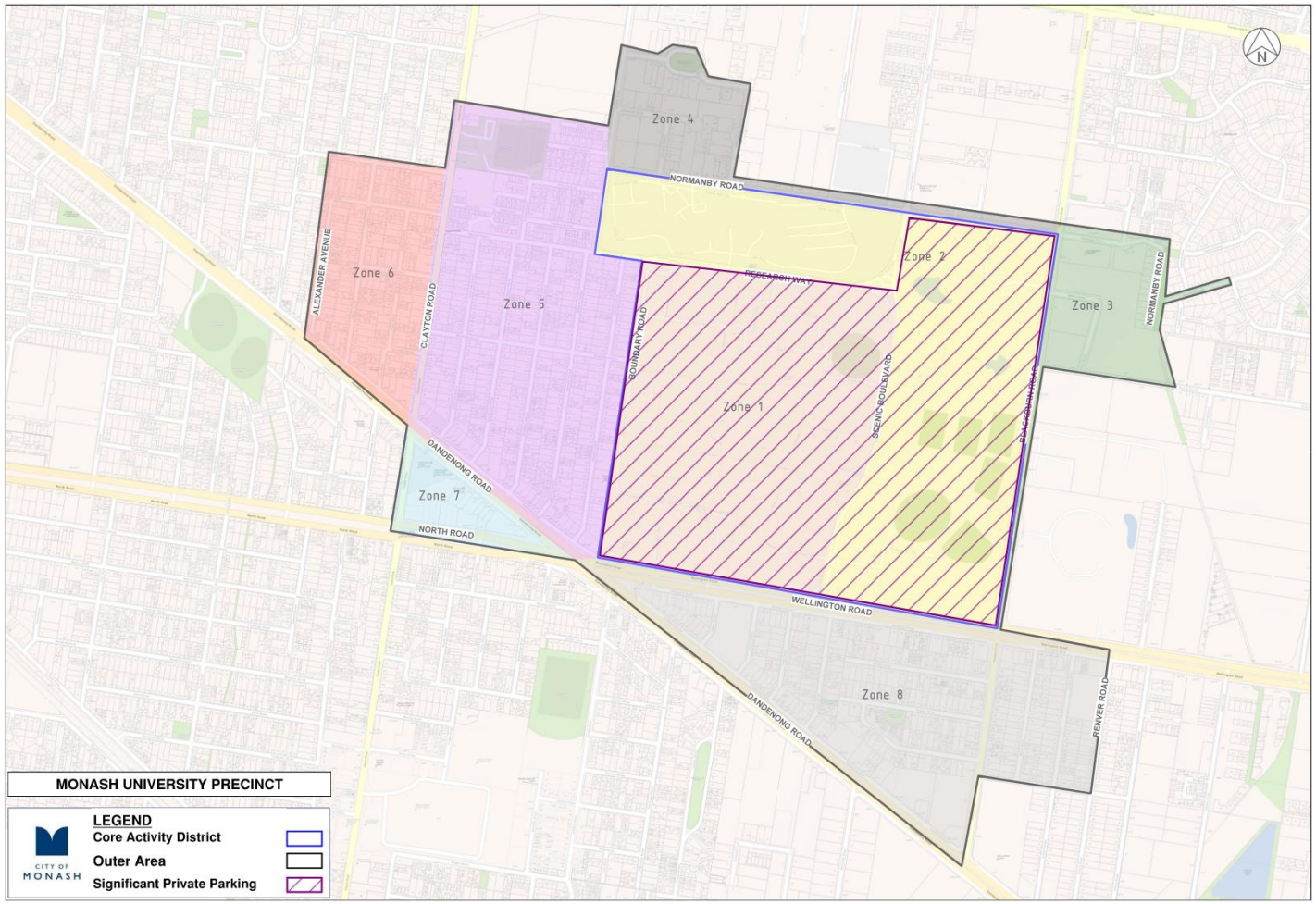

Figure 14.2: Private Parking in the Monash University Activity Centre

14.3 Recommended Parking Management in Monash University

14.3.1 Core Area

Parking data analysed in Figure 14.1, Zone 2 exceeds the 85% target occupancy.

Zone 1 and 2 consists of only private car parking owned by Monash University. Therefore, parking management recommendations are outside of the SPMR and Council scope.

14.3.2 Outer Area

The Monash University outer area is predominately residential with some industrial uses, the car parking surveys results indicate an inventory of 2,305 parking spaces and an occupancy well below the target 85% occupied.

Existing Parking Conditions

The car parking survey within the outer area and showing the peak occupancy is provided in Figure 14.3.

Figure 14.3: Car Parking Areas Included within Outer Area – Peak Occupancy

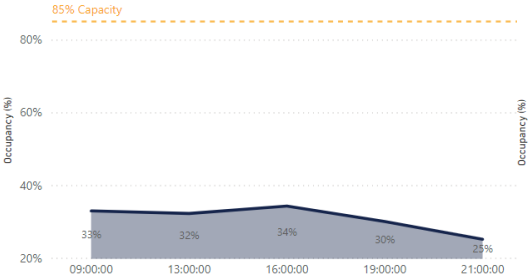

Figure 14.4: Monash University Outer Area – Occupancy Tuesday 23 July 2024

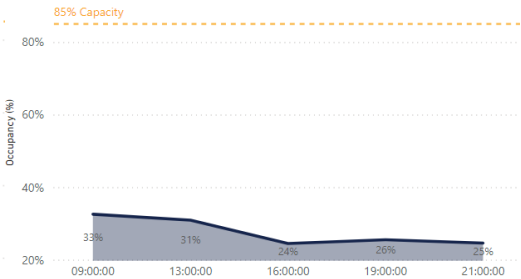

Figure 14.5: Monash University Outer Area – Occupancy Wednesday 24 July 2024

Existing Restrictions

The existing parking restrictions and inventory within this area is shown in Table 14.1.

Table 14.1: Monash University Outer Area – Existing Restrictions

STREET NAME	RESTRICTION	CAPACITY
Alexander Ave	Unrestricted	60
Arnott St	½ P 8am-6pm Mon-Fri	68
Auguste Ave	1P 8am-6pm Mon-Fri	24
Bayview Ave	½ P 8am-6pm Mon-Fri	45
Beddoe Ave	½ P 8am-6pm Mon-Fri	59
	Permit Zone 8am-6pm Mon-Fri	57
Bettina St	½ P 8am-6pm Mon-Fri	61
Boyd Ave	Unrestricted	16
	1P 8am-6pm Mon-Fri	13
Business Park Dr	Unrestricted	35
	1P 8am-6pm Mon-Fri	5
Cambro Rd	1P 8am-8pm	36
	Permit Zone	36
Carlson Ave	1P 8am-6pm Mon-Fri	13
	½ P 8am-6pm Mon-Fri	9
Clarkson Court	Visitor	31
	Disabled Parking Only	1
Clayton Rd	Clear Way 7am-9:30am, 3pm-6:30pm Mon-Fri Tow Away	48
Coban St	½ P 8am-6pm Mon-Fri	11
	Permit Zone	10
Connam Ave	Unrestricted	14
	1P 8am-8pm	6
	Loading Zone 15 Minute 8am-6pm	3
	2P 8am-6pm Mon-Fri	2

STREET NAME	RESTRICTION	CAPACITY
Dennis S	½ P 8am-6pm Mon-Fri	70
	1P 8am-6pm Mon-Fri	5
Dobson Ave	Unrestricted	13
	1P 8am-6pm Mon-Fri	10
Dover St	1P 8am-6pm Mon-Fri	18
	Unrestricted	17
Duerdin St	Unrestricted	56
Florence Ave	½ P 8am-6pm Mon-Fri	26
Gardiner Rd	Unrestricted	31
	½ P 9am-3pm Mon-Fri	16
	Bus Zone	3
	½ P 8am-6pm Mon-Fri	2
	Bus Zone Mon-Fri	2
Glenbrook Ave	½ P 8am-6pm Mon-Fri	90
Hilltop Ave	½ P 8am-6pm Mon-Fri	26
Industrial Ave	Unrestricted	30
Irwin St	½ P 8am-6pm Mon-Fri	44
Koonawarra St	½ P 8am-6pm Mon-Fri	71
	Unrestricted	33
Marshall Ave	½ P 8am-6pm Mon-Fri	106
Martin St	Unrestricted	70
Morton St	1P 8am-6pm Mon-Fri	59
	½ P	7
	2P	6
Murdo Rd	1P 8am-6pm Mon-Fri	70
Normanby Rd	Unrestricted	93
	2P 8am-6pm Mon-Fri	23
	1P 8am-6pm Mon-Fri	10
	Bus Zone	7
North Rd	Bus Zone	1
Parker St	½ P 8am-6pm Mon-Fri	26
Patrick St	1P 8am-6pm Mon-Fri	43
	Unrestricted	43
Princess Hwy Service Rd	1P 8am-6pm Mon-Fri	26
	2P 8am-6pm Mon-Fri Authorised Vehicle Excepted	17
	P 2mins 8:30am-9:30am, 3 pm-4pm School Days	4
	Work Zone 9:30am-3pm Mon-Fri; P 15mins 8:30am-9:30am, 3pm-4pm School Days	4
	Unrestricted	3

STREET NAME	RESTRICTION	CAPACITY
	Permit Zone 8am-4pm Mon-Fri	1
Redwood Dr	Unrestricted	37
	1P 8am-6pm Mon-Fri	6
	No Parking	2
Renver Dr	1P 8am-6pm Mon-Fri	29
	Unrestricted	28
Rossdale St	Unrestricted	8
	1P 8am-6pm Mon-Fri	6
Stewart Rd	1P 8am-6pm Mon-Fri	24
	Unrestricted	20
Stockdale Ave	½ P 8am-6pm Mon-Fri	104
Strelden Ave	Unrestricted	29
	1P 8am-6pm Mon-Fri	12
Wellington Rd Service Rd	½ P 8am-6pm Mon-Fri	67
	1P 8am-8pm	12
	Unrestricted	9
Woodside Ave	½ P 8am-6pm Mon-Fri	66
	Loading Zone 30mins	1
	TOTAL	**2,305**

Monash University Outer – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Monash area suggests parking occupancy is generally well below the target 85% occupancy as indicated within Figure 14.4 and Figure 14.5.

Monash University outer area consists of 645 unrestricted parking spaces with a combined peak occupancy of 50%. While this peak occupancy does not trigger the need to change parking controls, certain locations as Martin Street and Business Park Drive exceed the 85th percentile on both the Tuesday and Wednesday. Consideration should be given to instate time restrictions within these streets.

Filtering the occupancy data for car parking spaces in the Monash outer area with existing time restrictions reveals significant occupancy in specific streets. Consideration should be given to easing existing parking restrictions within the outer area where possible in the following areas:

- Beddoe Avenue, Marshall Avenue, Stockdale Avenue, Koonawarra Street, Glenbrook Avenue, Florence Avenue, Hilltop Avenue, Gardiner Road, Carlson Avenue, Beddoe Avenue, Bayview Avenue, Strelden Avenue, Patrick Street, Dover Avenue, Dobson Avenue, Princess Highway Service Road, Renver Road, Murdo Road, Morton Street, Irwin Street, Dennis Street, Bettina Street and Arnott Street.

Consideration should be given to providing residential permit parking given the proximity to Monash University. Restrictions should be retained to discourage staff, visitors and students to Monash University from parking on streets.

14.4 Summary of Monash University Recommendations

A summary of recommended parking management tools to be implemented is provided below:

A summary of recommended parking management tools to be implemented is provided within Table 14.2 providing recommendation for parking management tools in specific locations.

Table 14.2: Monash University – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
OUTER	Martin Street	Unrestricted	91% 9am Tues 23 July 2024 94% 9am Wed 24 July 2024	• Consider introducing time restrictions
	Business Park Drive	Unrestricted	85% 9am Tues 23 July 2024 85% 9am 24 July 2024	• Consider introducing time restrictions
	Beddoe Avenue, Marshall Avenue, Stockdale Avenue, Koonawarra Street, Glenbrook Avenue, Florence Avenue, Hilltop Avenue, Gardiner Road, Carlson Avenue, Beddoe Avenue, Bayview Avenue, Strelden Avenue, Patrick Street, Dover Avenue, Dobson Avenue, Princess Highway Service Road, Renver Road, Murdo Road, Morton Street, Irwin Street, Dennis Street, Bettina Street and Arnott Street.	Timed restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions, noting permit restrictions may be suitable • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

14.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for higher education precincts which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over student and employee parking. In all instances changes to parking management should consider the function of road and any potential impacts to the traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Consider the car parking hierarchy in higher education areas, industrial/ commercial areas and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

15 MONASH MEDICAL PRECINCT

15.1 Background

The Monash Medical Precinct is strategically significant for several key reasons:

- **Major Healthcare Hub**: As a leading medical facility, the precinct attracts a high volume of patients, visitors, and healthcare professionals. This increases the need for effective transport planning and sufficient parking facilities to accommodate daily traffic.
- **Proximity to Educational Institutions**: Located near Monash University and various training hospitals, the precinct supports medical education and research, increasing the demand for accessible transport routes and parking for students and staff.
- **Public Transport Integration**: The area benefits from strong public transport links, including bus routes and proximity to train stations. This connectivity encourages public transport use, reducing congestion and supporting sustainable transport initiatives.
- **Future Growth and Development**: Anticipated population growth in surrounding areas, combined with the ongoing expansion of healthcare and research facilities within the precinct, will lead to increased transport demand, particularly with the development and eventual launch of the Suburban Rail Loop (SRL).

15.2 Survey Results Snapshot

There are a total of 6,965 parking spaces available within the Monash Medical Precinct study area. Of the 6,965 parking spaces available within the study area 3,310 spaces are located on-street with the remaining 3,655 spaces located off-street.

A summary of car parking survey results of zones exceeding 85% occupancy during the peak period is shown in Figure 15.1.

15.2.1 Council Parking Assets

Whilst the parking surveys and data analysis has included private parking, the scope of the SPMR is limited to council car parking only. Private car parks within the area of note include:

- **Monash Medical Precinct Parking**

Private car parking areas is shown within Figure 15.2.

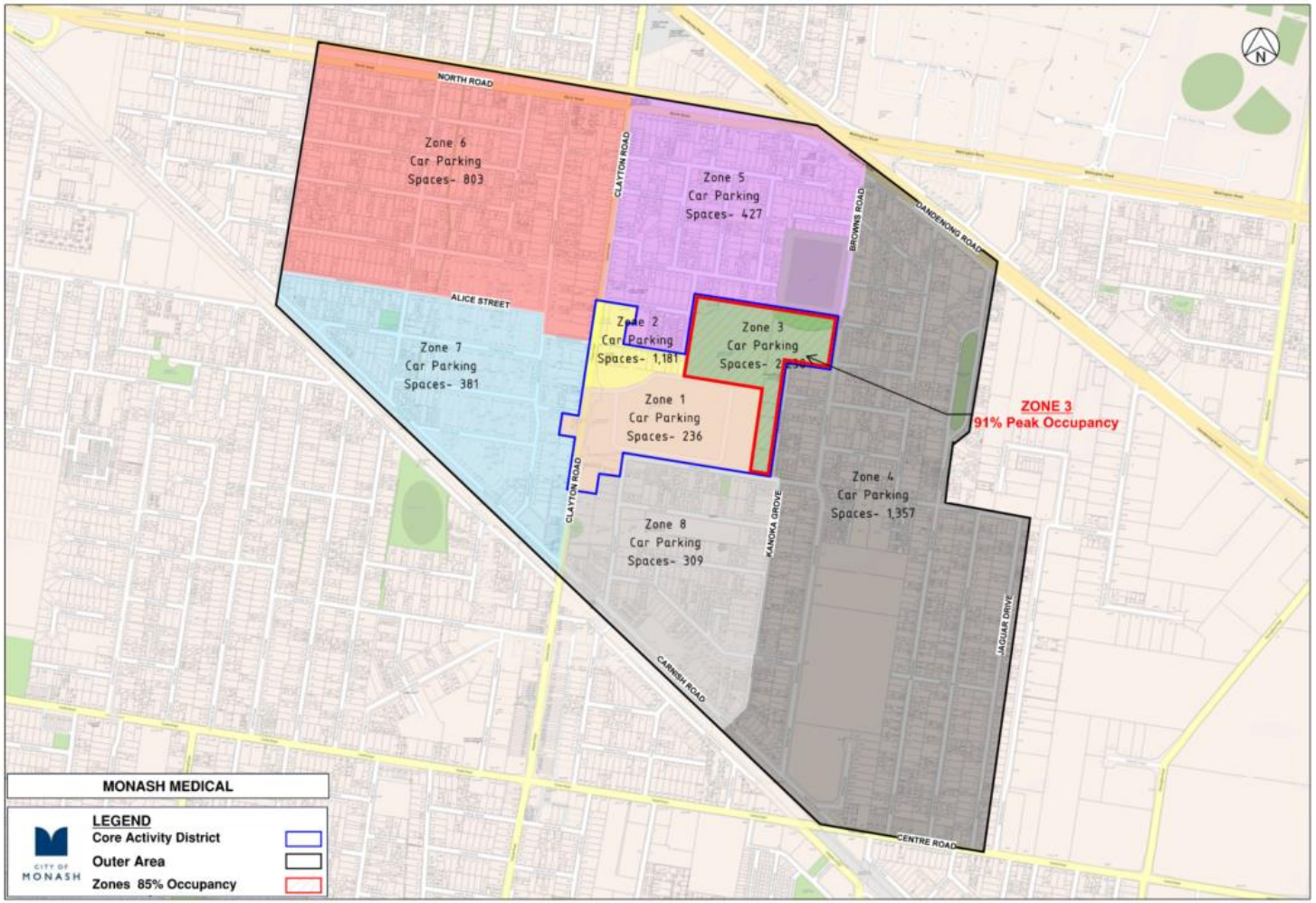

Figure 15.1: Monash Medical – Zones Exceeding 85% Peak Occupancy

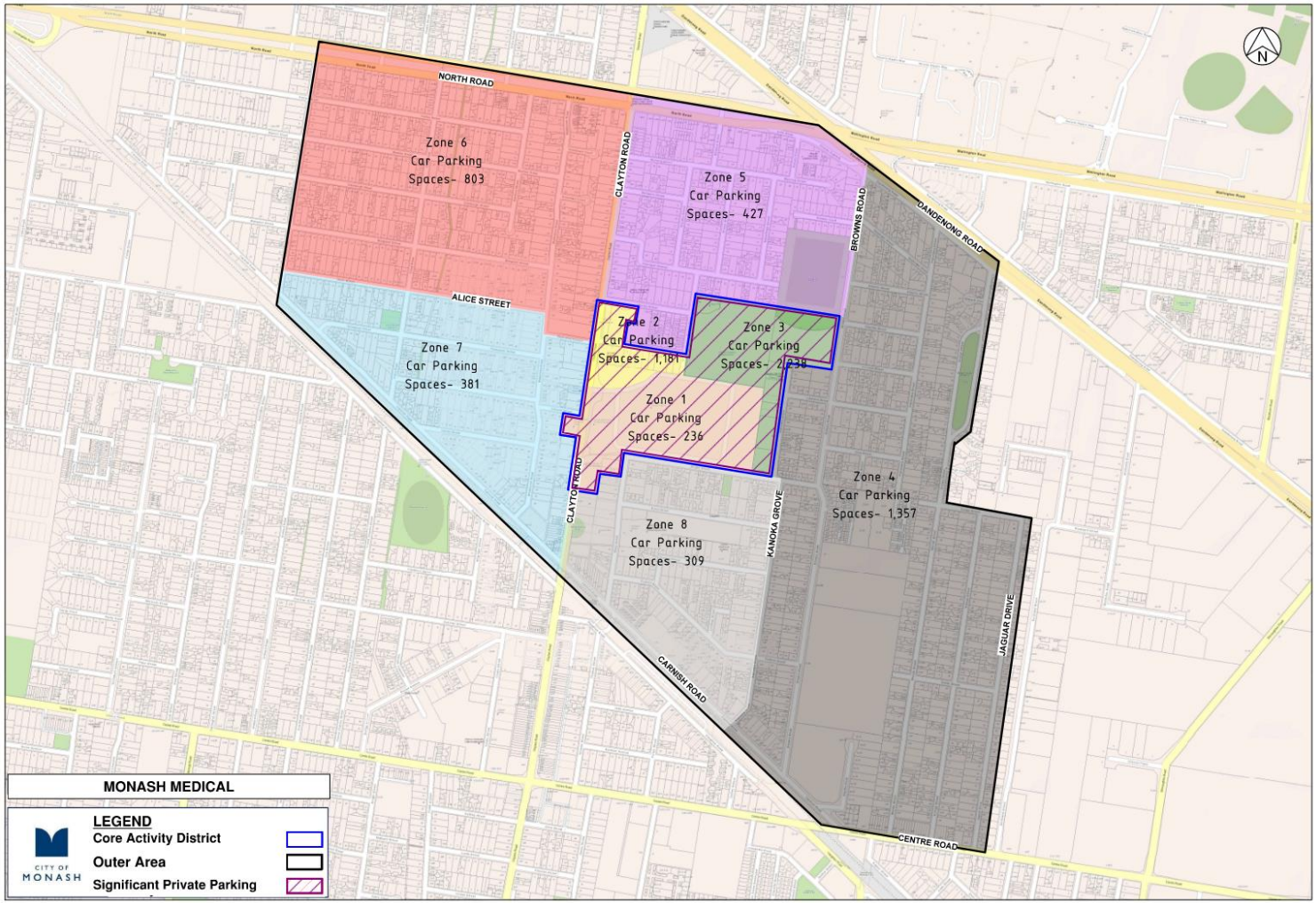

Figure 15.2: Private Parking in Monash Medical

15.3 Recommended Parking Management in Monash Medical Precinct

15.3.1 Core Area

Parking data analysed in Figure 15.1 indicates peak occupancy in Zone 3 exceeds the 85% target occupancy.

The majority of parking in the core area consists of private car parks with the exception of the Council managed Fregon Reserve parking area at 6B Browns Road, Clayton. The Fregon Reserve parking area has 103 spaces and recorded a peak parking occupancy above 85% on a weekday.

Monash Medical Core Context

The Monash Medical Core area includes the Monash Medical Centre, Monash Heart health and Monash Children's Hospital and associated private car parking areas including a multideck car park.

Existing Car Parking Conditions

Noting recommendations are outside of SPMR and Council scope, analysis of the survey results are provided below.

The Monash core area car parking survey results indicate an inventory of 3,655 parking spaces and an overall occupancy well below the target peak occupancy. The car parking areas surveyed and associated peak occupancy for the Monash Medical core area is shown in Figure 15.3, the occupancy results are shown in additional detail in Figure 15.4 and Figure 15.5.

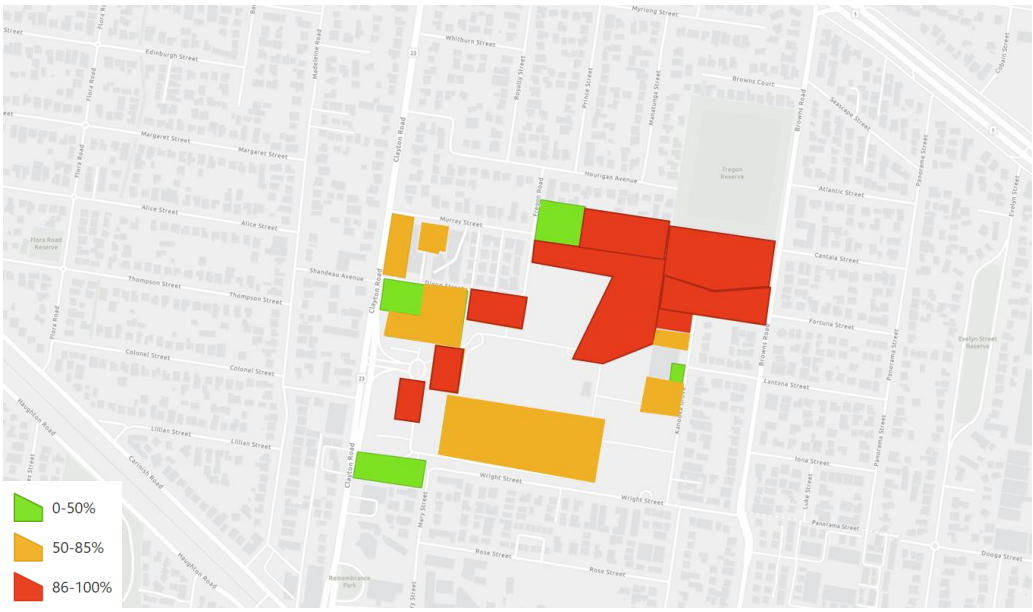

Figure 15.3: Car Parking Areas Included Within Monash Medical Core

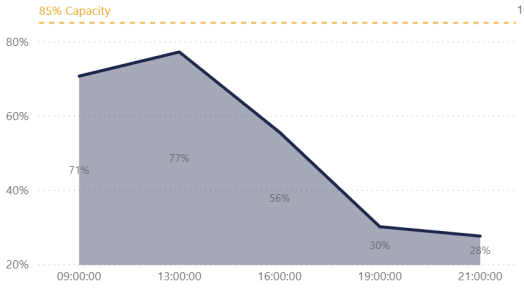

Figure 15.4: Monash Medical Core Area – Occupancy Wednesday 24 July 2024

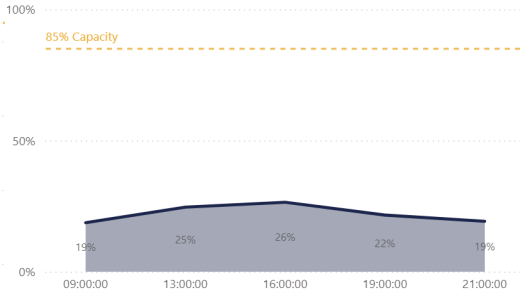

Figure 15.5: Monash Medical Core Area – Occupancy Saturday 27 July 2024

Filtering for car parking spaces with the “staff only”, “reserved” or “employee” parking restrictions gives occupancy results as shown in Figure 15.6 and Figure 15.7. The results indicate there is sufficient availability throughout the day with the peak occupancy observed of 88% at 1:00pm on Wednesday 24 July 2024.

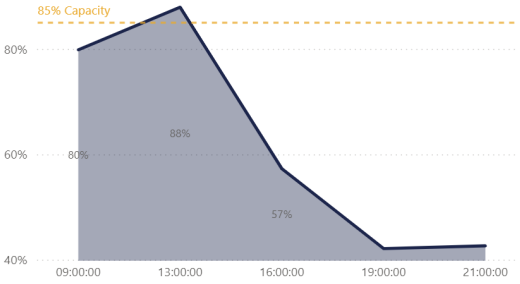

Figure 15.6: Monash Medical Core Area – Staff Parking Only Occupancy Wednesday 24 July 2024

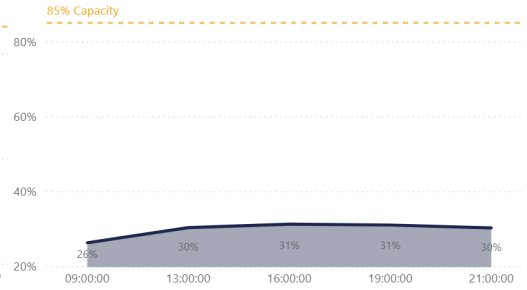

Figure 15.7: Monash Medical Core Area – Staff Parking Only Occupancy Saturday 27 July 2024

Similarly, filtering for spaces available for public parking (timed restrictions or unrestricted paid parking) gives occupancy results as shown in Figure 15.8 and Figure 15.9.

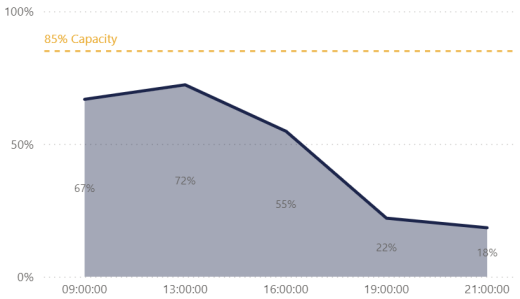

Figure 15.8: Monash Medical Core Area – Publicly available Parking Occupancy Wednesday 24 July 2024

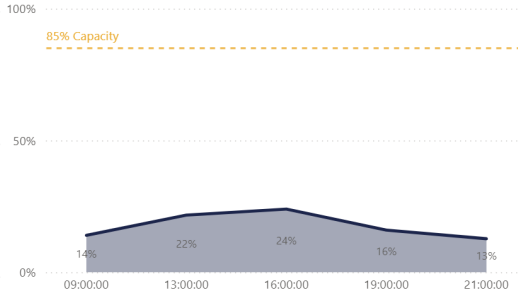

Figure 15.9: Monash Medical Core Area – Publicly available Parking Occupancy Saturday 27 July 2024

Public Multi Deck Car Park

Of particular interest the multideck car park occupancy results are shown in Figure 15.10 and Figure 15.11 indicating availability throughout the multideck car park, peak capacity remained well below 85% on both workdays and weekends. Parking fees apply in the multideck car park.

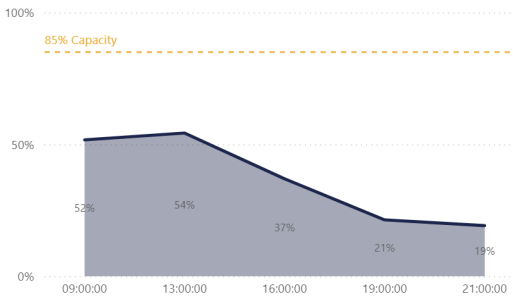

Figure 15.10: Monash Medical Multi Deck Car Park
Occupancy Wednesday 24 July 2024

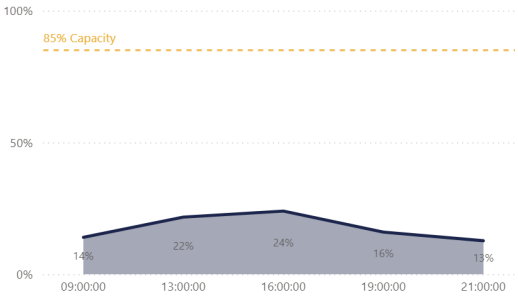

Figure 15.11: Monash Medical Multi Deck Car Park
Occupancy Saturday 27 July 2024

15.3.2 Outer Area

The Monash Medical outer area is predominately residential, the car parking surveys results indicate an inventory of 3,310 parking spaces and an occupancy well below the target peak occupancy.

Existing Car Parking Conditions

The car parking survey within the outer area and showing the peak occupancy is provided in Figure 15.12. The occupancy results for the outer area is shown in Figure 15.13 and Figure 15.14.

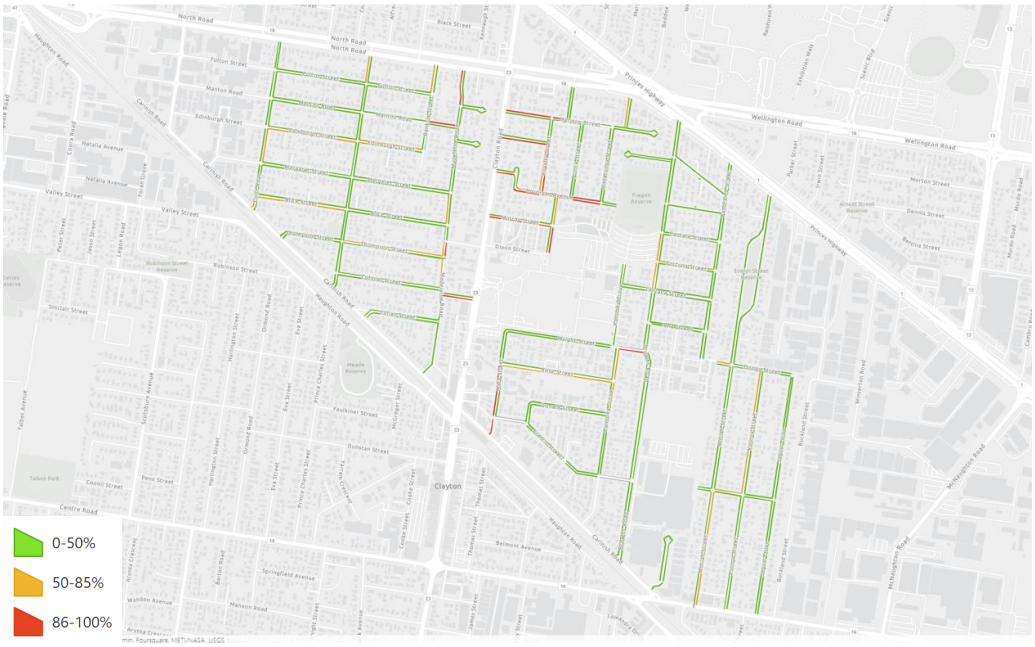

Figure 15.12: Car Parking Included within Outer Area – Peak Occupancy

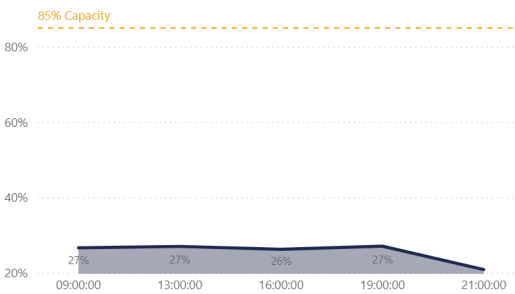

Figure 15.13: Monash Medical Outer Area – Occupancy Wednesday 24 July 2024

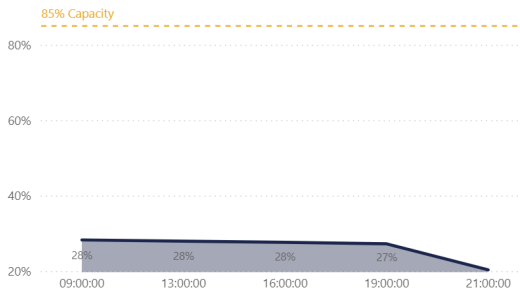

Figure 15.14: Monash Medical Outer Area – Occupancy Saturday 27 July 2024

Existing Restrictions

The existing parking restrictions and inventory within this area is shown in Table 15.1.

Table 15.1: Monash Medical Outer Area – Existing Restrictions

STREET	RESTRICTION	CAPACITY
Alice St	½ P 8am-6pm Mon-Fri	63
	2P 8am-6pm Mon-Fri	25
	Unrestricted	40
Atlantic St	½ P 8am-6pm Mon-Fri	30
Banksia St	2P 8am-6pm Mon-Fri	13
	Unrestricted	30
Beleura Grove	½ P 8am-6pm Mon-Fri	8
Bendix Dr	Unrestricted	23
Bimbi St	Unrestricted	27
Browns Ct	½ P 8am-6pm Mon-Fri	21
Browns Rd	½ P 8am-6pm	6
	½ P 8am-6pm Mon-Fri	122
	2P 7:30am-5:30pm Mon-Fri	98
	2P 8am-6pm Mon-Fri	18
	2P 8am-8pm	23
	No Parking	1
Cantala St	½ P 8am-6pm Mon-Fri	38
Colin Rd	Unrestricted	69
Colonel St	½ P 8am-6pm Mon-Fri	65
	1P 8am-6pm Mon-Fri, 8am-1pm Sat	8
	Unrestricted	7
Donald St	½ P8am-6pm Mon-Fri	59
Dooga St	1P 8am-6pm Mon-Fri	61
	Unrestricted	4
Edinburgh St	2P 8am-6pm Mon-Fri	30
	Unrestricted	70
Evelyn St	1P 8am-6pm Mon-Fri	44
	Unrestricted	23
Flora Rd	2P 8am-6pm Mon-Fri	37
	Unrestricted	84
Fortuna St	½ P 8am-6pm Mon-Fri	29
	Work Zone 7am-5pm Mon-Fri	2
Francis St	½ P 8am-6pm Mon-Fri	68
Fregon Rd	2P 8am-6pm Mon-Fri	14
	Permit Zone	14

STREET	RESTRICTION	CAPACITY
Fulton St	4P 8am-5pm Mon-Fri, 8am-12pm Sat	30
	Unrestricted	74
Grovedale Ct	1P 8am-6pm Mon-Fri	3
	1P 8am-8pm Mon-Fri	6
	Unrestricted	6
Hourigan Ave	½ P 8am-6pm Mon-Fri	54
	Permit Zone	8
Iona St	½ P 8am-6pm Mon-Fri	40
Jaguar Dr	1P 8am-6pm Mon-Fri	44
	Unrestricted	128
Kanooka Grove	½ P 8am-6pm Mon-Fri	14
	1P 8am-6pm Mon-Fri	16
	2P 8am-8pm	49
	Permit Zone	55
	Work Zone 7am-6pm Mon-Fri, 9am-6pm Sat; 1P 8am-6pm Sun	4
Kionga St	½ P 8am-6pm Mon-Fri	28
	1P 8am-6pm Mon-Fri	35
	Unrestricted	82
Kumara Pl	½ P 8am-6pm Mon-Fri	11
Lantana St	½ P 8am-6pm Mon-Fri	66
Lillian St	½ P 8am-6pm Mon-Fri	49
Madeleine Rd	½ P 8am-6pm Mon-Fri	101
	½ P 8am-8pm	15
	2P 8am-8pm	15
Manatunga St	½ P 8am-6pm Mon-Fri	46
Manton Rd	½ P 8am-8pm	7
	2P 8am-8pm	7
	Unrestricted	106
Margaret St	½ P 8am-6pm Mon-Fri	28
	2P 8am-6pm Mon-Fri	44
	Unrestricted	45
Mary St	1P 8am-6pm Mon-Fri, 8am-1pm Sat	10
	P 5mins 8am-9am, 3pm-4pm School Days, 1P 9am-3pm Mon-Fri	5
	Permit Zone	19
	Unrestricted	14
Moriah St	1P 8am-6pm Mon-Fri	59
	Permit Zone 8am-5pm Mon-Fri, 8am-1pm Sat	35
	Unrestricted	43

STREET	RESTRICTION	CAPACITY
Murray St	2P 8am-6pm Mon-Fri	21
	Permit Zone	14
Myriong St	½ P 8am-6pm Mon-Fri	55
	1P 8am-6pm Mon-Fri	14
	Permit Zone	8
Panorama St	½ P 8am-6pm Mon-Fri	127
Prince St	½ P 8am-6pm Mon-Fri	54
Rockbeare Ct	1P 8am-8pm	11
	Unrestricted	5
Rose St	1P 8am-6pm Mon-Fri, 8am-1pm Sat	34
	1P 9:30am-3pm	30
Royalty St	½ P 8am-6pm Mon-Fri	38
Seascape St	½ P 8am-6pm Mon-Fri	43
Thompson St	½ P 8am-6pm Mon-Fri	50
	2P 8am-6pm Mon-Fri	21
	Unrestricted	20
Whitburn St	½ P 8am-6pm Mon-Fri	18
Wright St	½ P 8am-6pm Mon-Fri	10
	1P 8am-6pm Mon-Fri	36
	Permit Zone	26

Monash Medical Outer – Recommended Locations to Modify Parking Management

Review of the existing restrictions and parking occupancy across the outer Monash Medical area suggests parking occupancy is generally well below the target 85% occupancy.

The following roads have been identified with time restrictions and a peak occupancy below 50%, consideration could be given to easing restrictions in the following areas:

- Fulton Street, Manton Road, Edinburgh Street, Margaret Street, Alice Street, Thompson Street, Lillian Street, Jaguar Drive, Kionga Street, Moriah Street, Dooga Street, Evelyn Street, Panorama Street, Seascape Street, Atlantic Street, Cantala Street, Lantana Street, Iona Street, Browns Road, Browns Court, Kanooka Grove, Wright Street, Rose Street, Donald Street, Francis Street, Mary Street, Manatunga Street, Myriong Street, Prince Street, Royalty Street (between Whitburn Street and Myriong Street).

It is noted considerations should be made to the impacts to staff and patient parking demands by easing or implementing parking changes across the area. Noting the location of the Browns Road South Staff car park (paid private parking), if restrictions are eased in the surrounding areas it is likely staff will seek free on-street parking.

15.4 Summary of Monash Medical Precinct Recommendations

A summary of recommended parking management tools to be implemented in Monash Medical Precinct is provided in Table 15.2.

Table 15.2: Monash Medical Precinct – Recommended Parking Management Tools

	LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
CORE	Fregon Reserve parking area	3P 8am-6pm Mon-Fri	1pm 96% Wed 24 July 2024 4pm 62% Sat 27 July 2024	• Consider shortening parking restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking
OUTER	Fulton Street, Manton Road, Edinburgh Street, Margaret Street, Alice Street, Thompson Street, Lillian Street, Madeleine Road, Jaguar Drive, Kionga Street, Moriah Street, Dooga Street, Evelyn Street, Panorama Street, Seascape Street, Atlantic Street, Cantala Street, Lantana Street, Iona Street, Browns Road, Browns Court, Kanooka Grove, Wright Street, Rose Street, Donald Street, Francis Street, Mary Street, Manatunga Street, Myriong Street, Prince Street, Royalty Street (between Whitburn Street and Myriong Street)	Mix of time restrictions	All streets specified have peak occupancies below 50%	• Consider easing or remove the time restrictions for the streets identified, (noting potential impacts to staff and patient parking demands in the area) • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / restrictions

15.4.1 Additional Considerations

- Any modifications to parking management should consider the car parking hierarchy for hospital areas which prioritises safety, pedestrians, accessible spaces, bicycles, loading zones and drop off/pick up over patient and employee parking. In all instances changes to parking management should consider the function of road and any potential impacts to the traffic flow considering the road cross section (i.e. parking availability used to allow for opposing traffic flow).

Additional considerations to implement the parking management tools and general parking management tools that may be applicable include:

- Impacts to staff and patient parking demands by easing or implementing parking changes across the area. Noting the location of the Browns Road South Staff car park (paid private parking), if restrictions are eased in the surrounding areas it is likely staff will seek free on-street parking.
- Consider the car parking hierarchy in community areas and residential areas
- Promoting car sharing across the area and providing car share only spaces
- For any major changes to parking restrictions a trial implementation period could be undertaken where the restrictions are in place for a limited time to observe the effects on parking occupancy and any unforeseeable effects of the changes

Following any changes to parking restrictions, an initial review of the parking conditions (occupancy trends, including turnover and peak occupancy) should be conducted after six months, with ongoing monitoring to occur annually thereafter.

To implement changes to parking restrictions effectively, it is recommended to conduct community consultation to clearly explain the rationale and objectives behind the proposed changes while providing stakeholders with an opportunity to share their input. Feedback gathered from the community can inform adjustments to the implementation process, ensuring that concerns are addressed and fostering greater support for the changes.

16 INDICATIVE COSTINGS

16.1 Background

Indicative cost estimates have been prepared for each activity centre to support the recommended parking management tools. Where available, the estimates have been based on the Rawlinson Australian Construction Handbook or credible online sources.

16.1.1 Paid Parking Costing Consideration

To provide costing estimates associated with implementing paid parking infrastructure, including the type and number of meters required, reference is made to the Austroads Guide to Traffic Management Part 11 Parking Management Techniques. The guide suggests parking meters should be located within 50m of each other and on the same side of the road, roughly equating to one parking meter every 10-20 parking spaces (depending on the parking arrangement and parking dimensions). The indicative cost to implement each meter is estimated at $13,500 as sourced from the Rawlinson Australian Construction Handbook.

Regarding the type of meter / paid parking machine it is recommended to implement pay by plate type machines which work by the driver entering the vehicle registration number and duration of stay they require. This type of machine is commonly observed across metropolitan Melbourne and increases efficiency for enforcement. Benefits and drawbacks of each parking control system as sourced from Austroads is provided in Table 16.1 .

Table 16.1: Parking Control Systems Benefits and Drawbacks – Austroads

	BENEFITS	DRAWBACKS
Pay and display	• Paid time overlap (> 10% revenue) parking spaces are paid for a greater period than they are occupied • Unlimited layout of spaces • Spaces do not need to be marked • Automatic issue of ticket and receipt (credit card) • Easily relocated /expanded to additional spaces • Alternatives available if a machine is not working • Can be used on and off-street • Easily understood by the public • Less queries on infringements • More detailed transaction data available from every ticket issued • A two-part ticket can be used for discounts/ validation by businesses • Already easily understood by most drivers • Does not require personal technology such as smart phones	• Extra walking distance • Uses more paper • Additional maintenance costs due to more moving parts • Awkward for some parkers such as parents with small children • Unless designed to accommodate credit cards, requires parkers to potentially have significant amount of cash available depending on fee and length of stay • ‘Meter feeding’ can occur where parking is time limited
Pay by space	• Shorter walking distance for drivers • Paperless – more environmentally friendly • Less moving parts therefore less maintenance	• Restricted number of spaces per machine • Spaces must be marked and numbered. • Overlap is used unless machine resets to zero

	BENEFITS	DRAWBACKS
	• More efficient for enforcement as rangers only visit the machine not each space • Receipt can be generated on demand	• No alternative if a machine is not working • Not used off-street • Inconvenient to relocate • Numbering requires maintenance • Fixed fee structure encourages overlap • Confusing for some parkers especially elderly
Pay by plate	• Paid time overlap (> 10% revenue) • More efficient for enforcement and can target repeated offenders • Spaces do not need to be marked • Less queries on infringements • Unlimited layout of spaces • Paperless – more environmentally friendly • Can be used on and off-street • Discourages free parking period over multiple visits (i.e. Drivers moving vehicles for free parking)	• Extra time consumed to enter licence plate numbers may result in queues • Possible error when typing in the number plate • Higher maintenance on key pad • Confusing for some parkers especially elderly"
Mobile phone	• No maintenance costs • Paperless – more environmentally friendly • Can be used on and off-street	• Assumes all drivers have a mobile phone and that these are fully charged and usable at the time parking is required • Detailed signage required • Administration for debt collection • Requires sophisticated enforcement software • No receipt available

16.2 Costing Limitations

The following factors have not been included in the estimates noting the uncertain nature and unforeseeable variables:

- Legal requirements
- Any planning, review and design requirements
- Community engagement and consultations
- Council officer time

16.3 Costing Summary

Indicative cost estimate summary for implementing the recommended parking management tools are provided in Table 16.2. It is noted items for consideration, maintenance and additional parking surveys have not been included in the estimates.

Table 16.2: Costing Estimates for Sign Changes

ACTIVITY LOCATION	INDICATIVE COST
Glen Waverley Activity Centre	$ 98,000.00
Clayton Activity Centre	$ 24,000.00
Oakleigh Activity Centre	$ 47,000.00
Mount Waverley Activity Centre	$ 26,000.00
Huntingdale Activity Precinct	$ 15,000.00
Pinewood Shopping Centre	$ 10,000.00
Syndal Shopping Centre	$ 21,000.00
Holmesglen Neighbourhood Activity Centre	$ 3,000.00
Kerrie Road Strip Shopping Centre	$ 1,000.00
Monash University Precinct	$ 73,000.00
Monash Medical Precinct	$ 94,000.00

WGA

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Parking Management Review Recommendations

Summary of recommendations for key activity locations

Table 1: Glen Waverley Parking Review Recommendations

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Glen Waverley Central Parking Area	2P 8am-8pm	98% 8pm-9pm Thur 25 July 2024 100% 6pm-9pm Sat 27 July 2024	• Explore extending parking restrictions beyond 8pm • Consider dynamic signage • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is now in private ownership and some of the recommendations may not be practical depending on the timing of any redevelopment of the site
Monash Civic Centre and Library parking	1 ½ P 8am-8pm Mon-Fri	95% 1pm Sat 27 July 2024	• Consider applying parking restrictions on weekends • Consider sensors dynamic signage • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Glendale St East Parking Area	2P 8am – 6 pm	76% 6pm Thur 25 July 2024 96% 6pm - 8pm Sat 27 July 2024	• Explore extending parking restrictions beyond 6pm • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is to be acquired by the SRLA and some of the recommendations may not be practical depending on the timing of any redevelopment of the site
Glendale St West Parking Area	3P 8am – 6pm	90% 7pm-8pm Thur 25 July 2024 97% 6pm-9pm Sat 27 July 2024	• Explore extending parking restrictions beyond 6pm • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking • It is noted that this car park is to be acquired by the SRLA and some of the recommendations may not be practical depending on the timing of any redevelopment of the site
Kingsway, Coleman Parade, Railway Parade North	Timed restrictions	All streets specified have peak occupancies above 85%	• Consider adjusting parking restrictions • Increase parking enforcement • Explore paid parking

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Mount Street, Hogan Road, Little Street, Panoramic Grove, Charlotte Street, Clifford Street, Fairhills Parade, Kennedy Street, Barbara Avenue, Blair Road , Grace Street, Bogong Avenue, Florence Street, Rose Avenue, Myers Avenue, Fernhill Street, Lisbon Street, Goodin Grove, Hinkler Road, Evelyn Street, Glen Road, Victoria Avenue, Wilson Road, Lincoln Avenue, Marriott Parade, Petter Street	Permit and Timed Restrictions	All streets specified have peak occupancies below 50%	• Consider implementing consistent parking time restrictions • Consider easing permit and / or time restrictions

Table 2: Clayton Parking Review Recommendations

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Cooke Street East Parking Area	2P 8am-6pm Mon-Sat	100% Occupancy - 1:00pm-3:00pm 25 July 2024 100% Occupancy - 12:00pm-3:00pm 27 July 2024	• Consider adjusting time restrictions for some spaces • Consider extending current restrictions to 8pm and on Sundays • Consider sensors and dynamic signage at vehicle entry to car park on Cooke Street to indicate car park availability and direct to additional car parks within surrounds (Cooke St West parking area, Dunstan St parking area) • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking
Clayton Road (Dunstan Road to Centre Road	1P 8am-6pm Mon-Fri, 8am-1pm Sat	100% Occupancy - 8pm 25 July 2024 100% Occupancy - 27 July 2024 12:00pm-6:00pm	• Consider extending restrictions to 8pm including Saturdays and Sundays • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
Thomas Street South Car Park	2P 8am-6pm Mon-Sat	98% Occupancy - 7pm 25 July 2024 100% Occupancy - 9pm 27 July 2024	• Extend parking restrictions to 8pm and on Sundays • Increase enforcement, issue fines for overstayed parked cars • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Haughton Road * (Nicholson Court to McGregor Street) Nicholson Court	Unrestricted and 4P 8am – 6pm Mon – Sat	All streets specified have peak occupancies above 85%	• Consider adjusting time restrictions to provide shorter and consistent restrictions (*It is noted that the SRLA works may have impacted surveys. Continued monitoring is required following the SLRA changes including the Carinish Road East closure)
All	All	N/A	• Retain existing restrictions.

Table 3: Oakleigh Parking Review Recommendations

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Portman Street (Station Street to Hanover Street)	1P 8am – 8pm	100% Occupancy - 8:00pm 25 July 2024 100% Occupancy 11am 27 July 2024	• Consider extending parking restrictions beyond 8pm • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
Atherton Road (Station Street to Atkinson Street)	1P 8am-8pm	91% Occupancy - 11am to 12 midday 25 July 2024 97% Occupancy 11am to 12 midday 27 July 2024	• Consider extending parking restrictions beyond 8pm • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Station Street	1P 8am-8pm	95% Occupancy 11:00am & 4:00-6:00pm 25 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
Hanover Street (West off street parking area)	2P 8am – 8pm	100% Occupancy 1pm 25 July 2024 98% Occupancy 3:00pm 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Consider dynamic signage to indicate car park availability and direct to surrounding car parks • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking
Chester Street	1P 8am-8pm	78% occupancy 11am 25 July 2024 66% occupancy 6pm 27 July 2024	• Apply an area based approach that considers the impact of wider parking change in the surrounding area • Provide consistent restrictions on-street and consolidate underutilised 2-minute, 1/4P and 1/2P restricted spaces • Increase enforcement, issue fines for overstayed parked cars • Explore paid parking
Chester Street (North off street parking area)	2P 8am-8pm	100% Occupancy 11am-1pm 100% Occupancy 11am 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Consider dynamic signage to indicate car park availability and direct to surrounding car parks • Explore paid parking

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Clyde Street, Westley Street, Willesden Road, Swindon Road, Earlstown Road and Davey Avenue	Permit zones (various times)	All streets specified have peak occupancies below 50%	• Consider easing permit restrictions and/or time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions
Drummond Street (Between Palmer Street to Atherton Road)	2P 8am-8pm Mon-Fri, 8am-1pm Sat	92% 7pm 25 July 2024 91% 7pm 27 July 2024	• Provide consistent restrictions on-street • Consider extending current restrictions to 8pm Saturday and on Sundays • Explore paid parking
Palmerston Grove	Permit Zones 1P at retail frontages	91% 1pm-4pm 25 July 2024 87% 1pm 27 July 2024	• Increase enforcement, issue fines for overstayed parked cars • Explore paid parking at retail frontages

Table 4: Mount Waverley Parking Review Recommendations

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
All	Timed Restrictions	All streets/ car parks specified have peak occupancies between 50% and 85%	• Retain existing parking controls • Continue to monitor parking conditions, if occupancy consistently below 50% consider easing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Rosaline Avenue, Farquharson Street, Bowman Street, Cheviot Road, Wirth Street, Holskamp Street, Miller Crescent, Amber Grove, Quercus Court, Kuzea Court, Waimarie Drive, Valley Road, Mummery Street, Alexander Street and Carmel Avenue	Timed restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions

Table 5: Huntingdale Parking Review Recommendations

LOCATION	PARKING CONTROLS	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Huntingdale Core Area	Time Restrictions	73% 1pm 25 July 2024	• Retain existing parking controls • Continue to monitor parking conditions, especially on Huntingdale Road, Hume Street, Stafford Street, Clifford Street, if occupancy consistently exceeds 85% consider adjusting restrictions or implementing paid parking
Berkeley Street, Ross Street, Beuford Street, Parer Street, Huntingdale Road (Beauford St to Edward Street, & Clarendon Avenue to Valley Street)	Time Restrictions	All streets specified have peak occupancies below 50%	• Ease or remove the time restrictions for the streets identified. • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

Table 6: Pinewood Parking Review Recommendations

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
All	Timed Restrictions	65% 4pm Fri 26 July 2024 62% 1pm Sat 27 July 2024	• Retain existing parking controls • Continue to monitor parking conditions, if occupancy consistently below 50% consider easing/removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions
Tooland Court, Illuka Crescent, Lemana Crescent, Lemont Avenue, Toombah Street, Torroodun Street, Wallabah Street.	Time Restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

Table 7: Syndal Parking Review Recommendations

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
All	N/A	N/A	• Retain existing parking controls • Continue to monitor parking conditions, if occupancy consistently below 50% consider easing/removing time restrictions, if occupancy consistently exceeds 85% consider adjusting restrictions

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Lee Avenue, St Clair Crescent, Price Avenue, Latham Court, Matthew Street, Pepperell Avenue, Dunscombe Avenue, Marbray Drive	Time Restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions
Doynton Parade (Blackburn Road to Munro Avenue)	Unrestricted	100% 4pm Thur 25 July 2024 57% 7pm Sat 27 July 2024	• Consider implementing time restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider further adjustment of parking controls

Table 8: Holmesglen Parking Review Recommendations

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Power Avenue	Unrestricted & 2P 8am – 6pm Mon – Fri	100% 4pm Sat 27 July	• Provide consistent time restrictions on Power Avenue • Consider restrictions on Saturday

Table 9: Kerrie Road Parking Review Recommendations

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Kerrie Road (between High Street and Kincumber Road)	1/2P 8am-9pm 1P 8am-9pm 2P 8am-6pm Mon-Sat	100% 1pm 27 July 2024	• Extend 2P on-street parking restrictions beyond 6pm to provide consistent parking restrictions. • Provide wayfinding signage directing shop users to off-street car parking between Kerrie Road and Gallaghers Road

Table 10: Monash University Precinct Parking Review Recommendations

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Martin Street	Unrestricted	91% 9am Tues 23 July 2024 94% 9am Wed 24 July 2024	• Consider introducing time restrictions
Business Park Drive	Unrestricted	85% 9am Tues 23 July 2024 85% 9am 24 July 2024	• Consider introducing time restrictions

LOCATION	PARKING RESTRICTION (PREDOMINATE RESTRICTION)	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Beddoe Avenue, Marshall Avenue, Stockdale Avenue, Koonawarra Street, Glenbrook Avenue, Florence Avenue, Hilltop Avenue, Gardiner Road, Carlson Avenue, Beddoe Avenue, Bayview Avenue, Strelden Avenue, Patrick Street, Dover Avenue, Dobson Avenue, Princess Highway Service Road, Renver Road, Murdo Road, Morton Street, Irwin Street, Dennis Street, Bettina Street and Arnott Street.	Timed restrictions	All streets specified have peak occupancies below 50%	• Consider easing time restrictions, noting permit restrictions may be suitable • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions

Table 11: Monash Medical Precinct Parking Review Recommendations

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Fregon Reserve parking area	3P 8am-6pm Mon-Fri	1pm 96% Wed 24 July 2024 4pm 62% Sat 27 July 2024	• Consider shortening parking restrictions • Continue to monitor parking conditions post implementation of above recommendations, if occupancy continues to exceed 85% consider adjusting restrictions or implementing paid parking

LOCATION	PARKING RESTRICTION	PEAK OCCUPANCY & TIME	RECOMMENDATIONS
Fulton Street, Manton Road, Edinburgh Street, Margaret Street, Alice Street, Thompson Street, Lillian Street, Madeleine Road, Jaguar Drive, Kionga Street, Moriah Street, Dooga Street, Evelyn Street, Panorama Street, Seascape Street, Atlantic Street, Cantala Street, Lantana Street, Iona Street, Browns Road, Browns Court, Kanooka Grove, Wright Street, Rose Street, Donald Street, Francis Street, Mary Street, Manatunga Street, Myriong Street, Prince Street, Royalty Street	Mix of time restrictions	All streets specified have peak occupancies below 50%	• Consider easing or remove the time restrictions for the streets identified, (noting potential impacts to staff and patient parking demands in the area) • Continue to monitor parking conditions post implementation of above recommendations, if occupancy consistently below 50% consider removing time restrictions, if occupancy consistently exceeds 85% consider reintroducing / adjusting restrictions