



CITY OF VINCENT

PRECINCT PARKING MANAGEMENT PLAN



Inspiring innovation in parking and transport

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Executive Summary

The City of Vincent requires a review of the implementation of the 2009 Precinct Parking Management Plans prepared for each of five town centres of Leederville, Mount Hawthorn, Mount Lawley/Beaufort Street, North Perth and William Street, plus the Pickle district.

The new Parking Plan for each precinct aims to achieve the city's Accessible City Strategy objective which is *'to maintain an appropriate supply of affordable, secure, convenient and appealing parking that is accessible to all.'*

Although the city provides an efficient parking service compared with many Perth metropolitan councils, improvements are necessary. At a high level, car parking problems in the precincts are caused by four issues:

- The city's population is growing and parking demand is increasing.
- Parking supply is decreasing.
- Climate change and the need to prioritise road space for active and public transport modes.
- The value of parking is not always recognised.

Changes to parking management are necessary to:

- simplify unnecessarily complicated and confusing parking regulations,
- obtain up-to-date data on patterns of parking demand,
- implement and review parking fees which are responsive to demand and appropriate for each precinct,
- curtail the overly generous permit system, and
- modernise the labour intensive and inefficient method of chalking tyres.

The annual fees and charges review is neither a responsive, nor effective process to manage changes in parking demand or to achieve broader strategic objectives. Effective parking management requires that different fees are appropriate for different precincts. Fees should be based on actual demand data and reviewed more than once a year in accordance with a recommended Parking Management Framework, with triggers for change and intervention measures based on utilisation.

Level 5 Design's proposed solutions embrace four key areas:

1. Customer Service - including the provision of informative and useful signage and data to provide real-time information on parking availability.
2. Utilisation of different technologies - for control and for information, including assistance to pedestrians and vehicles other than cars, and the use of data to provide actual rather than anecdotal reports on patterns of demand.
3. Accommodation of new types of mobility - including car share, e-vehicles, driverless drones and Uber type services.
4. Regular revision of on- and off-street parking controls and pricing regulations.

The city's parking issues will not be solved by selective implementation of a few 'urgent' recommendations. In order to deliver meaningful change and achieve the strategic vision of *'easy accessibility into and around Vincent'*, the solutions require the implementation of all actions working in tandem to deliver change. Only a holistic approach will save time for parkers, reduce congestion, conserve energy, improve air quality and produce public revenue which can subsidise ratepayers and places in the city.

Cities are complex and Vincent is in the process of moving from a transport system that is car dependent to one where active (walking and cycling) and public transport will play a bigger role. This will be achieved through parking management and pricing.

There is a natural tension between some objectives, and this is unavoidable. Parking decisions will often require trade-offs between competing demands. One of the most difficult trade-offs is between immediate individual / business benefits and changes that benefit the wider community and the community of the future. Any parking management changes should also consider the effect that related changes in revenue will have on ratepayers.

Sections 1 to 12 of this review discuss the issues and solutions and provide recommendations prioritised as Urgent (within 2 years), Necessary or Desirable.

The recommendations common to all precincts are summarised below with reference to the relevant section in the review. The Appendices contain a separate analysis and action timetable for each precinct.

REF	RECOMMENDATION	PRIORITY	BENEFIT
2	Parking management is to embrace four key areas: 1. Customer service. 2. Utilisation of different technologies 3. Accommodation of new types of mobility - including car share, e-vehicles, scooters, driverless drones and Uber type services. 4. Regular revision of parking controls and pricing.	Necessary	<i>Simplification of parking regulations and the provision of signage and data to provide real-time information on parking availability.</i> <i>For control and information including assistance to pedestrians and vehicles other than cars, and data to provide actual rather than anecdotal reports on demand in order to optimise the use of all parking spaces. Applies to car share, different types of e-vehicles and PUDO (pickup and drop off).</i>
3.3	Amend the Draft Parking Policy to incorporate reductions in parking supply linked to the provision of car share. Provide convenient car share spaces in each precinct.	Urgent	<i>Convenient provision of car share options will encourage less car ownership and reduce parking demand.</i>
3.4	Initiate discussions with WA government re obtaining grants to introduce EV charging.	Desirable	<i>More EV charging stations will encourage take-up and generate income to the city.</i>
3.5	A robust regulatory framework and appropriate infrastructure is necessary prior to introduction of e-scooters.	Necessary	<i>Controlled pilot trials should be carried out first.</i>
4.1	Invest in different integrated technologies to collect data, provide wayfinding and improve customer service. Install solar panel shade cover in suitable car parks to power EV chargers.	Urgent	<i>Make parking easier to find, navigate and use. This will make more effective use of all public parking and also show how parking revenues can be re-invested into new infrastructure to improve access for all.</i>
4.2	Mandate installation of user-pay EV charging facilities, for all new buildings together with a minimum of EV-ready bays, per new NCC Regulations	Necessary	<i>This will save costs in the long term.</i>
5.2	Implement Actions 1 - 3 recommended in CoV Accessible City Strategy.	Necessary	<i>These reiterate the need for consistent wayfinding and signage, car share, EV charging and limiting residential parking.</i>
6.3.1	Gradually regulate the duration of stay in ticket parking areas by parking fee only, without the need for additional time and category restrictions. Exceptions only for allocated bays for 15minP No Ticket required.	Necessary	<i>This will reduce confusion and allow parkers to choose how long they will stay, subject to paying the fee. It also allows the parker to extend their paid time if they wish via the Easypark app. 15minP No Ticket, also caters to PUDO parkers.</i>

REF	RECOMMENDATION	PRIORITY	BENEFIT
6.3.2	Public parking signage in the precincts should be substantially improved and real time information provided to drivers on space availability. Also improve user information and destination signs for pedestrians. Provide detailed information using signage, brochures, maps, websites and smartphone apps.	Necessary	<i>This will reduce the time spent cruising for a vacant space, thereby minimising congestion of the roads. It is also worthwhile to clearly indicate to all users of public off-street car parks, the walking distance to/from their destination.</i>
6.5	CoV to invest in the provision of five types of technology.	Urgent	<i>Smart technology should be installed in one precinct as a trial to indicate to businesses and drivers the benefits of integrated systems.</i>
6.6	Provision needs to be made to park and re-charge different types of vehicle including EV cars, scooters, motor cycles and bicycles.	Necessary	<i>This will encourage take up and use of these new forms of mobility.</i>
6.7	Undertake an audit of all ACROD parking bays in the city's car parks to ensure they fully comply with best practice design and also clearly show location of ACROD bays on all parking information publications. Supply of ACROD bays in the six precincts should be higher than the minimum rates.	Necessary	<i>Cater to increasing numbers of ACROD permit holders visiting the precincts.</i>
7.2	Parking occupancy surveys to be undertaken at the same time each year. Regular surveys by the city using LPR cameras should measure occupancy, duration of stay and compliance with regulations.	Urgent	<i>Both as a snapshot of demand, but also to assess how demand is changing. Surveys in high demand areas should be undertaken every year, and every 2-3 years in areas of less demand. Results should identify peak time occupancy and average occupancy for each car park and street.</i>
7.3	Annual fees and charges process to confirm a maximum fee for each parking area effective July each year, and the parking management group are to be permitted flexibility to reduce the fees by up to 20% if necessary, during the year. All 1P time restrictions are reviewed and replaced with 2P, unless absolutely necessary. Parking time restrictions are to be reviewed at least every 2 years.	Urgent	<i>Setting parking fees once a year to fit with the fees and charges timetable does little to make the most effective use of all parking supply. Fees should be set to achieve occupancy and mode share targets.</i>
		Urgent	<i>1P timed parking is poor at attracting visitors to shopping areas. It provides the driver with much less than one hour to transact their business and does not encourage visitors to browse.</i>
		Necessary	
7.4	Adopt the parking management framework with criteria for parking occupancy triggers and parking management measures.	Urgent	<i>Facilitates evidence-based decision-making, using data derived from parking surveys as adjusted for adjacent land use</i>
7.5	Investigate, communicate, and implement a demand responsive parking pricing trial.	Necessary	<i>Pricing variations throughout the day encourage patrons to park at off-peak times while increasing parking usage.</i>
9	The parking permit system requires a complete overhaul in line with best practices elsewhere in Perth and resident parking permits should not be free.	Necessary	<i>Stricter conditions of compliance plus a fee will curtail abuse and reduce the number of permits requested. It will create greater equity with residents who don't have a car.</i>
11	Ongoing advocacy and education are important methods of improving the use of travel options and encouraging people to travel sustainably throughout the precincts.	Necessary	<i>Consider public relations campaigns to market alternative transport options, such as car-free days.</i>

REF	RECOMMENDATION	PRIORITY	BENEFIT
12.2	Institute on-going monitoring and reporting on the implementation and impact of all of the recommendations in this Review.	Necessary	<i>A 6-monthly consolidated Parking Report will assist in monitoring the operational performance of parking facilities. This will foster a proactive traffic management culture as opposed to acting in reaction to negative parking outcomes such as congestion and customer dissatisfaction.</i>

It is proposed that prior to the city's consideration of this Precinct Parking Review, all current fees and regulations are to remain unchanged. Council should resolve that the current 2022/23 fee structure will be the maximum applicable for the next budget year, subject to a review of fees and regulations in accordance with the recommended Parking Management Framework. Some fees may be decreased during the year, but none will be increased.

1 Background and precincts

1.1 Background

In 2002, the City of Vincent (CoV) prepared a Car Parking Strategy which was reviewed and updated in 2008. Using information from the strategy and applying principles of best practice, Parking Management Plans were developed for the five precincts of Leederville, Mount Hawthorn, Mount Lawley/Highgate, North Perth and Perth. Each precinct plan incorporated several recommendations for the short, medium and longer terms in order to provide guidance over ten years from 2010.

The main vision of the CoV's 2020 Accessible City Strategy is 'putting people first, and ensuring that getting around is safe, easy, environmentally friendly and enjoyable.' In line with this, CoV now requires a review of the implementation and relevance of the Precinct Parking Management Plans for each of the five centres, plus the Pickle District.

The reviewed Parking Plan for each precinct is intended to achieve CoV's objective which is 'to maintain an appropriate supply of affordable, secure, convenient and appealing parking that is accessible to all.'

1.2 Precincts

The parking areas in the six precincts are shown in Figure 1.1.



Figure 1.1: Parking Precincts in 2023 City of Vincent Parking Review

2 Introduction

Level 5 Design's approach is based on the principle that it is quicker, easier and cheaper to make more effective use of all existing parking than to create additional parking supply.

The proposed solutions embrace four key areas:

- 1. Customer service** - including simplification of parking regulations and the provision of signage and data to provide real-time information on parking availability.
- 2. Utilisation of different technologies** - for control and information including assistance to pedestrians and vehicles other than cars, and the use of data to provide actual, rather than anecdotal reports on demand in order to optimise the use of all parking spaces.
- 3. Accommodation of new types of mobility** - including car share, e-vehicles, scooters, driverless drones and Uber type services.
- 4. Regular revision of on- and off-street parking controls and pricing** - based on occupancy figures and an evidence-based approach.

We firstly examine future types of mobility and trends in parking technology and then consider relevant city documents and the major issues and parking problems in the city. Solutions applicable to all precincts are followed by Appendices with specific recommendations and prioritised timetables for each of the six individual precincts.

3 Future Types of Mobility

This section highlights changes which over the long term (+10 years) will impact significantly on the amount and type of parking that will be needed in the precincts. It also identifies key elements in the way in which mobility is being transformed and considers the impact of:

- Smart technology and innovation including car share and automated vehicles
- Value-added services including EV charging
- Flexible facilities
- Payments and pricing.

The future of mobility is uncertain, but the benefits are potentially substantial. Electric vehicles and autonomous and connected vehicles will reduce emissions, congestion and the amount of space required for parking. Car sharing and ride sharing is expanding rapidly, and the use of e-bikes / scooters is predicted to substantially increase the number of commuters using these vehicles, rather than other modes of transport.

New mobility options that will occur within the next decade are considered below.

3.1 Automated vehicles

Much has been written about when automated vehicles will become commonplace and their impact on car parks.

Most modern vehicles now have some form of partial automation, while a growing number offer advanced systems such as adaptive cruise control and self-parking capabilities.

The term 'driverless' refers to all vehicles which have higher levels of automation, beginning at the point where a driver may not need their hands on the steering wheel, but is ready to take over control, through to where a vehicle doesn't need a driver and may not even have a steering wheel.

Advanced control systems will be able to interpret sensory information to identify the most appropriate navigation path, as well as detect obstacles and relevant signage.

There are five distinct levels on the journey towards fully driverless vehicles, ranging from no automated technology, right through to vehicles that can operate without anyone. This is explained in Figure 3.1.

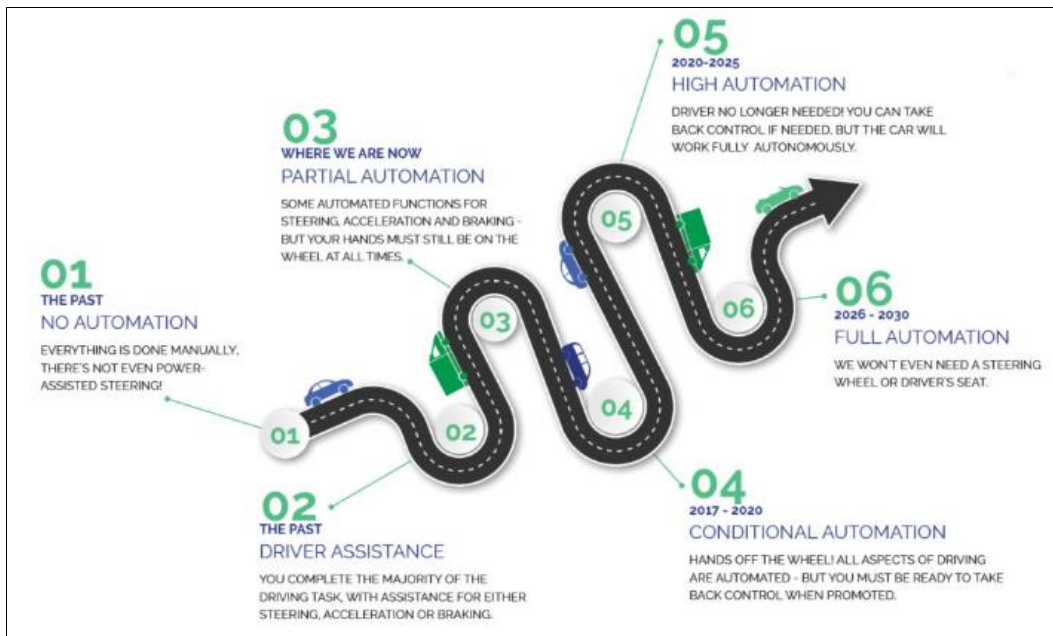


Figure 3.1: Levels of Automation (<https://advi.org.au>)



Figure 3.2: Driverless drone delivery vehicle

3.2 Deck car park design

Car parks specifically designed for self-parking cars will take up much less space than traditional car parks as illustrated in Figure 3.3 which shows how 40 automated and connected vehicles can be fitted into the space currently required for 15 self-drive cars. There will also be significant savings on footprint, ceiling heights, finishes, stairs, elevators, lighting and security. Car park design must also consider re-purposing in the long term.

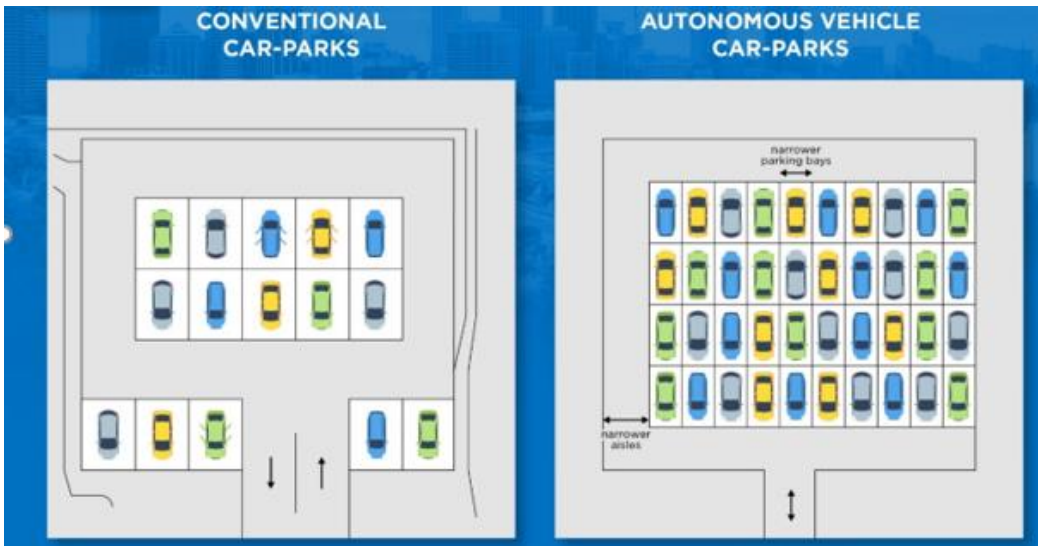


Figure 3.3: Car park savings with self-parking cars

3.3 Car share

In its most basic form, car sharing is car rental by the hour. Car-sharing programs are changing how people get around. These services give consumers all the benefits of car ownership without the costs of purchase, insurance, cleaning, maintenance and parking.

Providing on- or off-street parking spaces for car-sharing operators or by requiring the provision of these spaces through development control, local authorities can help facilitate car-sharing programs and in turn, reduce the demand for car ownership and on- and off-street parking spaces. For example, in New South Wales, Leichardt Council's local planning framework specifies that one car-sharing space can be provided in lieu of five private car parking spaces.

RAC data shows a single car share could remove up to nine vehicles from the road and also reduce congestion and emissions.



Figure 3.4: Car share parking

The city's latest Draft Parking Policy¹ refers to the provision of parking for cars, scooters, motor cycles and bicycles and service, delivery and courier vehicles, plus ACROD and Pick Up / Drop Off (PUDO) bays, but it does not refer to Car Share parking. PUDO Parking is best accommodated by free 15minP parking bays.

It is recommended the Draft Parking Policy be amended to incorporate reductions in parking supply linked to the provision of car share, and the city provides convenient car share spaces in each precinct.

3.4 Electric vehicles (EV's)

The federal government predicts almost 90% of all new cars sold by 2030 will be electric, creating demand for more charging outlets, including within new housing developments. WA has long lagged the country on direct EV incentives, but in May 2022 the State Government announced rebates would be available for electric and hydrogen vehicles.

According to the RAC,² 68% of consumers want government to provide more public charging infrastructure. The WA government is increasing EV charging infrastructure at 'all new public building capital works – including government office accommodation, hospitals, schools and sports facilities among other building types.' The government also plans to commit to at least 25% of its eligible vehicle fleet, being electric by 2025-26.

As at 30 April 2023, there were less than 4 public EV chargers in CoV as shown in Figure 3.4 where colour Green represents public chargers and Brown represents high power chargers.³ CoV has approved installation of two EV chargers at the Chelmsford Road car park.

It is recommended that CoV initiate discussions with the WA government re obtaining grants to introduce electric charging.

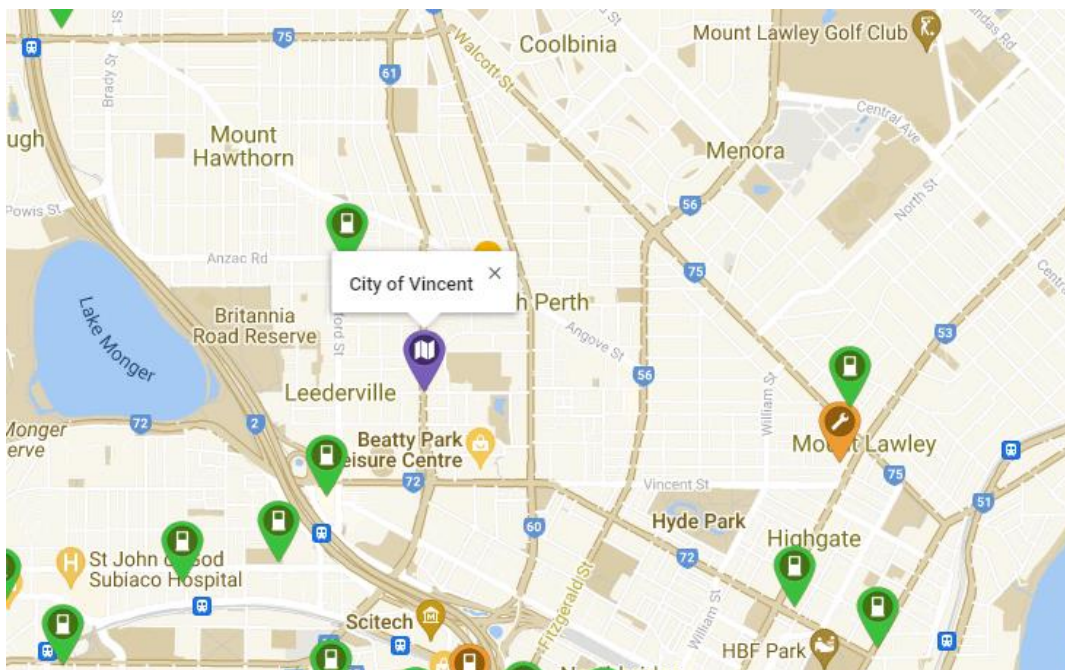


Figure 3.5: Public EV chargers currently in and around City of Vincent

¹ CITY OF VINCENT - DRAFT PARKING AND ACCESS POLICY NO: 7.7.1

² RACWA. <https://rac.com.au/car-motoring/info/electric-car> 16 May 2022

³ According to Plugshare.com

3.5 Micro-mobility

E-scooters are a popular option to fill the 'first and last mile' void, providing a clean, efficient, fast on-demand service. The current Neuron Mobility trial in the City of Stirling has proved popular.

One of the biggest challenges of these vehicles, is providing customers with quality rideability and safety. They are too large and too fast for pedestrian comfort and too small and too slow for car driver preference. Beyond speed, helmet requirements and road restrictions, there have been concerns from the public and authorities regarding the safety of e-scooters, particularly on pedestrian paths. Parking is also necessary for the vehicles to be stored and re-charged.

For micro-mobility options to become viable, it is recommended that a robust regulatory framework and appropriate infrastructure is necessary, and controlled pilot trials should be carried out first.

Despite all these fundamental changes in mobility described above, cars are unlikely to be replaced anytime in the foreseeable future as the 'personal vehicle of choice' and therefore parking in its current form, will still be required for many years to come.



4 Trends in Parking Technology

Diverse technologies are being utilised by many Australian cities to address parking challenges.

4.1 Benefits of new parking technologies

Future trends in parking technology focus less on regulation and control, and more on providing the customer with real-time information and making it less stressful to find, park and pay for parking. Detailed data on parking demand assists in managing parking more effectively. Local examples of the where the different technologies are used and their benefits are shown below.

Table 1. Available parking technologies

Parking Technologies	Benefits and examples in WA
<p>1. In-ground parking sensors</p>	<p>Sensors can be used for enforcement, reporting, and to provide real-time parking information for guidance solutions and apps. Examples are currently installed in Mt Hawthorn, and in Claremont, South Perth and Joondalup. The sensors are particularly useful if the data they transmit (occupied/vacant) is available to the public via wayfinding signs or a parking app.</p> 
<p>2. Wayfinding variable message signage</p>	<p>Parking wayfinding signs on major roads increase the perception and information of parking availability. The most useful wayfinding is more than simply a 'P' sign with total capacity (as shown below), but dynamic message electronic signs which show the actual number of vacant spaces, both on -street and off-street. Current CoV information is static and does not indicate what is currently available.</p> 

Parking Technologies	Benefits and examples in WA
	<p>New dynamic, real-time information signs all need up-to-date data and thus require accurate information from car parks. This can be obtained from individual parking sensors in on-street bays or from new pole-mounted camera technology in off-street car parks. Examples are at Hillary's Boat Harbour and Curtin Uni.</p> 
<p>3. Destination signage</p>	<p>It is also important for parkers to be able to easily find and understand the distance to their destination. The city's Wayfinding Strategy⁴ recommended totem signs to assist pedestrians leaving car parks. An alternative with a clear message is shown below.</p> 
<p>4. Outdoor vacant space indicators and pole mounted cameras</p>	<p>Individual vacant parking space (red/green light) systems are available not only in deck car parks (such as Karrinyup Shopping Centre) but also for open air car parks via an app or in-car information. The cameras also provide enhanced security. An example is at Curtin Uni.</p> 

⁴ Refer to CITY OF VINCENT DRAFT WAYFINDING AND SIGNAGE PLAN prepared by Aspect Studios. Adopted 15 Nov 2022.

Parking Technologies	Benefits and examples in WA
<p>5. Deck parking space availability indicators</p>	<p>The green/red light system is popular with drivers entering large deck car parks. It reduces congestion and time spent 'hunting' for a bay. More sophisticated versions use LPR cameras to monitor duration of stay and also to assist drivers to find their car on returning to the car park. An example is Karrinyup Shopping Centre.</p> 
<p>6. Parking Apps for wayfinding and payment</p>	<p>Many cities and private parking operators offer parking apps which allow a driver to search, navigate, access and pay for parking from a smartphone. They eliminate the need for paper tickets or drivers to get out of their car to pay. More than 40% payments in the city are via the Ezipark app, but the app is limited only to payment. It does not yet provide information on where to find vacant bays.</p> 
<p>7. Licence Plate Recognition (LPR) systems</p>	<p>New vehicle mounted LPR systems such as CoV already has, do not necessarily require special cameras. They can now use cheaper, high picture quality, smartphone cameras to capture parking data. The data can be used not only for enforcement, and monitoring e-Permits, but for regular surveys of actual patterns of parking demand. Postal code data greatly assists in marketing campaigns. Examples are in Joondalup and Melville.</p> 

Parking Technologies	Benefits and examples in WA
<p>8. Solar powered pay parking machines</p>	<p>These provide an effective method of control of long-term parking including options to provide a period of free time. The city uses Parkeon machines which are generally reliable and durable. The screen on these machines can also be used to provide other precinct and destination information to parkers.</p> <div style="display: flex; justify-content: space-around;">   </div>
<p>9. Parking enforcement</p>	<p>Greater efficiencies and reduced costs are available from systems which integrate with e-permit solutions, payment machines, LPR and sensors. Examples are in Bayswater and South Perth.</p>
<p>10. Solar panel shade covers</p>	<p>The installation of solar-panel shade covers at open air car parks provides a high level of amenity and can also generate income to the city. There are organisations that will install the panels and purchase the surplus power from CoV.</p> <p>In a drive to boost clean energy production, France has approved legislation that makes it mandatory for all existing and new car parks with 80 spaces or more to be covered by solar panels. With electricity prices increasing, many businesses and councils are turning to on-site renewables to try to reduce costs down in the long run. There is an opportunity to turn car parks into solar farms.</p> 

Parking Technologies	Benefits and examples in WA
<p>11. EV Charging</p>	<p>EV take up will be further encouraged with the provision of more public EV chargers. CoV has approved installing two electric vehicle charging stations at Mt Lawley's Chelmsford Road carpark. E-scooter and E-bike chargers are additional options for all precincts to increase their use.</p> <div style="display: flex; justify-content: space-around;">   </div>
<p>12. Secure bike and scooter parking</p>	<p>Innovative storage systems provide weather-proof, aesthetically appealing and compacted secure bike, e-bike and e-scooter storage. Through an automated built-in system and ground-level access, cyclists are able to easily store and pick up their bicycles.</p> <p>The access point is situated at ground level while the storage facility extends downward underneath. It is primarily designed for an outdoor setting separate from buildings. The solutions are designed to be convenient and compact. They are being considered for developments in South Perth.</p> <div style="display: flex; justify-content: space-around;">   </div>

It is recommended that the city invests in different technologies to collect data, provide wayfinding and improve customer service, and make public parking easier to find, navigate and use. This investment will have a two-fold benefit; It will make more effective use of all available public parking and also indicate to the community, how parking revenues can be re-invested into new infrastructure to improve access for all.

While some of the technology is desirable, others are essential to reduce congestion and get cars off the roads more quickly by helping drivers to quickly find a vacant space.

4.2 Electric vehicle charging

Sales of electric motor cars and other e-vehicles are increasing, and they all require parking. Car park providers are faced with the problem of whether and how many EV stations should be supplied and how the energy should be charged for.

Shopping centres which aim to become more sustainable will allow cars to be charged by 100% renewable energy. AMP have decided to provide at least two fast-charging stations per shopping centre. The stations cost the user 40 cents per kWh per use and allow fast EV charging to become part of the customers' shopping experience.

Local governments own land that is ideal for the location of public EV charging stations, specifically car parks in busy centres. CoV is considering installing two electric vehicle charging stations at Mt Lawley's Chelmsford Road carpark.

It is recommended the city considers mandating installation of user-pay EV charging facilities, for all new buildings together with a minimum of EV-ready bays. The recently published National Construction Code⁵ has some new requirements for electric vehicle charging in parking areas and for the provision of accessible parking bays.

4.3 Website information

The city's website is informative and easy to follow. It gives details of parking locations and maximum parking capacity available, but does not indicate current availability. There is no information for ACROD parkers on where designated spaces are located.

It could be improved with colourful diagrams and show different categories of driver where to park, such as short term visitors, medium term (4-6 hours), evenings, seniors, ACROD, employee, all day parkers etc. Fee information and the benefits of the Easypark payment app should also be included. Good website examples are Bunbury and Victoria Park.⁶

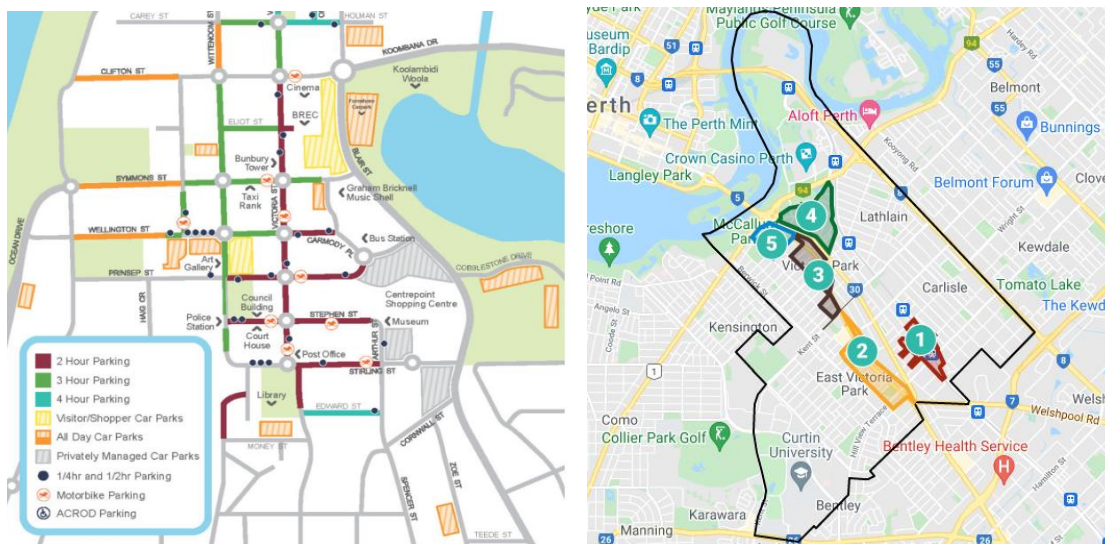


Figure 4.1: Extracts from Bunbury and Victoria Park parking websites

⁵ The big change is for EVs – residential apartments now need 100% of parking bays to be wired for 7Kw chargers, offices require 10% of bays to be reticulated for 12Kw chargers, warehouses and community facilities require 20% of bays to be reticulated for 12Kw chargers, and hotels and serviced apartments require a minimum of 20% of bays to be wired for 48Kw chargers.

⁶ <https://www.victoriapark.wa.gov.au/Around-town/Parking-and-travel/Parking/Parking-FAQs>

5 Relevant Documentation

The traditional approach to parking has been that motorists should nearly always be able to easily find convenient, free parking at every destination. Under this 'predict and provide' approach, parking planning was based on the premise that 'parking problem' means 'inadequate supply', and consequently more parking is better, every destination should satisfy its own parking needs (based on minimum ratios), car parks should never fill, and parking should always be free, or subsidised at very low cost, or incorporated into building costs.

However, the new 'demand management' approach,⁷ as distinct from the unsustainable 'demand satisfaction' (predict and provide) approach, emphasises the movement of people and goods, rather than motor vehicles, and gives priority to more active and efficient travel and communication modes such as walking, cycling, car sharing and public transport.

The momentum towards this new approach within CoV is reflected in relevant documents which have informed this review. Key findings from these documents are summarised below.

5.1 Strategic Community Plan

This establishes the community's vision for Vincent's future⁸. Priorities to 2028 include *'a desire to be a leader in making it safe, easy, environmentally friendly and enjoyable to get around Vincent'*. The outcomes required to achieve this include *'embracing emerging transport technologies as well as well designed, pedestrian and cyclist networks and better integration of all modes of transport and increased services through the City'*.

The plan includes a commitment to *'continuing to be an agile Local Government that is alert and responsive to the community's needs'*.

5.2 Accessible City Strategy

The strategy⁹ focuses on *'ensuring easy accessibility and connectivity into and around Vincent'*. Objectives include *'promotion of environmentally friendly transport modes and initiatives and making it enjoyable to get around the local area. This requires the reallocation of road and verge space, including on-street parking, throughout the city to prioritise vulnerable users according to user hierarchy and road hierarchy'*.

The city plans to *'become a leader in adaptability and technology and managing car parking (including supply and pricing) to improve efficiency and support mode shift'*.

The strategy recognises that parking needs differ greatly across Vincent. These needs are influenced by the activity, density and variety of development in the area, as well as the availability of alternative transport modes. Parking is an effective bridge between land-use and transport mode choice and an inherent component of both the transport and land use system. An appropriate supply of quality, well located car parking is a critical issue for people and businesses.

The document summarised the public parking supply in 2020 as follows:

⁷ Victoria Transport Policy Institute. BC Canada. Todd Litman. <https://www.vtpi.org/documents/tdm.pdf>

⁸ STRATEGIC COMMUNITY PLAN 2018–2028 (2020 Minor Review). Created by the community of the City of Vincent

⁹ CITY OF VINCENT - ACCESSIBLE CITY STRATEGY 2020–2030

- More than 17,500 spaces, distributed across the LGA.
- 2,000 bays in off-street car parks.
- 1,600 paid bays (1,100 off-street and 500 on-street bays).
- 6,000 unrestricted (free all-day) parking bays, located primarily in residential neighbourhood streets
- 8,000 time-restricted bays (paid or free), located within or adjacent to Activity Centres or corridors, or in other areas of increased demand.
- 500 on-street spaces are subject to some form of residential permit (either as a restriction or an exemption).

The strategy made significant findings:

- Free, unrestricted on street car parking in residential areas means that residents may own more cars than available car spaces on the property.
- Kerbside parking reduces the capacity for active transport.
- Demand for private vehicle road space and parking poses an ongoing threat to cycling in Vincent.
- Reallocate road and verge space, including on-street parking, throughout the city to prioritise vulnerable users according to user hierarchy and road hierarchy.
- Manage car parking (including supply and pricing) to improve efficiency and support mode shift.
- Businesses and residents have an extreme emotional attachment to free proximal parking.

Various actions were recommended in the strategy and this Precinct Plan supports these.

- Action 1.1.3 - Develop and implement a consistent wayfinding and signage strategy across the City. This should consider pedestrian transport modes, cycling and parking.
- Action 2.3.4 - Explore supporting the provision of increased bicycle and scooter usage and consider locating bike share docks or e-bike chargers within existing car parking bays.
- Action 2.3.5 - Ensure there is adequate policy to support the introduction of car sharing.
- Action 3.2.2 - Ensure appropriate end of trip facilities are provided within town centres, mixed use centres and major parks in accordance with LPP 7.7.1.
- Action 3.3.1 - Establish a business plan for the management of parking within Vincent to:
 - prepare precinct specific parking management plans, with priority given to precincts already at capacity,
 - expand paid parking using the 'demand responsive pricing' methodology.
- Action 3.3.2 - Ensure precinct plans provide the right amount of parking, in the right locations to support reduced car dependence.
- Action 3.3.4 - Better manage the supply of on-street parking through the implementation of various restrictions by:
 - limiting roadside residential parking, confining parking to the property,
 - restricting parking to 3P or less within 2 blocks of train stations or transit nodes, with residential permit exemptions.
- Action 3.3.5 - Liaise with neighbouring LGAs and private car park managers to promote more consistent management arrangements to optimise the demand and supply of car parking for residents, visitors and customers.

The strategy concluded that 'paid parking and parking permit revenue naturally pays for the installation and maintenance of parking infrastructure but is ideally allocated to funding local improvements within individual parking precincts.'

5.3 Draft Parking Policy

The city's current parking policy¹⁰ contains more than 50 car parking user categories for Commercial Development Car Parking and 14 for bicycles.

These minimum ratio requirements are excessive, too detailed and offer limited flexibility. They have four important deficiencies:

- They do not distinguish between short stay needs and long-term parking.
- They do not consider the use of alternatives to the single occupant car.
- As they represent minimum parking requirements, they can encourage over-provision of parking and can limit the ability of developers to provide a lesser amount of parking if they consider the development is marketable with a lower on-site parking provision.
- They usually focus on the supply of parking, not on how it is to be used.

The city should consolidate and simplify the different categories. Ratios should be standardised for uses with similar characteristics.

It is also suggested that together with the strong focus on the management of parking within the city, parking maximums or caps should be considered to accommodate community priorities and to ensure road network capacity is not exceeded.

The city also requires the provision of bays marked exclusively for use by drivers with disabilities at the rate specified in the National Construction Code Series and relevant Australian Standards and in accordance with ACROD standards.¹¹

A draft revised Parking Policy is currently in preparation. Finalisation of this policy has been delayed pending the outcome of the recently published Action Plan for Planning Reform¹² which includes developing consistent car parking requirements in commercial and mixed-use centres.

Draft interim guidance has been developed by DPLH to provide consistent car parking requirements for non-residential land uses in Perth and to support any local government review of car parking rates under their respective local planning frameworks. The draft guidance provides minimum and maximum car parking rates which can be applied to non-residential uses.

5.4 Wayfinding Strategy

CoV recently adopted the Vincent Wayfinding Signage Plan¹³ which will deliver a comprehensive and coordinated signage network to connect residents and visitors to town centres. It includes directional signage for pedestrians, bicycles and vehicles and regulatory signage. It is anticipated implementation of the signage will commence in 2023.

Unfortunately, the package does not incorporate technology for variable message signage to advise drivers of real-time available parking spaces. Access to parking would be improved and drivers would benefit from signs on major routes leading into each precinct

¹⁰ CITY OF VINCENT PLANNING AND BUILDING POLICY MANUAL PARKING AND ACCESS POLICY NO: 7.7.1 PARKING AND ACCESS. Adopted 27/3/2001. Latest amendment 8/12/2015.

¹¹ Policy No 7.7.1 Section 6.3 ACROD Bays.

¹² ACTION PLAN FOR PLANNING REFORM issued by Planning Reform, Reform, Design and State Assessment, Department of Planning, Lands and Heritage. Section C(2). February 2023.

¹³ CITY OF VINCENT Draft Wayfinding and Signage Plan prepared by Aspect Studios. Adopted 15 Nov 2022.

which provide accurate information on vacant spaces, not maximum capacity. Examples are shown below.



Figure 5.1 Examples of useful variable message signage

The introduction of real time parking availability signage alerting drivers to the number of vacant spaces will improve utilisation and reduce congestion.

More advanced individual parking space sensor systems will reduce 'cruising for bays' in the larger car parks.

5.5 2009 Precinct Parking Plan - gap analysis

Many recommendations common to all the precincts in the 2009 Precinct Parking Management Plan¹⁴ have not been, or only partially implemented. They are commented on below.

Table 2. Gap analysis with 2009 Precinct Parking Management Plans

HIGH PRIORITY - ACTION WITHIN 3 YEARS BY 2012	COMMENT
Wayfinding signage is installed initially on all main routes into each high activity centre with additional signage which promotes walking distances.	Not done. Still a valid high priority.
The Town commences surveys in order to undertake a review of current parking ratios.	Still a valid high priority, but also applies to determination of current levels of occupancy.
Introduce pay parking on-street when regular peak hour demand exceeds 85%.	Still a valid high priority.
Ensure details of all parking restrictions applicable in the Town are easily available.	Partially implemented. Could be improved
An annual charge of \$50 per permit is introduced to cover administration and enforcement costs.	Still valid. Fee is equivalent to less than \$1/week.
Offer parking on street to non-residents between certain times if they pay a fair market price, opportunities for these 'parking benefit districts' are Brookman Street, Perth, Fairfield Street, Mount Hawthorn, View Street, Alma Road and Raglan Road, North Perth, and Carr Place, Leederville.	No longer valid.
All new developments, or applications for change of use are to provide a Parking Control and Management Plan (PCMP) with applications for developments with more than 10 parking spaces.	Still valid.

¹⁴ Section 4.18 of Town of Vincent Precinct Parking Management Plans 25 November 2009. Prepared by ARRB

HIGH PRIORITY - ACTION WITHIN 3 YEARS BY 2012	COMMENT
Cease offering a discounted monthly prepaid parking permit.	Still valid.
Education on the need for, and benefits of, managing parking demand should be available and regularly communicated in Council publications.	Not done. Still valid.
Recruit additional enforcement staff and purchase improved enforcement technologies.	Partially implemented. Could be improved.

MEDIUM PRIORITY - ACTION WITHIN 4-8 YEARS BY 2017	COMMENT
Approach the various owners of off-street parking and negotiate to permit the Council to take over the management of all the parking in each area as a single car park.	Still valid.
Amalgamate the existing parking ratios into fewer categories, and investigate replacing minimum standards with maximum standards in the longer term.	Still valid. Under consideration in the Draft Parking Policy
Amend the Shortfall Parking Table in the Town's Parking and Access Policy used to assess development applications to facilitate and encourage applications for shared parking; take into account reductions in demand through increased use of alternatives to the single occupant private car; and encourage the development of travel plans.	Still valid.
The Town's media and online publications are to reinforce the unsustainability of current parking practices and the benefits of managing parking demand.	Not done. Still valid.
Undertake a parking survey in 2013 updating the 2008 survey to assess any changes and take appropriate action and use results, supplemented by additional surveys as required, to identify locations where parking charges should be introduced or increased.	Not done. Still valid.
Current restrictions in streets more remote from the business areas are reviewed to assess whether they can be modified.	Not done. Still valid.
Public and private car parks should initially assume that 2% of vehicles are motorcycles or scooters.	No longer valid
Undertake further improvements to all off-street car parks and apply crime prevention through environmental design (CPTED) guidelines to improve security throughout the Town.	Still valid.
Upgrade the major pedestrian thoroughfares to and within all public off-street car parks.	Still valid.
Surveys of demand and duration patterns should be undertaken regularly.	Not done. Still valid.
Investigate modern technology for the new on-street and for all the off-street pay parking areas, which will provide greater user convenience and options.	Still valid.

LOW PRIORITY - ACTION 2018+	COMMENT
As more new developments are constructed with reduced parking supply, pressures on on-street parking in adjacent residential areas are likely to increase. It will be necessary to monitor the situation and to introduce and enforce parking restrictions such as 2P parking on residential streets when pressures from all-day commuter parking start to develop.	Partially implemented. Still valid

6 Parking Problems

This section considers high-level parking problems in CoV and the current management of parking by the city. It then summarises several rectifiable problems in the precincts, all of which could be resolved by better management of parking supply.

Every high activity area has parking problems which are generally described as 'inadequate supply'. But as evidenced by the results of the March 2023 Parking Surveys (refer Annexures), only the Pickle District showed 85% occupancy at times of peak demand. In other precincts, while some car parks had higher occupancy than others; overall there were always vacant parking bays within a reasonable walking distance of most destinations.

The combined precinct survey results showing overall % occupancy at peak times are summarised below. Additional detail is provided in Section 8 and the Appendices.

Table 3. March 2023 parking survey summary

	City of Vincent	PUBLIC PARKING SUPPLY & USE	MARCH 2023					
		COMBINED ON and OFF STREET						
		Survey	Public Bays	ACROD	Seniors & Pram	OCCUPIED	%	VACANT
1	Leederville	SAT 11/3/23 1800-1930	1500	17	9	1073	72%	427
2	Mt Hawthorn	FRI 10/3/23 1800-1845	312	7	0	204	65%	108
3	Beaufort TC	SAT 18/3/23 1630-1745	377	7	5	162	43%	215
4	North Perth	FRI 17/3/23 1030-1150	374	10	4	211	56%	163
5	Pickle	TUE 7/3/23 1230-1315	156	0	0	133	85%	23
6	William St TC	MON 20/3/23 1100-1200	191	4	0	141	74%	50
	TOTAL		2910	45	18	1924	66%	986

6.1 High level problems

At a high level, car parking problems in CoV precincts are caused by four issues:

1. The city's population is growing and parking demand is increasing.
2. Parking supply is decreasing.
3. Climate change.
4. The value of parking is not always recognised.

6.1.1 The population is growing and parking demand is increasing

CoV plans to potentially accommodate an additional 900 residents per annum¹⁵, and each year, more and more workers and visitors will travel to the city's activity centres from other LGA's.

Growing urbanisation increases the pressure on parking space availability. People increasingly expect to be able to walk, shop, dine and spend time in places that are attractive and safe. To accommodate this population growth, we need a more efficient transport system that makes better use of our limited road space. This means moving more

¹⁵ City of Vincent STRATEGIC COMMUNITY PLAN 2018 – 2028 at Section 4

people using fewer vehicles; using public transport more; more people walking and cycling, and fewer people driving and parking in busy areas.

Other factors that affect parking demand include:

- changes in patterns of commuting, such as working from home, more demand for park and ride options and the growing uptake of micro-mobility (electric scooters and bicycles), car sharing and ridesharing,
- an ageing population,
- the average number of cars per household, and
- changes to the retail and hospitality sector – how and where we shop and when, where and how we spend our leisure time.

6.1.2 Parking supply is decreasing

Over time, the supply of Council-controlled parking spaces has decreased. This is due to reallocation of on-street road space to support state and city priorities for pedestrian-focused developments and to support active and public transport. For example, the creation of additional cycleways makes it easier and safer for people biking and walking.

As a consequence of parking demand increasing and parking supply decreasing, the competition for road space is on the rise. The challenges vary around the city's town centres and busy precincts and are different depending on the time of day and day of the week. In addition to competition for road space between road users, there is competition between users of the parking system, for example, residents, commuters, contractors and shoppers.

6.1.3 Climate change

Road vehicle emissions comprise a significant percent of the city's carbon emissions. How we manage parking can support many emission reduction initiatives such as prioritising road space for active and public transport modes, allocating more on-street parking spaces for car share vehicles, electric vehicle charging facilities, pick up/drop off areas for ride share services and providing micro-mobility parking to encourage their uptake. The price of parking can also be used to influence how often and where people drive.

6.1.4 The value of parking is not fully recognised

While the City has implemented user-pays parking in many high activity centres, the large number (> 4,900) of residential and business parking permits in issue, does not take in to account the full costs of parking these vehicles, such as the lost opportunity to use the space for something else, the lost amenity and the cost to the environment.

6.2 Current management of parking

Compared with many Perth metropolitan councils, CoV provides an efficient parking service:

- there is a general acceptance of user pays parking by most businesses and their visitors,
- pay parking generates significant income¹⁶ to the City, thus reducing pressure on annual increases in rates to property owners,
- the level of compliance with parking regulations is high.

Site visits, surveys and meetings with internal stakeholders have identified several key issues in the management of parking in the city in addition to the impact of the gap analysis with the implementation of the previous Precinct Parking Management Plans (refer Section 5.5).

¹⁶ Approximately \$5M in paid parking forecast for year end June 2023.

Improvement is necessary to:

- simplify unnecessarily complicated parking regulations,
- obtain up-to-date data on patterns of parking demand,
- implement and review parking fee structures which are responsive to demand in each precinct,
- curtail the overly generous permit system, and
- modernise the labour intensive and inaccurate method of chalking tyres.

New parking technologies will not solve all parking problems, but they can assist to provide easier access, improved customer service and most importantly, accurate data for better management. Additionally, fundamental change is necessary in the way the city reviews parking regulations and fees.

Proposed solutions designed to make the most effective use of all public parking capacity at all times are set out in the following sections. They apply to all precincts in CoV.

6.3 Change focus to customer service

The city needs to shift from regulation and enforcement parking management to a more customer-focused service. This requires simplification of parking regulations and investment in technology to collect data and provide information via wayfinding and dynamic message signage.

6.3.1 Confusing parking regulations

Parking regulations are often unnecessarily complex for drivers who are also confused by poor signage and a mix of time restrictions and ticket parking.

For example, The Avenue car park has some 15minP bays, some 2P ticket bays, and other ticket bays with no time restriction. Drivers have difficulty understanding what signs apply to which bays and what parking is available.

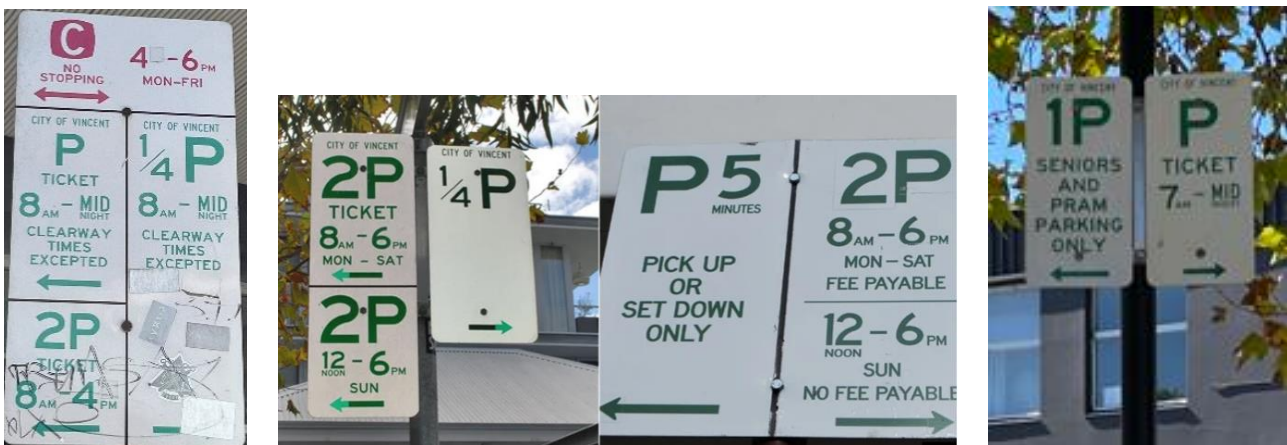


Figure 6.1 Inconsistent and confusing parking regulations

The Raglan Road car park provides five different categories of parking, some of which are time restricted, others are restricted to driver category (seniors and prams), while others are ticket parking, with a time limit. These are confusing for drivers, especially in the evening when signs and surface markings are not easily visible.

As parkers visit all of the entertainment and commercial businesses in Leederville and the Beaufort Street town centre and other precincts, it is **recommended the city gradually regulates the duration of stay in ticket parking areas by parking fee only, without the need for additional time and category restrictions in the car parks.** Some exceptions may be required for free-time periods such as 15minP and 30minP only for Loading Zones.

This will reduce confusion and allow parkers to choose how long they will stay, subject to paying the fee. It also gives the parker the option to extend their paid time if they wish via the Easypark app.

In order to make it easier for all users to understand free parking exemptions in ticket parking areas, **it is recommended that CoV provide only 15minP No Ticket spaces.** The elimination of 30minP and the vague 1/4P will provide consistency and certainty, give PUDO and other drivers the benefit of not requiring a ticket, and make it easier to monitor the churn at these spaces.

6.3.2 Signage

The wayfinding signage to the car parks is poor, and car parks are identified only at the entry, rather than on main roads leading to the car parks. Variable message wayfinding signage will reduce congestion. .

Public parking signage in the precincts should be substantially improved and real time information provided to drivers on parking space availability. This will reduce the time spent cruising for a vacant space, thereby minimising congestion of the roads.

It is also worthwhile to encourage businesses to show parking availability on their websites and clearly indicate to all users of public off-street car parks, the walking distance to/from their destination as illustrated below.

Improved user information involves the provision of information on parking availability via several sources including signage, brochures, maps, websites and smartphone apps.



Figure 6.2 Example of helpful destination signage

6.4 Collection of survey data

A key element in improved parking management is the availability of comprehensive, up-to-date data on parking demand. CoV uses its few LPR (licence plate recognition) cameras to occasionally obtain data on vacancy and duration of parking but the city does not currently have the same level of information on parking usage, as it does on parking supply.

New payment in lieu regulations (refer Section 11), require evidence-based data for any approved changes to parking supply or the provision of access related infrastructure. Regular collection of data, and year-on-year comparisons are necessary for evidenced based decisions on parking regulations and fees. The proposed triggers for parking management review (refer Section 7.3) require accurate information on how parking demand is changing in an area and this is best obtained by regular surveys of demand using LPR.

6.5 Utilisation of different technologies

Parking technologies are essential for control, payment and information including assistance to pedestrians and users of vehicles other than cars. All the technologies provide data which should be used to improve the management of parking and optimise the use of all spaces.

Key to improvement of customer service and parking management by CoV will be investment in smart parking technology in the precincts.

Integrated technology will greatly improve the customer experience by making it easier to find car parks and vacant spaces, re-charge E-vehicles and provide ticketless, easy to use vehicle registration and payment options. The technologies will also improve the efficiency of parking enforcement and management but most importantly will assist in future planning and reviews of regulations and fees with the provision of more frequent, current, and accurate data on patterns of parking demand.

Technology is improving and becoming less expensive, but **as a minimum, it is recommended that CoV invests in the provision of five types of technology** as shown in Table 4. The technologies should be installed in one precinct as a trial to indicate to businesses and drivers the benefits of integrated systems. This is illustrated in the figures below.

Table 4. Technology and pricing estimates

	TECHNOLOGY	APPROX COST
1	Vacant bay identification technology at all CoV off-street car parks with pole mounted cameras.	\$50K / car park
2	In-ground bay sensors for on-street spaces in major streets in each town centre.	\$400 / bay
3	LPR system for surveys of parking utilisation and to assist with enforcement.	\$35K incl 4 cameras
4	Variable message electronic car park wayfinding indicator & space available signs.	\$100K / sign
5	EV chargers for cars, E-bikes and scooters at public car parks. Solar panel shade cover at suitable car parks.	\$nil \$nil

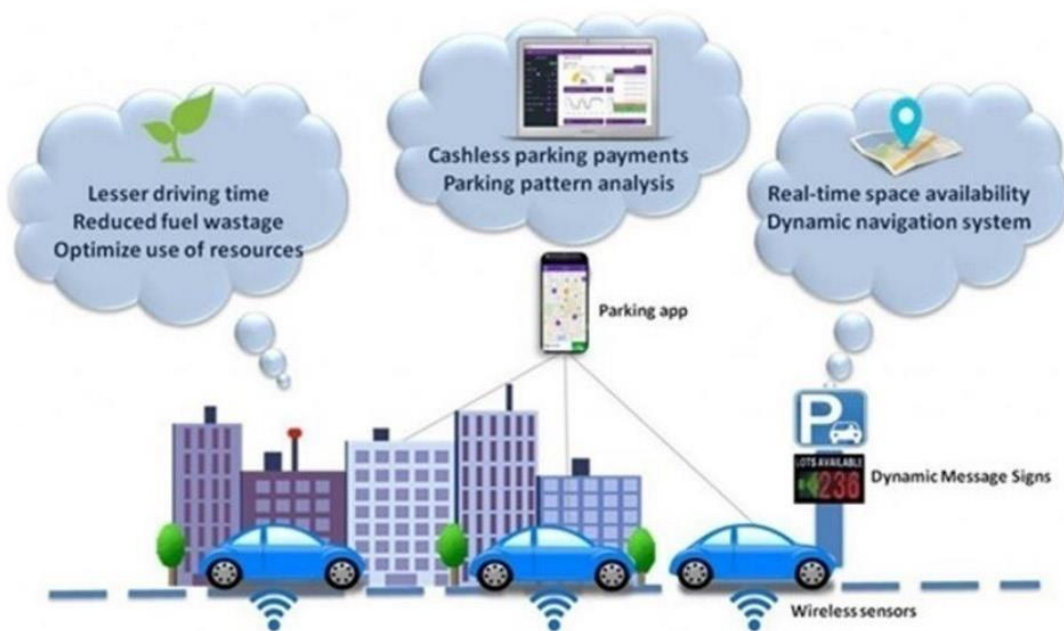


Figure 6.3 Illustrative parking technology platform



Figure 6.4 Pole mounted technology to determine spaces available in an open air car park

6.6 Accommodation of new types of mobility

In addition to E-vehicles, provision needs to be made to park and re-charge (user-pays) different types of vehicle including electric cars, scooters, motor cycles and bicycles.

Parking bays will eventually need to be allocated for driverless drones and Uber type services, especially in more densely populated residential areas.



Figure 6.5 Examples of EV charging

6.7 ACROD parking

ACROD Parking is a West Australian term referring to parking for people with disabilities.

The minimum requirement¹⁷ for ACROD bays in a car park is 1%, but this increases to 2% for car parks serving retail or service businesses. There are more than 90,000 ACROD permits in issue in WA. Precincts that attract ACROD parkers such as Leederville and Mt Lawley should provide more than the minimum requirement. The ACROD Parking Programme recommends 4-5%. Surveys undertaken in the precincts in March 2023 showed an average of only 1.3% for ACROD bays in the off-street car parks.

The Accessible City Strategy emphasises a focus on Vulnerable Users.

¹⁷ BCA TABLE D3.5 Car parking numbers for people with a disability.

It is recommended that the provision of ACROD bays in the six precincts should be higher than the minimum specified rates to cater to the increasingly older population utilising CoV car parks.

There are inconsistencies in the additional time allocated to ACROD parkers in WA because there are no set guidelines provided by ACROD or by legislation. Many LGA's allow an additional 30 minutes in addition to the specified time limit. CoV and City of Stirling provide ACROD parkers with double the time limit specified or purchased via a ticket machine. This can lead to the unintended benefit of ACROD permit holders parking all day in 4P areas.

Not all ACROD bays in CoV car parks are compliant with new design guidelines. **It is recommended that CoV undertake an audit of all ACROD parking bays in the city's car parks to ensure they fully comply with best practice design,¹⁸ and also clearly show on all parking information publications exactly where ACROD bays are located.**



Figure 6.6 Non-compliant ACROD parking bay at Barlee Street

¹⁸ Australian Standard AS/NZS 2890.6 2009 "Parking facilities Part 6. Off-street parking for people with disabilities"

7 Parking Regulations and Fees

The city owns or manages 20 car parks, of which only 11 charge a fee. A 5% surcharge applies to all credit card transactions. The current 2022/23 regulations and fees are shown below.

Table 5. June 2023 car park regulations and fees

Car Parks	Fees
The Avenue Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour. Some bays time restricted ticket parking 7am to 7pm (refer to internal signs). 284 Parking Bays
Barlee Street Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 46 Parking Bays
Brisbane Street Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 156 Parking Bays.
Chelmsford Road Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 56 Parking Bays
Frame Court Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm (refer to internal signs). 202 Parking Bays
Raglan Road Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour) and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. Some bays time restricted (no ticket required). 77 Parking Bays
Rosemount Hotel Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 49 Parking Bays
View Street Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 40 Parking Bays
Wasley Street Car Park	Ticket Parking 7am to Midnight Mon – Sun. \$1 for first hour and then \$3.20 per hour to a maximum of \$19.50 per day from 7am to 7pm. 48 Parking Bays
Stadium Car Park	Ticket Parking 8am to 10pm daily. \$3.20 per hour to a maximum of \$19.50 per day from 8am to 10pm Mon - Sun. 71 Parking Bays
William Street Car Park	Ticket Parking 8am to 10pm daily. \$4.40 per hour. Time restricted ticket parking 8am to 7pm Mon - Sun (refer to internal signs). 48 Parking Bays
Coogee Street Car Park	No Fee - Time Restrictions Apply. 51 Parking Bays
Dunedin Street Car Park	No Fee. 35 Parking Bays and 1 ACROD Parking Bay
Fitzgerald Street Car Park	No Fee - Time Restrictions Apply. 136 Parking Bays
Flinders Street Car Park	No Fee. 26 Parking Bays
Gill Street Car Park	No Fee. 47 Parking Bays
Loftus Centre Car Park	No Fee - Time Restrictions Apply. 385 Parking Bays
Pansy Street Car Park	No Fee. 26 Parking Bays
Robertson Park	No Fee - Time Restrictions Apply. 32 Parking Bays
Leederville Oval	No Fee. 34 Parking Bays

Although parking fees across the city are consistent with only a few exceptions, they bear little relation to the different demand in each precinct and in several cases are too high.

Fee changes have been set annually with fixed escalations from 2018 as shown in the following table.

Table 6. Parking fee increases 2018-2023

City of Vincent Paid Parking Rate History						
Location	2022/23	2021/22	2020/21	2019/20	2018/19	% Increase 2018 - 2023
MOUNT HAWTHORN						
No paid parking						
LEEDERVILLE						
Frame Crt CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
The Avenue CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Newcastle St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Frame Crt (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Leederville Pde (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Oxford St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Richmond St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Vincent St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
NORTH PERTH						
View St CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Wasley St CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Rosemount Hotel CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Fitzgerald St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
WILLIAM ST						
William St CP	\$ 4.40	\$ 4.20	\$ 4.20	\$ 4.20	\$ 4.20	105%
William St (kerbside)	\$ 4.40	\$ 4.20	\$ 4.20	\$ 4.20	\$ 4.20	105%
Brisbane St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Forbes Rd (kerbside)	\$ 4.40	\$ 4.20	\$ 4.20	\$ 4.20	\$ 4.20	105%
Monger St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
BEAUFORT ST						
Barlee St CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Chelmsford Rd CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Raglan Rd CP	\$ 3.20	\$ 3.00	\$ 2.90	\$ 2.90	\$ 2.80	114%
Barlee St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Beaufort St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Chelmsford Rd (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Clarence St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Grosvenor Rd (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Harold St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Mary St (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
Raglan Rd (kerbside)	\$ 3.30	\$ 3.10	\$ 2.90	\$ 2.90	\$ 2.90	114%
PICKLE DISTRICT						
No paid parking						

7.1 Changes to regulations and fees

There appears to be no clear rationale for the introduction or amendment of parking time restrictions or fees in different precincts.

Over the past five years, parking fees at the car parks have been increased across the board by 14%, with three exceptions. The fee changes have not been related to occupancy or demand or towards achieving any strategic objective.

The annual fees and charges review is neither a responsive, nor effective process to manage changes in parking demand or to achieve broader strategic objectives. Effective parking management requires that different fees are appropriate for different precincts.

Fees should be based on actual demand data and strategic objectives, and reviewed more than once a year in accordance with a parking management framework, with triggers for change and intervention measures based on utilisation.

7.2 Occupancy

Parking occupancy describes the percentage of spaces that are occupied at any given time. Parking occupancy rates, also called 'utilisation', reflect the relationship between parking supply and demand. Occupancy levels are key to determining changes to time restrictions, introduction of user-pays parking and eventually, expansion/contraction of parking supply.

The occupancy of public parking facilities in CoV should be high enough to ensure that they are occupied at a level that justifies the supply, but not so high that it is unreasonably difficult to find a space. A target occupancy of 85% at times of peak demand means that approximately one parking space in every seven should be vacant.¹⁹

The optimum occupancy range for a commercial activity area is regarded as 65% - 85%. Occupancy below 65% or above 85%, is considered undesirable and requires parking management intervention.

Parking is considered 'at capacity' when available spaces are more than 85% occupied at times of peak demand. When the average parking occupancy is 'regularly' above 85%, such as in the Pickle District, a change to the parking management approach may be necessary.

A low occupancy rate means that there are many spaces that are empty or unused. While this may be convenient for drivers travelling to the precinct, lower occupancy rates can also mean that an oversupply of parking or inappropriate parking prices exist in the area such as at the Barlee Street car park. By contrast, an area with a very high level of occupancy could mean that the available parking is limited and needs management to accommodate a certain level of demand.

Accurate and current demand surveys are essential requirements for monitoring occupancy. **It is recommended that parking occupancy surveys be undertaken at the same time each year**, not only as a snapshot of parking demand, but to assess how demand is changing. Surveys in high demand areas should be undertaken every year, and every 2 - 3 years in areas of less demand. Surveys should measure occupancy, duration of stay and compliance with regulations. The results should identify peak time occupancy and average occupancy for each car park and street.

¹⁹ The High Cost of Free Parking. Donald Shoup. 2005, APA Planners Press.

7.3 Regular reviews

It is important to recognise that parking demand in car parks alters over time in response to changes in the parking generators. Businesses change, as do the parking habits they create. **It should not be assumed that patterns of demand are constant or that small annual fee increases can be sustained. Sometimes fees may need to be reduced.**

The setting of parking fees once a year to fit in with the city's fees and charges timetable does little to make the most effective use of all parking supply. **Fees should be set to achieve occupancy and mode share targets, not CPI or budget goals.**

It is sometimes necessary for some parking fees and time restrictions to be reviewed more than once a year. It is therefore **recommended that the annual fees and charges process confirms a maximum fee for each parking area effective July each year, but the CoV parking management group are to be permitted the flexibility to reduce the fees by up to 20% if necessary, during the year.** A \$3.20/hour fee could be reduced to \$2.60/hour based on the parking management framework proposed below.

It is essential that parking time restrictions in CoV are also reviewed at least every 5 years, or more frequently in high demand areas. Most have remained unchanged for many years. Pro-active parking management requires as a minimum, a review of demand versus supply at least every few years. CoV seldom adjusts parking time restrictions and the approach to fee changes has been to merely increase them annually without any underlying rationale.

1P timed parking such as in Vincent Street East and used in many cities, is poor at attracting visitors to shopping areas. It provides the driver with much less than one hour to transact their business and does not encourage visitors to browse in the area.

In Auckland, removing time-limits for on-street parking in commercial areas was a key to winning business support for Auckland's on-street parking strategy. Auckland Transport proved to local business interests that the 1P time limits that had been in place in many areas were actually bad for business. The approach was communicated by a clever 'anti-dessert' message:²⁰ *'With 1P time limits, restaurant patrons must leave that rather than ordering dessert. If you support 1P time limits instead of the right prices for parking, then you are anti-dessert.'*

It is recommended that all 1P time restrictions in CoV are reviewed and replaced with 2P unless absolutely necessary.

Effective review of parking regulations and pricing will deliver several benefits to CoV and the community. It will:

- increase parking churn to help promote economic activity for local businesses,
- help reduce local traffic congestion and increase the attractiveness of precincts,
- promote behavioural change through improved travel choices and encourage more public transport, walking and cycling, and
- make more effective use of all the parking available.

Where practical, paid parking in each precinct should be divided into price zones. These zones will be a collection of streets with broadly similar parking demand profiles based largely on the primary adjacent land uses. The price zones may change over time to better manage demand, but the parking price should be uniform across each price zone.

²⁰ 'How to get parking reform done. The New Zealand story'. Posted by Paul Barter on 8/6/ 2022 on Reinventing Parking.

7.4 Parking management framework

A parking management framework will facilitate evidence-based decision-making, using data derived from parking surveys as adjusted for adjacent land use. The framework consists of occupancy triggers to identify the need for management intervention and measures that could be implemented when utilisation points are reached and sustained. The occupancy triggers with an example of a heat map are shown below.²¹

It is recommended the CoV adopts a parking management framework with criteria for parking occupancy triggers and parking management measures.

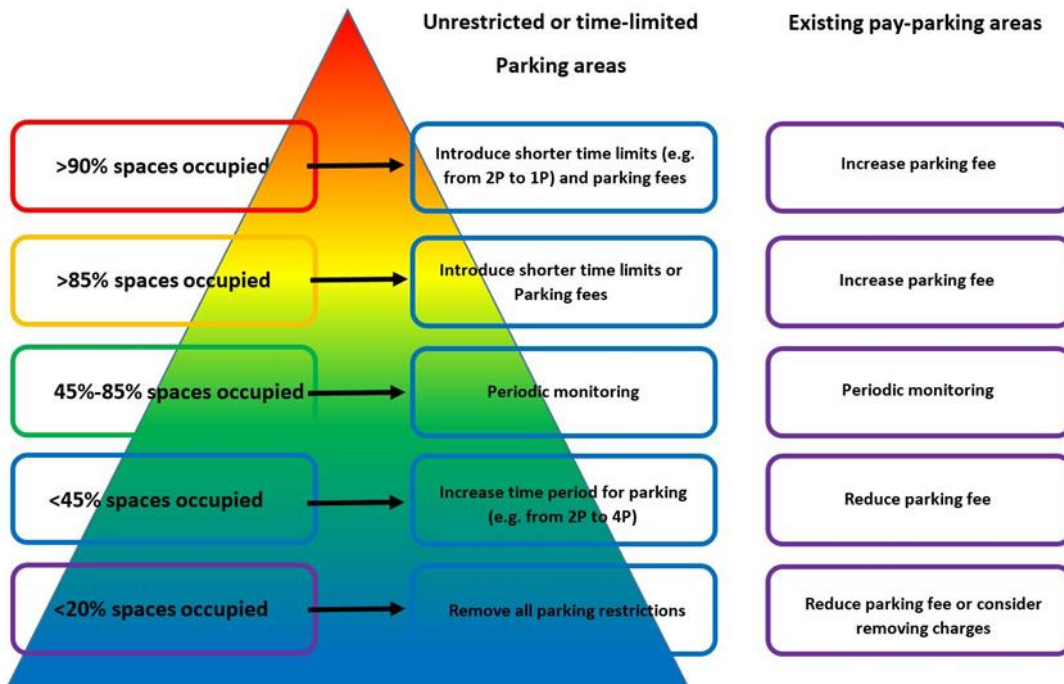


Figure 7.1 Parking occupancy triggers

Various measures in response to occupancy or other triggers are set out below²².

Table 7. Parking management measures

INTERVENTION TRIGGER	OPTIONAL MEASURES
On-street parking occupancy above 85%.	Introduce time restrictions Modify maximum time restrictions Introduce paid parking Increase paid parking fees
On-street parking occupancy below 65% (only applies in areas with existing parking regulations).	Modify time restrictions Reduce paid parking fees
Off-street parking occupancy above 85%.	Introduce time restrictions Modify time restrictions Introduce paid parking Increase paid parking fees Consider provision of additional paid parking

²¹ With acknowledgement to Cities of Rockingham, Willoughby and the WALGA Car Parking Guideline.

²² With acknowledgement to Town of Victoria Park. Parking Management Plan, Table 3.1. April 2022

INTERVENTION TRIGGER	OPTIONAL MEASURES
Off-street parking occupancy below 65% (only applies in areas with existing parking restrictions).	Decrease paid parking fees.
Complaints regarding lack of compliance.	Issue warning/infringement notices. On receipt of several complaints for the same issue/location within a 6 month period, initiate a parking survey.
Request by private parking owner for CoV management of parking.	Review parking management by owner Offer a Parking Monitoring Contract.
New developments near one another.	Encourage the creation of consolidated and shared parking.
Request for loading zone, taxi zone, PUDO, accessible parking, bus parking, motorcycle parking.	Review request with consideration of the street typology function and hierarchy of parking. Implement if it benefits the community and suits the street function.
Developers cannot provide required parking.	Require payment in lieu for each unsupplied parking bay.
Complaints regarding school parking.	Education by authorised officer monitoring Issue warning/infringement notice.
Increase in private vehicle use.	Educate the community on sustainable transport options.
Parking safety issue.	Review safety issue. Remove, add, or amend signs and line marking to resolve parking safety issue. Remove parking bays to resolve parking safety issue.

Where on-street pay parking is introduced, parking fees should be set according to the following general principles:

- Prices for on-street parking will be set at levels that ensure people can find a car park most of the time within a short walking distance of their destination.
- In general, if the data for demand for parking in an area is found to decrease, then prices should also decrease and vice versa.
- On-street parking in commercial activity centres will be prioritised to support visitors ahead of long-stay parkers and residents.
- The way parking prices are set in different parts of CoV shall be transparent and based on up-to-date empirical evidence of parking demand patterns in that area and observed trends in these patterns over time.

It is proposed that prior to CoV's consideration and endorsement of this Precinct Parking Review and its recommendations, all current fees and regulations remain unchanged and Council resolves that these fees will be the maximum applicable for 2023/24, subject to a review of fees and regulations in accordance with the recommended Parking Management Framework. Fees may be decreased during the year.

7.5 Demand responsive pricing

This refers to parking pricing that fluctuates with changes in demand and occupancy levels, by location, day and time and helps to maintain equitable access to parking.

Demand-responsive pricing means that the prices charged for parking will be adjusted based on parking demand data. Parking rates will be adjusted up or down with the goal of maintaining an average 85% occupancy at peak times. An occupancy range of 65-85% is considered an acceptable range.

Demand responsive pricing is not suitable for all parking areas but it is particularly appropriate where parking demand varies considerably across the day in response to different generators. For example, in Oxford Street or the Beaufort Town Centre, fees could be set to encourage off-peak use during the early part of the day and be higher in the evening when demand is high.

A trial by the Town of Victoria Park has parking fees varying from \$1.65/hour to \$4.90/hour as illustrated below.

East Victoria Park (Area 2)

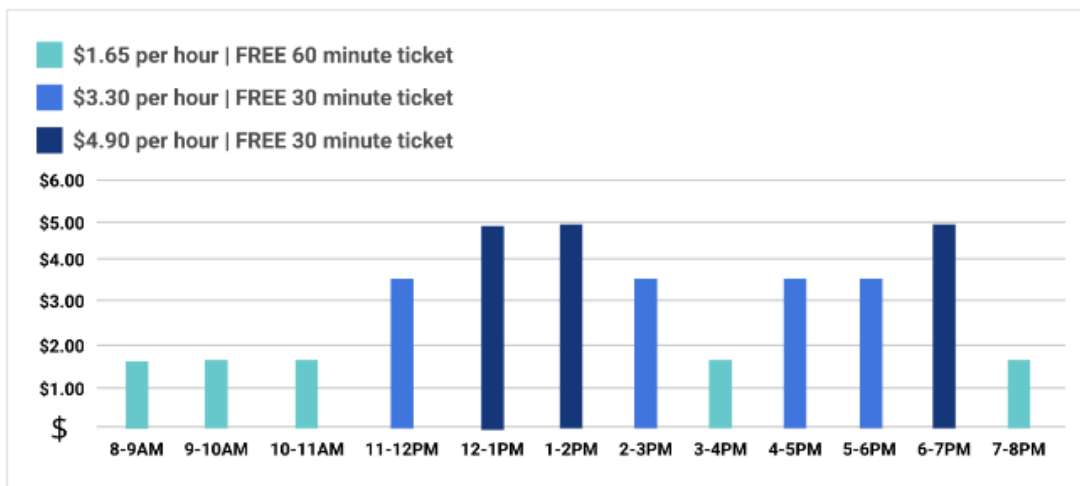


Figure 7.2 Dynamic pricing example in Town of Victoria Park

The trial in Victoria Park demonstrated that 'pricing changes and free periods throughout the day encouraged patrons to park at off-peak times while increasing parking usage. The small number of complaints received indicates that parking users adapted to the new model with minimal interruption.'

An important reason for the success of demand responsive pricing was the extensive communication undertaken by the Town prior to and during the trial.

It is recommended that CoV investigate, communicate and implement a demand responsive parking pricing trial.

7.6 Easypark


Currently less than 50% payments are made via the very convenient Easypark app. CoV also impose a 5% surcharge for credit card usage. In order to encourage take up of the Easypark app, CoV should consider offering a 5% discount on all payments via Easypark. If usage can be increased to > 70%, the city will benefit from considerable reduction in cash collection and banking fees as well as more accurate monitoring of car park usage.

Easypark can also be used to provide ratepayers with a discount on ticket parking in CoV (as in City of South Perth).

8 Occupancy Surveys

Surveys of parking occupancy across approximately 3,000 bays were undertaken in March 2023. The survey times were suggested by the City's parking department as being observed periods of peak demand in each precinct. The surveys only counted occupancy, not time of entry or duration of stay, across a relatively small samples size. The detailed results are considered in the specific precinct parking plans in the Appendices, but overall findings for each precinct are shown below.

Table 8. March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023								
OFF-street	Survey		SUPPLY			OCCUPIED		VACANT
Car Park		Public Bays	Acrod	Senior & Pram	Public Bays			
1	Leederville SAT 11/3/23 1800-1930	905	13	9	652	72%		253
2	Mt Hawthorn FRI 10/3/23 1800-1845	109	3	0	57	52%		52
3	Beaufort TC SAT 18/3/23 1630-1745	179	5	5	73	41%		106
4	North Perth FRI 17/3/23 1030-1150	137	6	4	50	36%		87
5	Pickle TUE 7/3/23 1230-1315	0	0	0	0			0
6	William St TC MON 20/3/23 1100-1200	48	2	0	34	71%		14
TOTAL		1378	29	18	866	63%		512
ON-street								
1	Leederville SAT 11/3/23 1800-1930	595	4		421	71%		174
2	Mt Hawthorn FRI 10/3/23 1800-1845	203	4		147	72%		56
3	Beaufort TC SAT 18/3/23 1630-1745	198	2		89	45%		109
4	North Perth FRI 17/3/23 1030-1150	237	4		161	68%		76
5	Pickle TUE 7/3/23 1230-1315	156	0		133	85%		23
6	William St TC MON 20/3/23 1100-1200	143	2		107	75%		36
TOTAL		1532	16	0	1058	69%		474
COMBINED ON and OFF STREET								
1	Leederville SAT 11/3/23 1800-1930	1500	17	9	1073	72%		427
2	Mt Hawthorn FRI 10/3/23 1800-1845	312	7	0	204	65%		108
3	Beaufort TC SAT 18/3/23 1630-1745	377	7	5	162	43%		215
4	North Perth FRI 17/3/23 1030-1150	374	10	4	211	56%		163
5	Pickle TUE 7/3/23 1230-1315	156	0	0	133	85%		23
6	William St TC MON 20/3/23 1100-1200	191	4	0	141	74%		50
TOTAL		2910	45	18	1924	66%		986

The survey results show:

- Parking demand does not exceed 85% in any precinct.
- At differing times of peak demand, almost 1,000 bays are available.
- Only in Mt Hawthorn, North Perth and Pickle is on-street parking preferred to off-street.
- Less than 1.5% bays are allocated for ACROD permit holders.
- Additional supply is not necessary but more effective management is required.

9 Permit System

Business and Resident Permits are available in CoV. Business permits are sold at \$210 per month with availability capped at 100 between the Avenue and Frame Court car parks, and 20 at each of the other car parks. This fee effectively provides businesses with parking at less than \$10/day, a significant discount on the \$19.50 maximum fee for casual parkers.

Usage should be monitored with surveys to ensure that visitor parking availability is not eroded by business permits.

The city offers residential permits on demand and subject to very few requirements including a maximum of 3 per existing dwelling. There is however no annual check of ongoing entitlement to permits, there is no fee charged for the privilege, and there is regular abuse of the system by parkers who are no longer bona-fide residents in the precinct. It is not surprising that there are more than 4,500 permits in issue.

The full cost of kerbside parking includes the lost opportunity to use the space for something else, the lost amenity for the community and the cost to the environment. The system is unfair to ratepayers who don't have a car. They are effectively subsidising valuable, on-street space to residents who have cars.

With an additional 900 residents expected in the CoV per annum²³, parking demand will increase and parking supply decrease. The competition for road space is on the rise increasing the pressure on parking space availability. As previously recommended in 2009, residential permits should be subject to an annual fee and residents should have to re-apply at least every two years. The fee will ensure less 'free' permits are requested and the bi-annual application combined with LPR surveys will curtail the current abuse.

It is recommended that parking permit system requires a complete overhaul in line with best practices elsewhere in Perth and resident parking permits should not be free.

The introduction of an annual fee will reduce the number of permits requested.

One of the actions of the Accessible City Strategy is to better manage the supply of on-street parking through the implementation of various restrictions.

The new parking restrictions will limit visitor parking to:

- 3P or less within two blocks of train stations or transit nodes
- 3P or less within one block of high-frequency transit corridors
- 2P or less within two blocks of town centres or mixed-used areas

The proposed restrictions are in place to address commuter parking on residential streets. Whilst an issue may not currently exist on a particular street, CoV has implemented these restrictions in a bid to avoid spillover of commuter parking from one street to another.

²³ City of Vincent STRATEGIC COMMUNITY PLAN 2018 – 2028 at Section 4

10 Achieve Modal Split Targets

There are several strategies to encourage a change in mode share.²⁴ Making private vehicle use more expensive or inconvenient is essential to driving a modal shift. Discouraging private car use through parking regulations can be achieved by time restrictions and price but especially by curtailing the supply of parking as well as reallocating road space for people.

Providing real alternatives that people will choose should be encouraged alongside disincentives for private car use. A shift away from private vehicles requires the provision of convenient, efficient, affordable and appealing alternatives that travellers will choose to take. To achieve this, CoV needs to prioritise alternative forms of transport on their roads; invest in alternative transport infrastructure; ensure multi-modal network connectivity; and introduce innovative schemes and incentives such as shared cars, particularly shared electric vehicles, cycle hire and smart payment systems to make them an attractive first choice.

Advocacy and Education are important methods of improving the use of travel options and encouraging people to travel sustainably throughout the precincts. CoV should consider public relations campaigns to market alternative transport options, such as car-free days.

In terms of education, the local community, businesses and visitors need to understand that:

- **Drivers cannot expect unlimited parking close to their destination.**
- **Unlimited supply has environmental, social, and economic drawbacks.**
- **Parking needs to be sustainable.**
- **There is a cost for the provision of parking.**
- **Parking users need to contribute to the cost of parking infrastructure equitably.**
- **A part of the net income from parking services is to be reinvested into improving access and transport infrastructure.**

The approaches for financing modal shift differ depending on the strategy taken to achieve it. Relatively cheap strategies can also have a large impact, such as streetscape alterations for walking, cycling and priority bus lanes, marketing campaigns and car-free days.

²⁴ C 40 Knowledge Hub. <https://www.c40knowledgehub.org/s/article/How-to-drive-a-modal-shift-from-private-vehicle-use-to-public-transport-walking-and-cycling>

11 New Payment in Lieu Regulations

11.1 Regulations

With effect July 2021, new regulations²⁵ applying to Payment in Lieu of Parking (cash-in lieu), require local governments to adopt a prescribed Payment in Lieu of Parking Plan²⁶ (PilPPlan) to apply for payment in lieu of conditions to development approvals. The PilPPlan is required to specify the area to which it applies and the purpose for which money is paid.

All PilPPlans shall follow the Manner and Form template as approved by the WAPC.

A PilPPlan can cover an entire Local Planning Scheme area, or one specific area or activity centre, or multiple individual areas or activity centres.

11.2 Needs analysis

Local government must confirm via evidence, the need for parking or other infrastructure. Provision of additional parking is not necessarily a requirement, however if this option is chosen, the city is required to compile and maintain up to date data on the supply of timed, paid, accessible and other public parking.

Unless CoV urgently compiles a database on all public parking supply in each precinct and commences surveys of high-demand areas for public parking (including informal parking) to record occupancy and duration of stay, the city will not have the data necessary to evidence the need for additional car parking to be constructed from payment in lieu contributions.

If a PilPP is targeted on improvements to infrastructure that would lead to improved access, the evidence needed for this will not require detailed car parking data.

It is understood that CoV's draft PilPP, which includes action items from the Accessible City Strategy that would lead to improved access throughout the City, has been reviewed and supported by DPLH.

11.3 Purposes for which payment in lieu will be applied

Payment in lieu of parking can be applied for either public parking infrastructure, or other transport infrastructure, or ancillary or incidental purposes.²⁷

Any construction of kerbside parking on existing roadways or purchase of technology to improve data collection and information to parkers could be listed within a PilPPlan as a cost that payment in lieu will contribute to. CoV can allocate funds received from payment in lieu towards investment in technology as recommended in Section 6.

A PilPPlan can recognise that the costs for different types of items does not have to be applied equally across a plan area. Costs can be attributed depending on variables such as locational factors and the mix of items proposed in the PilPPlan.

²⁵ Payment in Lieu of Parking Plan Manner and Form document applies to the Perth Metropolitan Region and Peel Region Scheme areas in Western Australia and operates under Schedule 2, Part 9A of the Planning and Development (Local Planning Schemes) Regulations 2015 (Regulations).

²⁶ WA Planning Commission. Amended Planning and Development (Local Planning Schemes) Regulations 2015 – Part 9A Provisions about Car Parking.

²⁷ Amended Planning and Development (LPS) Regulations 2015 – Part 9A. Clause 77J(1)(b)(ii)

12 Recommendations

This section summarises all of the recommendations common to all precincts. Still valid recommendations from the 2009 Precinct Parking Plan (refer Section 5.5) are either incorporated in the current Draft Parking Policy or below.

These recommendations are to be implemented together with specific action plans which are detailed for each precinct in the Appendices. The recommendations are prioritised as either Urgent (within 2 years), Necessary or Desirable.

12.1 Common to all precincts

REF	RECOMMENDATION	PRIORITY	BENEFIT
2	<p>Parking management is to embrace four key areas:</p> <ol style="list-style-type: none"> 1. Customer service. 2. Utilisation of different technologies 3. Accommodation of new types of mobility - including car share, e-vehicles, scooters, driverless drones and Uber type services. 4. Regular revision of parking controls and pricing. 	Necessary	<p><i>Simplification of parking regulations and the provision of signage and data to provide real-time information on parking availability.</i></p> <p><i>For control and information including assistance to pedestrians and vehicles other than cars, and data to provide actual rather than anecdotal reports on demand in order to optimise the use of all parking spaces. Applies to car share, different types of e-vehicles and PUDO</i></p>
3.3	Amend the Draft Parking Policy to incorporate reductions in parking supply linked to the provision of car share. Provide convenient car share spaces in each precinct.	Urgent	<i>Convenient provision of car share options will encourage less car ownership and reduce parking demand.</i>
3.4	Initiate discussions with WA government re obtaining grants to introduce EV charging.	Desirable	<i>More EV charging stations will encourage take-up and generate income to the city.</i>
3.5	A robust regulatory framework and appropriate infrastructure is necessary prior to introduction of e-scooters.	Necessary	<i>Controlled pilot trials should be carried out first.</i>
4.1	<p>Invest in different integrated technologies to collect data, provide wayfinding and improve customer service.</p> <p>Install solar panel shade cover in suitable car parks to power EV chargers.</p>	Urgent	<i>Make parking easier to find, navigate and use. This will make more effective use of all public parking and also show how parking revenues can be re-invested into new infrastructure to improve access for all.</i>
4.2	Mandate installation of user-pay EV charging facilities, for all new buildings together with a minimum of EV-ready bays, per new NCC Regulations	Necessary	<i>This will save costs in the long term.</i>
5.2	Implement Actions 1 - 3 recommended in CoV Accessible City Strategy.	Necessary	<i>These reiterate the need for consistent wayfinding and signage, car share, EV charging and limiting residential parking.</i>
6.3.1	Gradually regulate the duration of stay in ticket parking areas by parking fee only, without the need for additional time and category restrictions. Exceptions only for allocated bays for 15minP No Ticket required.	Necessary	<p><i>This will reduce confusion and allow parkers to choose how long they will stay, subject to paying the fee. It also allows the parker to extend their paid time if they wish via the EasyPark app.</i></p> <p><i>15minP No Ticket also caters to PUDO parkers.</i></p>

REF	RECOMMENDATION	PRIORITY	BENEFIT
6.3.2	Public parking signage in the precincts should be substantially improved and real time information provided to drivers on space availability. Also improve user information and destination signs for pedestrians. Provide detailed information using signage, brochures, maps, websites and smartphone apps.	Necessary	<i>This will reduce the time spent cruising for a vacant space, thereby minimising congestion of the roads. It is also worthwhile to clearly indicate to all users of public off-street car parks, the walking distance to/from their destination.</i>
6.5	CoV to invest in the provision of five types of technology.	Urgent	<i>Smart technology should be installed in one precinct as a trial to indicate to businesses and drivers the benefits of integrated systems.</i>
6.6	Provision needs to be made to park and re-charge different types of vehicle including EV cars, scooters, motor cycles and bicycles.	Necessary	<i>This will encourage take up and use of these new forms of mobility.</i>
6.7	Undertake an audit of all ACROD parking bays in the city's car parks to ensure they fully comply with best practice design and also clearly show location of ACROD bays on all parking information publications. Supply of ACROD bays in the six precincts should be higher than the minimum rates.	Necessary	<i>Cater to increasing numbers of ACROD permit holders visiting the precincts.</i>
7.2	Parking occupancy surveys to be undertaken at the same time each year. Regular surveys by the city using LPR cameras should measure occupancy, duration of stay and compliance with regulations.	Urgent	<i>Both as a snapshot of demand, but also to assess how demand is changing. Surveys in high demand areas should be undertaken every year, and every 2-3 years in areas of less demand. Results should identify peak time occupancy and average occupancy for each car park and street.</i>
7.3	Annual fees and charges process to confirm a maximum fee for each parking area effective July each year, and the parking management group are to be permitted flexibility to reduce the fees by up to 20% if necessary, during the year. All 1P time restrictions are reviewed and replaced with 2P, unless absolutely necessary. Parking time restrictions are to be reviewed at least every 2 years.	Urgent Urgent Necessary	<i>Setting parking fees once a year to fit with the fees and charges timetable does little to make the most effective use of all parking supply. Fees should be set to achieve occupancy and mode share targets. 1P timed parking is poor at attracting visitors to shopping areas. It provides the driver with much less than one hour to transact their business and does not encourage visitors to browse.</i>
7.4	Adopt the parking management framework with criteria for parking occupancy triggers and parking management measures.	Urgent	<i>Facilitates evidence-based decision-making, using data derived from parking surveys as adjusted for adjacent land use</i>
7.5	Investigate, communicate, and implement a demand responsive parking pricing trial.	Necessary	<i>Pricing variations throughout the day encourage patrons to park at off-peak times while increasing parking usage.</i>
9	The parking permit system requires a complete overhaul in line with best practices elsewhere in Perth and resident parking permits should not be free.	Necessary	<i>Stricter conditions of compliance plus a fee will curtail abuse and reduce the number of permits requested. It will create greater equity with residents who don't have a car.</i>
11	Ongoing advocacy and education are important methods of improving the use of travel options and encouraging people to travel sustainably throughout the precincts.	Necessary	<i>Consider public relations campaigns to market alternative transport options, such as car-free days.</i>

REF	RECOMMENDATION	PRIORITY	BENEFIT
12.2	Institute on-going monitoring and reporting on the implementation and impact of all of the recommendations in this Review.	Necessary	<i>A 6-monthly consolidated Parking Report will assist in monitoring the operational performance of parking facilities. This will foster a proactive traffic management culture as opposed to acting in reaction to negative parking outcomes such as congestion and customer dissatisfaction.</i>

12.2 Objectives and reporting

The new Parking Plan for each precinct aims to achieve the city's Accessible City Strategy objective which is 'to maintain an appropriate supply of affordable, secure, convenient and appealing parking that is accessible to all.'

Cities are complex and Vincent is in the process of moving from a transport system that is car dependent to one where active (walking and cycling) and public transport will play a bigger role. Parking management and pricing will assist in achieving this.

There is a natural tension between some objectives, which is unavoidable. Parking decisions will often require trade-offs between competing demands. One of the most difficult trade-offs is between immediate individual / business benefits and changes that benefit the wider community and the community of the future. Any parking management changes should also consider the effect that related changes in revenue will have on ratepayers.

In order to avoid a repeat of the limited implementation of many of the recommendations in the 2009 Precinct Parking Management Plan (refer Section 5.5), the city should institute on-going monitoring and reporting on the implementation and impact of all of the recommendations in this Review.

Changes to parking measures normally need a three to six-month period to enable the measures to 'bed-in' on site. Consequently, it is proposed to initiate monitoring every six months. To improve the operational transparency for collecting parking fees and charges, it is **recommended that a six-monthly Parking Report be submitted to Council.** Much of the required information is already available, but a consolidated Parking Report will assist in monitoring the implementation of recommendations and the operational performance of parking facilities. This will foster a proactive traffic management culture as opposed to acting in reaction to negative parking outcomes such as congestion and customer dissatisfaction.

The report should contain as a minimum the following information in a single document:

- A table with current details of public parking supply both on- and off-street, showing bay numbers, categories, time and other restrictions and fees.
- YTD revenue generated by ticket parking, permits and parking related infringements.
- Volume and type of permits in issue and changes during the period.
- Review of the operational performance of ticket parking by precinct, including total transactions, average and peak occupancy statistics, duration of stay and average transaction values.
- Details of any proposed variations to time restrictions and fees and the rationale behind these.
- Details of completed and proposed parking and access capex projects.
- Update on the implementation of recommendations in the 2023 Precinct Parking Review.

To help clarify the intent of the objective, long-term measures and indicators will show the impact the Precinct Parking Plans are having (desired direction in brackets) such as:

- Ratio of residents' parking permits to spaces (decrease)
- Number and design of ACROD bays (increase)
- Number of car share spaces (increase)
- Number of EV charging spaces (increase)
- Public transport, walking, cycling and micro-mobility trips (increase)
- Proportion of road corridors used for parking (decrease)
- Churn of bays (improves)
- Satisfaction with parking availability (improves).

The city's parking issues will not be solved by selective implementation of a few 'urgent' recommendations. In order to deliver meaningful change and achieve the strategic vision of 'easy accessibility into and around Vincent', the solutions require implementation of all actions working in tandem to deliver change.

Only a holistic approach will save time for parkers, reduce congestion, conserve energy, improve air quality and produce public revenue which can subsidise ratepayers and places in the city.

APPENDIX A – SPECIFIC PARKING ACTION PLANS

In addition to the recommendations in Section 12 which are to be applied to all precincts, specific plans for each precinct are based on site observations, input from various internal stakeholders and surveys of demand during peak periods in March 2023.

13 Beaufort Street Town Centre

Also known as the Mount Lawley / Highgate Precinct this borders the City of Stirling to the north, City of Perth to the south and includes three off-street car parks, known as Raglan Road, Chelmsford Road, and Barlee Street. Metered parking exists on some areas of Beaufort Street. The precinct is shown below.

The March 2023 survey results are shown in Table 12.1, followed by key findings from site visits.



Figure 13.1: Beaufort Street (Mount Lawley/Highgate) Town Centre

13.1 Key findings from survey and site visits

Table 13.1 Beaufort Town Centre March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023						SAT SURVEY 18/3/23		
BEAUFORT TC OFF-street			SUPPLY			OCCUPIED	1630- 1745	VACANT
	Car Park	Between	Public Bays	Acrod	Senior & Pram	Public Bays		
1	Raglan Rd		77	2	3	36	47%	41
2	Chelmsford Rd		56	2	2	22	39%	34
3	Barlee St		46	1		15	33%	31
		TOTAL OFF-street	179	5	5	73	41%	106
BEAUFORT TC ON-street								
	Beaufort St	St Albans to Harold	19			0	0%	19
	Beaufort St	Harold to Walcott east side	16			2	13%	14
	Beaufort St	Harold to Walcott west side	18			7	39%	11
	Beaufort St	Harold to Chatsworth west side	15			7	47%	8
	Beaufort St	Harold to Chatsworth east side	7			0	0%	7
	St Albans Ave	50m west of Bfort	7			7	100%	0
	Chatsworth	50m west of Bfort	11			7	64%	4
	Mary St	50m west of Bfort	6			5	83%	1
	Harold St	50m each west of Bfort	5			3	60%	2
	Harold St	50m each east of Bfort	19			17	89%	2
	Broome St	50m east of Bfort	20	1		13	65%	7
	Clarence St	50m east of Bfort	13	1		3	23%	10
	Barlee St	50m east of Bfort	13			7	54%	6
	Chelmsford		9			6	67%	3
	Grosvenor Rd	50m west of Bfort	3			1	33%	2
	Raglan Rd		11			0	0%	11
	Vincent St	50m west of Bfort	6			4	67%	2
		TOTAL ON-street	198	2	0	89	45%	109
		TOTAL PARKING	377	7	5	162	43%	215

An occupancy survey was undertaken on Saturday 18 March from 1630-1745hrs. The weather was fine. Survey results indicate:

- Less than half the bays in the Raglan Road and Chelmsford Road car parks were occupied and in the Barlee Street car park, occupancy was less than 33%.
- In the side streets leading off from Beaufort Street, high occupancy (>80%) occurred in St Albans Avenue, Mary Street and Harold Street.
- Across the entire precinct, less than half the bays were occupied in the early evening on Saturday.
- There are only two ticket machines at each car park.
- Occupancy observed in 3P (City of Stirling) car parks immediately north of Walcott Street was less than 50%.

13.2 Specific issues and recommendations

13.2.1 Raglan Road and Chelmsford Road car parks

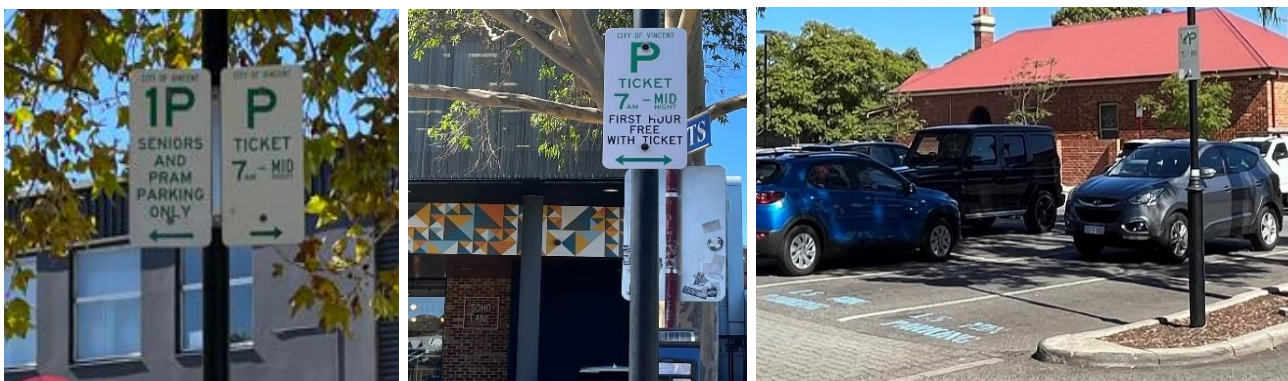
Issues

The two car parks are considered together as they serve several destinations including Fresh Provisions and IGA, the chemist, smaller shops, cafes and professional suites. Demand is highest late morning on Saturday, but also whenever an event occurs at the nearby Astor Theatre.

The issues at both car parks are largely the same but the proposed changes for each are slightly different.

- The car parks offer multiple categories of parking bays including 15minP, 1/4P, 30minP, Seniors & Prams1P, ACROD and Ticket parking. These are scattered in different areas.
- Some of the bay restrictions are only marked by road surface paint. Others by pole mounted signs.
- Drivers are confused as to whether they are required to take a ticket or not, and whether some parking is free for a period.

The pictures below illustrate some of these issues.



- It is impractical to monitor Seniors & Pram usage.
- Each car park offers two-way entry and exit from adjacent streets.
- 23 bays in the Raglan Road car park are in dead-end aisles with limited turning areas.
- The overall layout of the car parks does not provide an easy to follow search pattern.
- The loading area serving Fresh Provisions is hazardous for pedestrians.

- Ticket fees apply 7am-midnight every day. Currently \$1 for the first hour, \$3.20 for each additional hour with a maximum all day fee of \$19.50 (= 6.3 hours). The maximum fee only applies between 7am and 7pm.
- The parking duration (average length of stay) prior to September 2022 was 1.15hrs at Chelmsford Road, and 1.16hrs at Raglan Street. Between September 2022 and February 2023, the duration increased to 1.20hrs and 1.25hrs respectively.²⁸ This may have been the result of relaxing of pandemic restrictions.
- A private company owns Lot 200 which is the western portion of the carpark. This section has 12 parking bays since the development of the Alexander Building. They also have 6 x 15minute bays on their property at the building entrance. All of these 18 bays are available for public use. In return the City issues the company with 18 parking permits, to park in the carpark (not including the short term bays).

Recommendations for Raglan Road car park

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 13.2 Raglan Road car park - proposed changes

NO	RECOMMENDATIONS FOR RAGLAN ROAD CAR PARK	PRIORITY	BENEFIT
1.	Simplify the categories of bays to only three types: 15min free no ticket required, Ticket Parking and ACROD.	Urgent	<i>Less confusion, easier to find bays and simpler to monitor. Change all 1/4P wording to 15minP.</i>
2.	Consolidate the 15min free bays into one nested area on either side of the central north-south aisle of the car park. Add clear signage.	Urgent	<i>Closest to the destinations and easy for vehicles and pedestrians to access. Encourages high churn of bays.</i>
3.	Convert all 30minP bays to 15minP and double the nested area to 24 x 15minP bays – No ticket (in addition to 6 privately provided 15minP bays).	Urgent	<i>CoV currently provide 6 x 15minP bays and 5 x 30minP bays. Increase to total of 24 x 15minP bays in one single area plus 6 privately owned bays.</i>
4.	Eliminate 3 x Seniors & Pram 1P bays and convert these to 2 x ACROD bays. Total of 4 ACROD bays.	Urgent	<i>Seniors and Prams cannot be adequately monitored. More ACROD bays needed. Target is 5%.</i>
5.	All remaining 49 bays to be ticket parking, 7AM-Midnight.	Urgent	<i>Reduction from current 62 bays will increase bay occupancy.</i>
6.	Amend the fee structure to \$1 for the first hour, and reduce the rate thereafter to \$2.50 for each additional hour. Eliminate the maximum fee.	Urgent	<i>Average duration of stay is likely to increase at the lower fee as will ticket parking volumes. If either of these increase by more than 10%, car park revenue will be higher than current.</i>
7.	Install in-ground sensors in 15minP – No ticket bays.	Urgent	<i>Encourages a high level of compliance. Allows CoV to monitor volumes and duration of stay.</i>
8.	Survey occupancy and duration of stay in all bays within 6 months of the Urgent changes being implemented.	Necessary	<i>Assess whether volume of 15minP bays can be reduced and replaced with Ticket parking bays. Assess occupancy of ticket parking to re-examine fee structure.</i>

²⁸ City of Vincent. Ordinary Council Meeting Agenda. 4 April 2023 at pages 3 and 4.

NO	RECOMMENDATIONS FOR RAGLAN ROAD CAR PARK	PRIORITY	BENEFIT
9.	Consider Demand Responsive Pricing trial with higher fee for >2 hour stay after 6PM.	Desirable	Respond to high demand from events at nearby theatre.
10.	Install additional ticket machines.	Desirable	Drivers should not have to walk more than 20M to a ticket machine.
11.	Undertake a review of layout of the car park to improve access and traffic flow. This is to consider re-location of the loading dock to a safer location.	Urgent	Aim to reduce the bays in dead-end aisles and create an easier search pattern for parkers.

Recommendations for Chelmsford Road car park

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 13.3 Chelmsford Road car park - proposed changes

NO	RECOMMENDATIONS FOR CHELMSFORD ROAD CAR PARK	PRIORITY	BENEFIT
1.	Simplify the categories of bays to only three types: 15min free no ticket required, Ticket Parking and ACROD.	Urgent	Less confusion, easier to find bays and simpler to monitor. Change all 1/4P wording to 15minP.
2.	Locate the 15min free bays into two areas on the eastern side of the central north-south aisles of the car park. Add clear signage.	Urgent	Closest to the destinations and easy for vehicles and pedestrians to access. Encourages high churn of bays.
3.	Provide 10 x 15minP bays – No ticket	Urgent	CoV currently provides 5 x 15minP bays.
4.	Eliminate 2 x Seniors & Pram 1P bays and convert these to 1 x ACROD bays. Total of 3 ACROD bays.	Urgent	Seniors and Prams cannot be adequately monitored. More ACROD bays needed. Target is 5%.
5.	All remaining 45 bays to be ticket parking. 7AM-Midnight.	Urgent	Reduction from current 49 bays will increase bay occupancy.
6.	Amend the fee structure to \$1 for the first hour, and reduce the rate thereafter to \$2.50 for each additional hour. Eliminate the maximum fee.	Urgent	Average duration of stay is likely to increase at the lower fee as will the volumes of ticket parking. If either of these increase by more than 10%, car park revenue will be higher than current.
7.	Install in-ground sensors in 15minP – No ticket bays.	Urgent	Encourages a high level of compliance. Allows CoV to monitor volumes and duration of stay.
8.	Survey occupancy and duration of stay in all bays within 6 months of the Urgent changes being implemented.	Necessary	Assess whether volume of 15minP bays can be reduced and replaced with Ticket parking bays. Assess occupancy of ticket parking to re-examine fee structure.
9.	Install additional ticket machines.	Desirable	Drivers should not have to walk more than 20M to a ticket machine.
10.	Undertake a review of layout of the car park to improve access and traffic flow.	Desirable	Aim to create an easier search pattern for parkers given the close proximity of the Raglan Road car park and the likelihood of cars searching for parking between the two car parks.

13.2.2 Barlee Street car park

Issues

- This highly visible and well located 46 bay site offers two-way access to/from Beaufort Street. It is well lit, provides an easy search pattern and incorporates good Crime Prevention Through Environmental Design (CPTED).
- It is poorly utilised because many drivers are unaware of its convenient location and because the fee structure is too high. Fees are currently (June 2023) \$3.20 per hour with a maximum all day fee of \$19.50 (= 6.1 hours).
- The car park is only 230m walking distance to the Queens Hotel and 260m to Astor Theatre. Most people can walk 260m in less than 5 minutes.

Recommendations for Barlee Street car park

The focus of the recommendations is to increase the profile and encourage much higher occupancy of the car park, and then to gradually amend the fee structure to ensure predominantly short term visitor parking and maintain occupancy at between 65% and 85%.

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 13.4 Barlee Street car park - proposed changes

NO	RECOMMENDATIONS FOR BARLEE STREET CAR PARK	PRIORITY	BENEFIT
1.	Amend the fee structure to \$1 for the first hour, \$2.50 for each additional hour to a maximum of \$16.00 (= 7 hours) per day. If long term parking grows on a regular basis, increase the maximum fee.	Urgent	<i>Use fees to incentivise use of the car park. Average duration of stay will increase at the lower fee as will the volumes of ticket parking.</i>
2.	Ticket parking to apply 7AM-Midnight	Urgent	<i>Consistency with other nearby car parks</i>
3.	Monitor maximum fee usage by all day parkers to ensure bays are available for short term parkers (0-3hours)	Necessary	<i>Ensure that all day employees and staff do not occupy the car park to the exclusion of short term parkers.</i>
4.	Upgrade the ACROD bay to comply with current design specifications.	Necessary	
5.	Promote location of the car park and walking distance (in metres and minutes) with prominent static signage on both sides of Beaufort Street.	Urgent	<i>Install south facing signs at Broome and Harold Streets and north facing on Walcott Street and Chelmsford Road.</i>
6.	Communicate the location, convenience and fees to all major generators along Beaufort Street.	Urgent	<i>Request that the Parking Available information is included on their websites and table reservation apps.</i>
7.	Install prominent variable message signage indicating the number of spaces available at the Beaufort Street intersections with Vincent and Walcott Streets.	Desirable	<i>Inexpensive to expedite as the car park has a single point of entry and exit providing easy to obtain data.</i>
8.	Undertake a pedestrian safety audit north to Walcott Street and south to Broome Street to incorporate convenient pedestrian crossings across Beaufort and Vincent Streets.	Necessary	<i>Enhance perception of security and safety to further encourage use of the car park.</i>

13.2.3 On street parking

Issues

- On -street parking in the precinct is characterised by multiple different start and finish times, complicated by 1P, 2P and 3P maximum time restrictions which apply at

different times of the day. It is not only difficult for visitors to find a parking bay, but is confusing to understand and see the signage, especially at night.

The focus of the recommended changes is to establish consistency of regulations within the precinct and to simplify the parking restrictions.

Fee changes have not been proposed. It is recommended that approximately six months after the changes have been made, a detailed survey of occupancy and duration of stay is undertaken and fees are reviewed in accordance with Section 7.4.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct.

Table 13.5 Beaufort Town Centre parking - proposed changes

City of Vincent BEAUFORT STREET (MT LAWLEY / HIGHGATE) TOWN CENTRE				
STREET	CURRENT RESTRICTIONS - APRIL 2023	FEES per hr APRIL 2023	RECOMMENDATIONS	BENEFIT
Walcott St	Clearway 4.15PM-6PM, Mon-Fri	Nil	No change to clearway times. Urgently change to pay by plate ticket machines	
Raglan Rd	2P, 8AM-5.30PM, Mon-Fri, 8AM-Noon, Sat; Ticket Parking 7AM-Midnight, 2P Ticket 8AM-7PM (north) Ticket Parking 7AM-Midnight, 1P Ticket 8AM-7PM (south)	\$3.30	Change 2P free parking times to 7AM-6PM. Eliminate 1P and replace with 2P limit for Ticket parking 7AM-6PM. Change ticket parking to 7AM-Midnight.	Apply consistent times to all restrictions. Start time matches with off-street car parks. No max. fee after 7PM. More than 3P parking with ticket available off-street
Grosvenor Rd	LZ 15 Mins, 6AM-6PM, Taxi Zone 6PM-6AM; 1/4P 8AM-8PM;		Change 1/4P wording to 15minP. All LZ to be 30minP. Retain Taxi zone. All LZ 7AM-6PM Mon-Fri only.	Consistency. Allow LZ to be used as unrestricted parking after 6PM and on weekends as with off-street car parks.
Chelmsford Rd	Ticket parking 7AM-Midnight, 1P Ticket 8AM-7PM	\$3.30	Eliminate 1P and replace with 2P limit for Ticket parking 7AM-6PM.	Encourage visitors to stay longer - up to 2 hours. No max. time after 6PM.
Vincent St east of Beaufort St	1P, 8AM-5.30PM, Mon-Fri, 8AM-Noon, Sat;	Nil	Eliminate 1P and replace with 2P limit for Ticket parking 7AM-6PM.	Encourage visitors to stay longer - up to 2 hours. No max. time after 6PM.
Barlee St	Ticket parking 7AM-Midnight. 1P ticket 8AM-7PM	\$3.30	Change 1/4P wording to 15minP. 7AM - midnight. Eliminate 1P and replace with 2P limit for Ticket parking 7AM-6PM.	
Clarence St	1/4P at all times; Ticket Parking 8AM-Midnight. 3P Ticket 8AM-7PM	\$3.30	Change 1/4P wording to 15minP. 7AM - midnight. Change 3P limit for ticket parking to 7AM-6PM. Change Ticket parking to 7AM-Midnight	Consistency for all Ticket Parking 7AM-Midnight.
Beaufort St	Subject to varying clearway restrictions. Ticket parking either 8AM or 9AM-Midnight Mon-Sun. 1P and 2P time restrictions with varying start/finish	\$3.30	No change to clearway times. Urgently change to pay by plate ticket machines. No change to start times. Eliminate 1P and change all to 2P limit for Ticket parking from start time to 6PM.	Simplify the multiple different start finish and max time restrictions.
Harold St	2P at all times (southern side); Resident only parking (northern side); Ticket parking 8AM-Midnight, 2P ticket	\$3.30	Change 2P free parking times to 7AM-6PM. Change Ticket parking to 7AM-Midnight. 2P limit for Ticket parking 7AM-6PM.	Easier to understand and to comply. Easier to enforce and survey
Mary St	Ticket parking 8AM-Midnight. 2P ticket 8AM-7PM	\$3.30	Change Ticket parking to 7AM-Midnight. 2P limit for Ticket parking 7AM-6PM.	Consistency for all Ticket Parking 7AM-Midnight.
Chatsworth Rd	1/4P at all times; 1/4P, 8AM-5.30PM, Mon-Fri, 8AM-Noon,		Change 1/4P wording to 15minP. 15minP to apply 7AM-6PM Mon-Fri.	Consistency of signs and times
St Albans Ave	3P, 8AM-5.30PM, Mon-Fri; Resident only parking on Event days;		Change 3P free parking times to 7AM-6PM Mon-Fri. No change to Event day restrictions.	Consistency
Broome St	Ticket parking 8AM-Midnight, 2P ticket 8AM-7PM	\$3.30	Change Ticket parking to 7AM-Midnight. 2P limit for Ticket parking 7AM-6PM	Consistency for all Ticket Parking 7AM-Midnight.
		New fee proposed		
Raglan Rd CP	Refer separate recommendations	\$1/ first hr, then \$2.50/hr. No max.	All parking regulations apply 7AM-Midnight.	Off-street parking is cheaper than on-street.
Chelmsford Rd CP	Refer separate recommendations	\$1/ first hr, then \$2.50/hr. No max.	All parking regulations apply 7AM-Midnight.	Off-street parking is cheaper than on-street.
Barlee St CP	Refer separate recommendations	\$1/ first hr, then \$2.50/hr, max.	All parking regulations apply 7AM-Midnight. Max. fee applies 7AM-Midnight.	Off-street parking is cheaper than on-street.

14 Mount Hawthorn Precinct

The Mount Hawthorn Town Centre comprises the area bounded by Britannia Road, The Boulevard, Matlock Street, Woodstock Street, Fairfield Street, Scarborough Beach Road and Oxford Street. The area includes the Flinders Street, Coogee Street and the Oxford Street off-street car parks. The Mezz shopping centre provides 262 bays for customers. There is no pay parking for the public in the precinct.



Figure 14.1: Mount Hawthorn Town Centre

14.1 Key findings from survey and site visits

Table 14.1 Mount Hawthorn March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023								
						SURVEY FRI 10/3/23		
MT HAWTHORN Precinct OFF-street				SUPPLY		OCCUPIED	1800-1845	VACANT
Car Park	Between	Public Bays	Acrod	Senior & Pram	Public Bays			
1 Coogee St		51	2		25	49%	26	
2 Flinders St		26	0		26	100%	0	
3 Oxford St		32	1		6	19%	26	
	TOTAL OFF-street	109	3	0	57	52%	52	
MT HAWTHORN Precinct ON-street								
Scarb Bch Rd	Blvde to Oxford	43			16	37%	27	
Boulevard	50m south of Scrb Bch	12	1		3	25%	9	
Matlock St	50m north of Scrb Bch	6			1	17%	5	
Matlock St	50m south of Scrb Bch	5			0	0%	5	
Coogee St	50m north of Scrb Bch	8			7	88%	1	
Coogee St	50m south of Scrb Bch	8			7	88%	1	
Flinders St	50m north of Scrb Bch	7			5	71%	2	
Flinders St	50m south of Scrb Bch	3			3	100%	0	
Fairfield St	50m north of Scrb Bch	9			9	100%	0	
Fairfield St	50m south of Scrb Bch	5			5	100%	0	
Oxford St	Scrb Bch to Anzac	44			40	91%	4	
Oxford St	Anzac to Britannia Rd	17			17	100%	0	
Hobart St	Scrb Bch to Edinboro St	36	3		34	94%	2	
	TOTAL ON-street	203	4	0	147	72%	56	
	TOTAL PARKING	312	7	0	204	65%	108	

An occupancy survey was undertaken on Friday 10th March from 1800-1845hrs. The weather was fine. Survey results indicate:

- All 26 bays in Flinders Street car park were occupied, Coogee Street was half full, but occupancy at the car park off Oxford Street was less than 20%.
- On-street parking on both sides of Coogee, Flinders, Fairfield, Oxford and Hobart Streets showed very high occupancy, but overall demand along Scarborough Beach Road was less than 40%.
- Across the entire precinct, two thirds of the bays were occupied on Friday early evening.

14.2 Specific issues and recommendations

14.2.1 Oxford Street car park

Issues

- A well located, but poorly utilised car park, partially due to its awkward traffic flow which discourages cars entering from Oxford Street.
- Signage is in need of repair and the ACROD bay is non-compliant.
- Occupancy will improve if the search pattern can be re-configured to favour car entry from Oxford Street and exit into Begley Street.

The pictures below illustrate some of these issues.



14.2.2 Coogee Street west car park

Issues

- The council owned 51 bay car park on the western side of Coogee Street is well located and has a relatively easy search pattern. 3P time restrictions apply Mon-Fri, 8am-5.30pm. Lighting is adequate.
- Wayfinding signage is limited to two small P signs as shown below. Occupancy could be improved with better variable message signage on Scarborough Beach Road facing west and east, indicating the number of spaces available.
- There is one non-compliant ACROD bay.
- External signage does not indicate time restrictions.



- By contrast, the privately owned car parking areas opposite in Coogee Street east comprise a confusing mess of unintelligible instructions as illustrated below.



14.2.3 Flinders Street car park

Issues

- Similar to the Coogee Street west car park, the Flinders Street car park is well located and has a relatively easy search pattern. 3P time restrictions apply Mon-Fri, 8am-5.30pm. Lighting is adequate.
- Wayfinding signage is limited to two a few small P signs. Spaces available signage is not necessary for this small site.
- The council owned car park merges with privately owned car parks and there is no clear line of distinction between them. It is in CoV's interest to clearly demarcate the council owned land and parking area from other parking areas.
- Further surveys may confirm that occupancy is high throughout the day at this popular site. If so, then the churn of bays could be increased by reducing the time restriction to 2P.

Recommendations for Mount Hawthorn car parks

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car parks in this precinct.

Table 14.2 Mount Hawthorn car parks - proposed changes

NO	RECOMMENDATIONS FOR FLINDERS ST, COOGEE ST & OXFORD ST CARPARKS	PRIORITY	BENEFIT
1.	Change the parking start and finish time restrictions to a consistent 8am-6pm Mon-Sat	Necessary	Consistent with on street restrictions. Less confusion and simpler to monitor.
2.	Undertake daytime surveys of occupancy at Flinders Street car park and if the trend is towards >80%, then reduce 3P to 2P.	Necessary	Encourages more churn of bays.
3.	Ensure ACROD bays are redesigned to comply with minimum specifications.	Necessary	Allows all ACROD permit holders to make use of the bays.

NO	RECOMMENDATIONS FOR FLINDERS ST, COOGEE ST & OXFORD ST CARPARKS	PRIORITY	BENEFIT
4.	Review and replace the on-street wayfinding signage to all car parks	Desirable	<i>Improved signage creates greater perception of parking availability.</i>
5.	Insert the applicable parking time restrictions on the car park identification signs.	Desirable	<i>Drivers prefer to know the restrictions prior to entering the car park.</i>
6.	Consider a revised layout and traffic flow at Oxford Street car park	Desirable	<i>Encourage access, and thus increased use from Oxford Street.</i>

14.2.4 On street parking

Issues

- On -street parking either side of Scarborough Beach Road in Mount Hawthorn is generally 3P 8am-5.30pm Mon-Fri. but some streets such as Coogee south are 3P 8am-6pm Mon-Sat.
- On Scarborough Beach Road between Fairfield and Dover Streets parking is generally 1P 8-6pm Mon-Sat. A few bays are 1/4P and P5min.
- Parking on Oxford Street has too many different parking time restrictions including P5min, P10min, 1/4P, 1/2P, 1P and 1P and ticket. Most apply 8am-5.30pm M-F and 8am-12noon Saturday.



- Some of the high level of evening demand on side streets between Coogee and Hobart could be reduced and encouraged into the off-street car parks by introducing a 2P limit on street, but as long as overall occupancy is less than 85%, it is preferable to leave the restrictions unchanged.

The focus of the recommended changes is to establish consistency within the precinct and to simplify the parking restrictions.

As discussed in Section 7.3 above, it is recommended that all 1P time restrictions are reviewed and replaced with 2P unless absolutely necessary.

Additionally, where necessary for pick-up and drop-off, the only parking for less than 1 hour should be 15minP.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct.

Table 14.3 Mount Hawthorn on-street parking - proposed changes

City of Vincent MOUNT HAWTHORN				
STREET	CURRENT RESTRICTIONS - APRIL 2023	FEES per hr APRIL 2023	RECOMMENDATIONS	BENEFIT
Boulevarde	3P, 8AM-6PM, Mon-Sat	Nil	No change	
Matlock St	P5 Min PUDO only. 3P, 8AM-6PM, Mon-Sat	Nil	Change all P5min to 15minP.	Consistency.
Coogee St	1/4P at all times. 3P, 8AM-6PM, Mon-Sat	Nil	Change all 1/4P to 15minP.	Consistency.
Flinders St	3P, 8AM-6PM, Mon-Sat	Nil		
Fairfield St	1P, 8AM-6PM, Mon-Sat; 1/2P 8AM-6PM, Mon-Sat; 3P, 8AM-6PM, Mon-Sat	Nil	Change all 1/2P to 15minP. Eliminate 1P and replace with 2P.	Consistency. Encourage visitors to stay longer - up to 2 hours
Oxford St	1/2P, 8AM-5.30PM, Mo- Fri, 8AM-12PM, Sat; P5, 8AM-5.30PM, Mon-Fri, 8AM-12PM, Sat; 1P, 8AM-5.30PM, Mon-Fri, 8AM-12PM, Sat	Nil	Consistent finish time of 6PM Mon-Sat in all on-street parking. Change all 1/2P and P5 to 15minP. Eliminate 1P and replace with 2P.	Easier to understand and to comply. Easier to enforce and survey
Anzac Rd	2P, 8AM-5PM, Mon-Fri; 1P 8AM-5.30PM, Mon-Fri, 8AM-12PM, Sat; 1/4P, 8AM-5PM, Mon-Fri	Nil	Consistent finish time of 6PM Mon-Fri or Mon-Sat. Eliminate 1P and replace with 2P. Change all 1/4P to 15minP.	Encourage visitors to stay longer - up to 2 hours. Easier to understand and to comply. Easier to enforce and survey.
Britannia Rd	3P, 8AM-6PM, Mon-Fri, 8AM-1PM, Sat	Nil	Consistent finish time of 6PM Mon-Sat	Consistency.
Salisbury St	2P, 8AM-5.30PM, Mon-Fri	Nil	Consistent finish time of 6PM Mon-Fri. Eliminate 1P and replace with 2P. Change all 1/4P to 15minP.	Encourage visitors to stay longer - up to 2 hours. Easier to understand and to comply. Easier to enforce and survey.
Scarboro Beach Rd	1P, 8AM-6PM, Mon-Sat	Nil	Eliminate 1P and replace with 2P.	Encourage visitors to stay longer - up to 2 hours.
Wilb/force St	2P At all times	Nil	Change to 3P, 8AM-6PM, Mon-Sat	2P at all times is unnecessary.
Edinboro St	3P, 8AM-6PM, Mon-Sat	Nil	No change	
Hobart St	3P, 8AM-6PM, Mon-Sat	Nil	No change	
Oxford St CP	3P, 7AM-5.30PM, Mon-Fri		Refer separate recommendations	
Coogee St CP	3P, 8AM-5.30PM, Mon-Fri		Refer separate recommendations	
Flinders St CP	3P, 8AM-5.30PM, Mon-Fri		Refer separate recommendations	

15 Leederville Precinct

Leederville has a unique mix of retail, civic uses, education, restaurants, bars, and residential dwellings which all function in a cohesive environment and flourish together as one mixed-use hub. It is bounded by the Mitchell Freeway and Loftus Street, and extends north to Bourke Street. It includes three large off-street car parks.

CoV has invited proposals to develop the Avenue and Frame Court car park sites subject to several requirements regarding the ongoing provision and management of public parking in any new developments.



Figure 15.1: Leederville Town Centre

15.1 Key findings from survey and site visits

Table 15.1 Leederville Town Centre March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023								
					SURVEY		SAT 11/3/23	
LEEDERVILLE Precinct OFF-street				SUPPLY		OCCUPIED	1800-1930	VACANT
Car Park	Between	Public Bays	Acrod	Senior & Pram	Public Bays			
1	The Avenues		284	7	7	270	95%	14
2	Frame Court		202	2	2	91	45%	111
3	Loftus Centre		385	4		262	68%	123
4	L'ville Oval		34			29	85%	5
	TOTAL OFF-street		905	13	9	652	72%	253
LEEDERVILLE Precinct ON-street								
	Oxford St.	Lville Pde to Vincent	45			43	96%	2
	Oxford St	Vincent to Bourke	51			49	96%	2
	Vincent St	Oxford to Loftus	52			29	56%	23
	Richmond St	Oxford to Loftus	119	3		56	47%	63
	Richmond St	West of Oxford	33			33	100%	
	Melrose St	All	35			34	97%	1
	Carr Place	All	60			54	90%	6
	Bold Crt	All	7			2	29%	5
	Newcastle St	Oxford to Loftus	55			46	84%	9
	Bruce St	All	24			18	75%	6
	Burgess St	All	21			20	95%	1
	Scott St	All	9			5	56%	4
	Haley Ave	All	4			4	100%	0
	Ragen Alley	All	2			0	0%	2
	Stamford St	All	16			16	100%	0
	Leicester St	All	13			0	0%	13
	Fleet St	All	23			3	13%	20
	Frame Court	All	26	1		9	35%	17
	TOTAL ON-street		595	4	0	421	71%	174
	TOTAL PARKING		1500	17	9	1073	72%	427

An occupancy survey was undertaken on Saturday 18 March from 1800-1930hrs. The weather was fine. Survey results indicate:

- Overall occupancy throughout the town centre on Saturday early evening was 72%, but there were still 427 available spaces.
- Demand in the three major off-street car parks was high.
- Frame Court had 111 vacant bays. but demand at this car park is known to be high during the working week.
- Occupancy in many streets was very high, >85%.

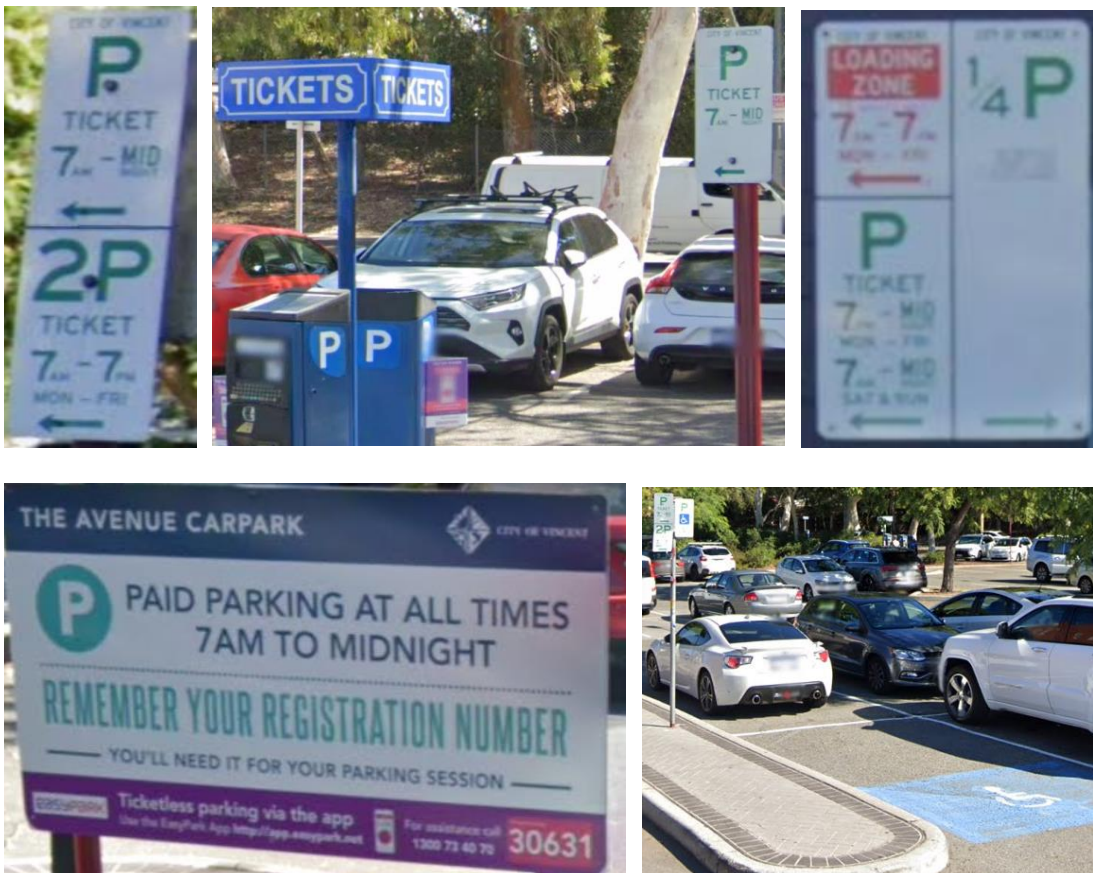
15.2 Specific issues and recommendations

15.2.1 The Avenue car park

Issues

- The car park is well known, easy to find and access from all directions, well lit, and consequently a popular location.
- It offers several categories of parking bays including 15minP, 1/4P, 2P, 1P Senior & Pram, ACROD and Ticket parking.
- Some bays are time restricted ticket parking 7am to 7pm (refer to internal signs). Drivers are confused as to whether the 2P Ticket applies or not, and whether they can extend this time using the Easypark app.
- Some bay restrictions are only marked by road surface paint. Others by pole mounted signs.
- Only some of the ACROD bays are compliant.
- There is no indicator of vacant space location and thus many drivers cruise around searching for an empty bay.

The pictures below illustrate some of these issues.



Recommendations for The Avenue car park

These recommendations recognise that the car park may be redeveloped in the short term. In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 15.2 The Avenue car park - proposed changes

NO	RECOMMENDATIONS FOR THE AVENUE	PRIORITY	BENEFIT
1.	Simplify the categories of bays to only three types: 15min free no ticket required, Ticket Parking and ACROD.	Urgent	<i>Less confusion, easier to find bays and simpler to monitor.</i> <i>Change all 1/4P wording to 15minP.</i>
2.	Eliminate 2P time restriction 7am-7pm	Urgent	<i>Less confusion. Allow drivers to pay for however long they wish to stay.</i>
3.	Consolidate the 15min free bays into one nested area facing the Good Grocer store. This will also serve other stores.	Urgent	<i>Closest to the destinations and easy for vehicles and pedestrians to access.</i> <i>Encourages high churn of bays.</i>
4.	Ensure ACROD bays are redesigned to comply with minimum specifications. Increase number of ACROD bays to a minimum of 9 (3%) and locate them in two nested zones: a) on the southern side of the aisle with the 15minP bays, and b) near the diagonal walkway through to Oxford Street south	Necessary	<i>Allows all ACROD permit holders to make use of the bays.</i>
5.	Survey occupancy and duration of stay in all bays within 6 months of the Urgent changes being implemented.	Necessary	<i>Assess occupancy of ticket parking to re-examine fee structure. If evening demand continues to regularly exceed 85%, amend the fees.</i>
6.	Retain \$1 for the first hour, and increase the rate for each additional hour. Consider a two tier fee structure for 2 nd and subsequent hours: 7am-5pm \$3.20 for each additional hour 5pm-midnight \$3.80 for each additional hour.	Necessary	<i>Current average duration is 2.10 hrs, but this is higher in the evening. Average ticket value in the evenings will increase from \$4.52 to \$5.18 (14%).</i>
7.	Install visible Aisle identification signage such as A, B, C to assist drivers to re-locate their car	Desirable	<i>Improve customer service.</i>
8.	Encourage use of Easypark app to vary paid parking time up or down.	Desirable	<i>Improve customer convenience.</i>

15.2.2 Frame Court car park

Issues

- The car park is well known for employees and visitors during the working week.
- It is not well utilised after hours.
- There is no identification signage from either of two access points off Newcastle Street, and poor signage on Loftus Street.
- There are no pedestrian wayfinding signs to assist parkers to find destinations in Leederville.

The pictures below illustrate some of these issues.



Recommendations for The Frame Court car park

The focus of the recommended changes is to increase the profile and usage of the car park for weekend and after hour drivers and to re-distribute some of the demand from The Avenue car park.

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 15.3 Frame Court car park - proposed changes

NO	RECOMMENDATIONS FOR FRAME COURT	PRIORITY	BENEFIT
1.	Reduce the fee for the second and subsequent hours after 5pm to \$2.50 and promote this on all signage at the car park	Urgent	Reduced fee will incentivise after hour use. Fee will be \$1.30 cheaper per hour than The Avenue car park.
2.	Promote the availability and price of the car park to leisure and entertainment destinations in Oxford Street, Newcastle Street and Carr Place.	Urgent	Assist businesses to advertise the convenient availability of Frame Court parking on their media publications.
3.	Install dynamic variable message signs near Carr Place intersection facing both directions on Newcastle Street. Also install a double sided sign on Loftus Street. Signs to show how many spaces are available.	Necessary	Increase the promotion of the site and reduce the demand at The Avenue
4.	Install pedestrian wayfinding signs to Oxford Street south, to Newcastle Street and to Luna Cinemas (<300m)	Necessary	Encourage use of the car park after hours. Most people can walk 300m in less than 6 minutes.

NO	RECOMMENDATIONS FOR FRAME COURT	PRIORITY	BENEFIT
5.	Increase number of ACROD bays to a minimum of 6 (3%) and locate in one zone in the north west corner.	Necessary	<i>Encourage ACROD permit holders to use the car park.</i>
6.	Install lighting above all ticket machines	Necessary	<i>Easier to use at night.</i>

15.2.3 Loftus Centre car park

Issues

- The car park is well known, easy to find from two streets, and convenient for many sport and recreation and community facilities.
- Although there is no fee to park in some bays, tickets are required to be displayed but only in certain areas. This is confusing for drivers.
- Several categories of parking bays are provided including 30minP, 1 1/2P, 3P, 5P, ACROD and Ticket parking.
- 3P applies 8am-8pm Mon-Fri, 5P applies Sat-Sun. This distinction is not always clear.
- Some of the bay restrictions are only marked by road surface paint. Others by pole mounted signs.
- Several ACROD bays are non compliant.

The pictures below illustrate some of these issues.



Recommendations for The Loftus Centre car park

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 15.4 The Loftus Centre car park - proposed changes

NO	RECOMMENDATIONS FOR LOFTUS CENTRE	PRIORITY	BENEFIT
1.	Eliminate 5P Ticket Sat-Sun.	Urgent	<i>Less confusion. Monitor the volume of cars staying >5 hours.</i>
2.	Eliminate 90minP and replace with 3P Mon-Fri 8am-8pm	Urgent	<i>Consistency and easier to monitor</i>
3.	Properly signpost all 15minP No Ticket required bays in front of the library.	Necessary	<i>Closest to the destinations and easy for vehicles and pedestrians to access. Encourages high churn of bays.</i>
4.	Install in-ground sensors in 15minP – No ticket bays.	Necessary	<i>Encourages a high level of compliance. Allows CoV to monitor volumes and duration of stay.</i>

NO	RECOMMENDATIONS FOR LOFTUS CENTRE	PRIORITY	BENEFIT
5..	Ensure ACROD bays are redesigned to comply with minimum specifications. Increase number of ACROD bays to a minimum of 12 (3%) and locate them in two nested zones: a) directly outside the library, and b) directly outside the Rec Centre.	Necessary	<i>Encourage all ACROD permit holders to use the car park.</i>
6.	Survey occupancy and duration of stay in all bays within 6 months of the Urgent changes being implemented.	Necessary	<i>Assess whether volume of 15minP bays can be reduced and replaced with Ticket parking bays. Assess duration of stay parking on weekends.</i>
7.	Install additional ticket machines where needed.	Necessary	<i>Drivers should not have to walk more than 20M to a ticket machine.</i>

15.2.4 On street parking

Issues

- On -street parking in the precinct is characterised by multiple different start and finish times, complicated by P5, 1/4P, 1P, 2P and 3P, and maximum time restrictions which apply at different times of the day. It is not only difficult for visitors to find a parking bay, but is confusing to understand and see the signage, especially at night.
- Verge parking occurs on many streets restricting the amenity for other users.



The focus of the recommended changes is to establish consistency of regulations within the precinct and to simplify the parking restrictions.

Fee increases should be considered where occupancy is regularly >85% including Oxford St, Richmond St, Melrose St, Carr Place, Newcastle St, Burgess St, and Stamford St.

It is recommended that approximately six months after other recommended changes have been implemented, a detailed survey of occupancy and duration of stay is undertaken and fees are reviewed in accordance with Section 7.4. The hourly fee in these streets may need to be increased from \$3.30 to \$3.60.

Similarly, in streets such as Scott Street and Fleet Street, if after a detailed survey, occupancy is regularly less than 45%, the hourly fee should be reduced to \$3.00 or eliminated altogether.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct.

Table 15.5 Leederville Town Centre on street parking - proposed changes

City of Vincent	LEEDERVILLE TOWN CENTRE			
STREET	CURRENT RESTRICTIONS - APRIL 2023	FEES per hr APRIL 2023	RECOMMENDATIONS	BENEFIT
Bourke St	2P, 8AM - 5.30PM, Mon-Fri; 1/4P, 8AM - 5.30PM, Mon-Fri, 8AM - 12PM, Sat		Change 1/4P wording to 15minP. Eliminate 1P & replace with 2P. Change to 6pm finish Mon-Fri.	Consistency across the town centre.
Leicester St	2P, 8AM - 5.30PM, Mon-Fri		No change	
Bruce St	2P, 8AM - 5.30PM, Mon-Fri		No change	
Richmond St	2P, 8AM - 5.30PM, Mon-Fri; 1/4P, 8AM - 5.30PM Mon-Fri, 8AM - 12PM, Sat; 1P 8AM - 5.30PM, 8AM-12PM, Sat; P Ticket, 8AM-7PM; 1P, 8AM-8PM, Mon-Fri, 8AM-12PM, Sat	\$3.30	Change 1/4P wording to 15minP. Eliminate 1P & replace with 2P. End ALL Mon-Fri time restrictions at 6pm. Consider a fee increase after detailed surveys. Change ticket machines to Pay by Plate.	Simplify the multiple different finish and max time restrictions. Consistency across the town centre.
Melrose St	1P at all times; and 2P, 8AM - 5.30PM, Mon-Fri, 8AM - 12PM, Sat		Eliminate 1P & replace with 2P. Consider a fee increase after detailed surveys.	Encourage visitors to stay longer - up to 2 hours.
Ragen Alley	2P, 8AM - 5.30PM, Mon-Fri		Change to 6pm finish Mon-Fri.	Consistent finish times across town centre
Oxford St	Ticket parking 7AM-midnight Mon-Sun. Max 1P 8AM-7PM Mon-Sun	\$3.30	Eliminate 1P & replace with 2P. Change ticket machines to Pay by Plate. Consider a fee increase after detailed surveys. Change 2P start time to 7AM	Encourage visitors to stay longer - up to 2 hours. Parking fee should be higher on-street than in nearby off-street car parks. Consistency in start times.
Haley Ave	4P, 8AM - 5.30PM, Mon-Fri		Change to 6pm finish Mon-Fri. Consider a fee increase after detailed surveys.	Consistent finish times across town centre.
Stamford St	1P, 8AM - 5.30PM, Mon-Fri		Eliminate 1P & replace with 2P. Change to 6pm finish Mon-Fri. Consider a fee increase after detailed surveys.	Encourage visitors to stay longer - up to 2 hours.
Vincent St	Subject to varying clearway restrictions. P5 (outside clearway) outside SIDE; 1/4P 9AM-4PM; P Ticket 8AM - 10PM.	\$3.30	Change 1/4P wording to 15minP No Ticket required. Change ticket machines to Pay by Plate.	Consistency across the town centre.
Leederville Pde	1P Ticket, 8AM-7PM, P Ticket, 7AM - Midnight	\$3.30	Eliminate 1P & replace with 2P.	Encourage visitors to stay longer - up to 2 hours.
Carr Pl	No Parking, 9PM-7AM - Residential Permit Holders Excepted, 2P Ticket 7AM-9PM; No parking - Residential Permit Holder Excepted; 1P Ticket, 8AM-5.30PM, Mon-Fri, 8AM-12PM Sat; 1/4P, 8AM - 5.30PM, Mon-Fri, 8AM-12PM, Sat	\$3.30	Eliminate 1P & replace with 2P. Change 1/4P wording to 15minP No Ticket required. Change to 6pm finish Mon-Fri. Curtail verge parking.	Simplify the multiple different finish time restrictions. Consistency across the town centre. Encourage visitors to stay longer - up to 2 hours.
Bold Crt	No Parking, 9PM-7AM - Residential Permit Holders Excepted, 2P Ticket Other times	Free	Clarify 2P ticket 7AM-9PM Mon-Sun	Clarify when ticket parking applies.
Newcastle St	P Ticket, 7AM - Midnight; M/c Only; 1P Ticket 8AM-7PM, P Ticket, 7AM - Midnight; 1/4P At all times; P Ticket 8AM - 8PM; P5 min, 8AM - 8PM pick up or set down	\$3.30	Eliminate 1P & replace with 2P. Change all 1/4P and P5 minute wording to 15minP. All m/c P tickets to be from 7am-12am	Encourage visitors to stay longer - up to 2 hours. Consistency across the town centre.
Frame Crt	3P Ticket, 7AM-7PM, P Ticket 7AM - Midnight	\$3.30	In line with changes at Frame Court car park, eliminate 3P day time restriction Mon-Fri.	Simplify parking during the day and attract parkers in the evening. Allow drivers to choose how long they wish to pay for.
Loftus St	Subject to varying clearway restrictions.		No change	
Burgess St	2P, 8AM - 5.30PM, Mon-Fri, 8AM - 12PM, Sat; No Parking on verge		Change to 6pm finish Mon-Fri. Consider a fee increase after detailed surveys.	Consistency across the town centre.
Scott St	2P, 8AM - 5.30PM, Mon-Fri, 8AM - 12PM, Sat		Change to 6pm finish Mon-Fri.	Consistency across the town centre.
Fleet St	2P, 8AM - 5.30PM, Mon-Fri, 8AM - 12PM, Sat		Change to 6pm finish Mon-Fri.	Consistency across the town centre.
		New fee proposed		
The Avenue CP	Refer separate recommendations	Increase fees	Retain \$1 for the first hour, and increase the rate for each additional hour. Consider a two tier fee structure for 2nd and subsequent hours: 7am-5pm \$3.20 for each additional hour. 5pm-midnight \$3.80 for each additional hour.	
Frame Crt CP	Refer separate recommendations	Reduce fees	Reduce the fee for the second and subsequent hours after 5pm to \$2.50	
Loftus Centre CP	Refer separate recommendations	Free	No change	
Leederville Oval CP		\$3.20	No change.	
Leederville Tennis CP	3P, 8AM - 5.30PM, Mon-Fri		Change to 6pm finish Mon-Fri.	

16 North Perth Precinct

The boundary of the North Perth Town Centre extends beyond the City of Vincent's Town Planning Scheme No. 2 District Centre Scheme Zone, to incorporate the commercial, cultural, and community offering in the immediate vicinity of Angove and Fitzgerald Streets. Several privately owned car parks are reserved for specific tenants and their visitors. The North Perth Plaza (Coles) has a 3P limit, monitored by a private enforcement company.



Figure 16.1: North Perth Town Centre

16.1 Key findings from survey and site visits

Table 16.1 North Perth Town Centre March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023								
						SURVEY	FRI 17/3/23	
NORTH PERTH Precinct OFF-street				SUPPLY		OCCUPIED	1030- 1150	VACANT
Car Park	Between	Public Bays	Acrod	Senior & Pram	Public Bays			
1 Rosemount		49	2		18	37%		31
2 View St		40	1		15	38%		25
3 Wasley St		48	3	4	17	35%		31
	TOTAL OFF-street	137	6	4	50	36%		87
NORTH PERTH Precinct ON-street								
Fitzgerald St	Chelmsfd to Marmion	53			20	38%		33
View St	Olive to Fitzgld	26	2		25	96%		1
Angove St	Daphne to Fitzgld	25			22	88%		3
Glebe St	All	23			13	57%		10
Woodville Ln	All	0			0	0%		0
Woodville St	View to Menzies	21	1		19	90%		2
Daphne St	50m north of Angove	4			3	75%		1
Alma Rd	50m each side of Fitzgld	9			3	33%		6
Raglan Rd	50m each side of Fitzgld	20			9	45%		11
Grosvenor Rd	50m each side of Fitzgld	6			1	17%		5
Forrest St	50m east of Fitzgld	8			8	100%		0
Wasley St	50m east of Fitzgld	14			14	100%		0
Burt St	50m east of Fitzgld	10			10	100%		0
Albert St	50m west of Angove	18	1		14	78%		4
	TOTAL ON-street	237	4	0	161	68%		76
	TOTAL PARKING	374	10	4	211	56%		163

An occupancy survey was undertaken on Friday 17 March from 1030-1145hrs. The weather was fine. Survey results indicate:

- Demand was high in Angove Street and in several side streets off Fitzgerald close to Angove Street.
- Demand in each of the three metered parking car parks was less than 40% with 87 bays available.
- Across the entire precinct, less than half the bays were occupied around midday on Friday.

16.2 Specific issues and recommendations

16.2.1 Rosemount and View Street car parks

Issues

The two car parks are considered together as they serve similar destinations.

- They are effectively one single rectangular car park located on an awkward gradient.
- The one-way search pattern in part of the car parks is not convenient.
- Occupancy mid-morning on a Friday was less than 40% indicating there is ample free parking in the immediate vicinity. The car parks appear to be under-utilised.
- Ticket fees apply 7am-midnight every day.
Currently \$1 for the first hour, \$3.20 for each additional hour with a maximum all day fee of \$19.50 (= 6.3 hours).
- The parking duration (average length of stay) prior to September 2022 was 1.26hrs at Rosemount, and 1.10hrs at View Street. Between September 2022 and February 2023, the duration increased to 1.38hrs and 1.23hrs respectively.²⁹
This may have been the result of relaxing pandemic restrictions.

In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the two car parks.

Table 16.2 Rosemount and View Street car parks - proposed changes

NO	RECOMMENDATIONS FOR ROSEMOUNT & VIEW STREET CAR PARKS	PRIORITY	BENEFIT
1.	Survey demand during weekdays, in the evenings and on weekends to confirm levels of occupancy. Subject to these, the hourly parking fee after the first hour may need to be reduced to \$2.50 in accordance with the Parking Framework.	Urgent	<i>Increased volumes and utilisation as a result of a reduced fee is more appropriate for the precinct.</i>
2.	Consider Demand Responsive Pricing trial with lower fees during the day and higher fees for >2 hour stay after 6PM.	Desirable	<i>Respond to high demand from nearby hotel, cafes and similar generators.</i>
3.	Insert the applicable parking time restrictions on the car park identification sign.	Desirable	<i>Drivers prefer to know the restrictions prior to entering the car park.</i>
4.	Add two additional fully compliant ACROD bays.	Necessary	<i>As there are unused bays, increase availability of ACROD bays to 3%.</i>

16.2.2 Wasley Street car park

Issues

- Easy to access from two streets.
- Searching pattern is straightforward.
- 1P Seniors and Pram parking is impractical to monitor.
- ACROD bays are non-compliant.
- The car park is generally underutilised.
- No indication of spaces available to drivers from the street.
- The car park is not easy for parkers to see from Fitzgerald Street.

The pictures below illustrate some of these issues.

²⁹ City of Vincent. Ordinary Council Meeting Agenda. 4 April 2023 at pages 3 and 4.



In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car parks.

Table 16.3 Wasley Street car park - proposed changes

NO	RECOMMENDATIONS FOR WASLEY STREET CAR PARK	PRIORITY	BENEFIT
1.	Eliminate Seniors and Prams bays.	Urgent	Seniors and Prams cannot be adequately monitored.
2.	Ensure the three ACROD bays are fully compliant. Current design excludes some ACROD permit holders.	Urgent	Allows all ACROD permit holders easy access to the bays.
3.	Survey demand during weekdays and in the evenings and on weekends to confirm levels of occupancy. Subject to these, the hourly parking fee after the first hour may need to be reduced to \$2.50 in accordance with the Parking Framework.	Urgent	Increased volumes and utilisation as a result of a reduced fee is more appropriate for the precinct.
4.	Promote location of the car parks and walking distance (in metres and minutes) with prominent static signage on both sides of Fitzgerald Street.	Necessary	More parkers will become aware of the convenience of the car parks
5.	Insert the applicable parking time restrictions on the car park identification signs.	Desirable	Drivers prefer to know the restrictions prior to entering the car park.

16.2.3 On street parking

Issues

- There is a confusing array of parking restrictions and operating hours in the precinct. Including 5 minute, 1/4P, 1P, 2P, 3P, and Senior & Pram.
- Some streets have 1P parking 8am-6pm Mon-Fri, others are 1P 8am-5.30pm and 8am-12noon Sat.
- Parking on these streets is therefore free and unrestricted after 6pm or after 5.30pm or 12 noon, as the case may be.
- This is in contrast to pay parking in the three car parks which applies 7days a week from 7am-midnight.
- **Effectively parkers are penalised for parking off-street after hours, and encouraged to park on-street. This policy is the reverse of best practice, which is to encourage use of off-street car parks and reduce on-street demand.**
- Loading Zones are restricted to different times (see sign below in Alma Street) but there is no indication that these Loading Zones are available for unrestricted public parking outside of these specified hours.



The focus of the recommended changes is to establish consistency within the precinct and to simplify the parking restrictions.

As discussed in Section 7.3 above, it is recommended that all 1P time restrictions are reviewed and replaced with 2P unless absolutely necessary.

Additionally, where necessary for pick-up and drop-off, the only parking for less than 1 hour should be 15minP.

Consideration to be given to introducing pay parking in certain streets where there is regularly high-demand. Based on results from the March 2023 survey, this would apply to parts of View St, Angove St, Woodville St, Forrest St, Wasley St, and Burt St. It would increase the churn (turnover) of bays in these streets.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct, where surveyed occupancy regularly exceeds 85%.

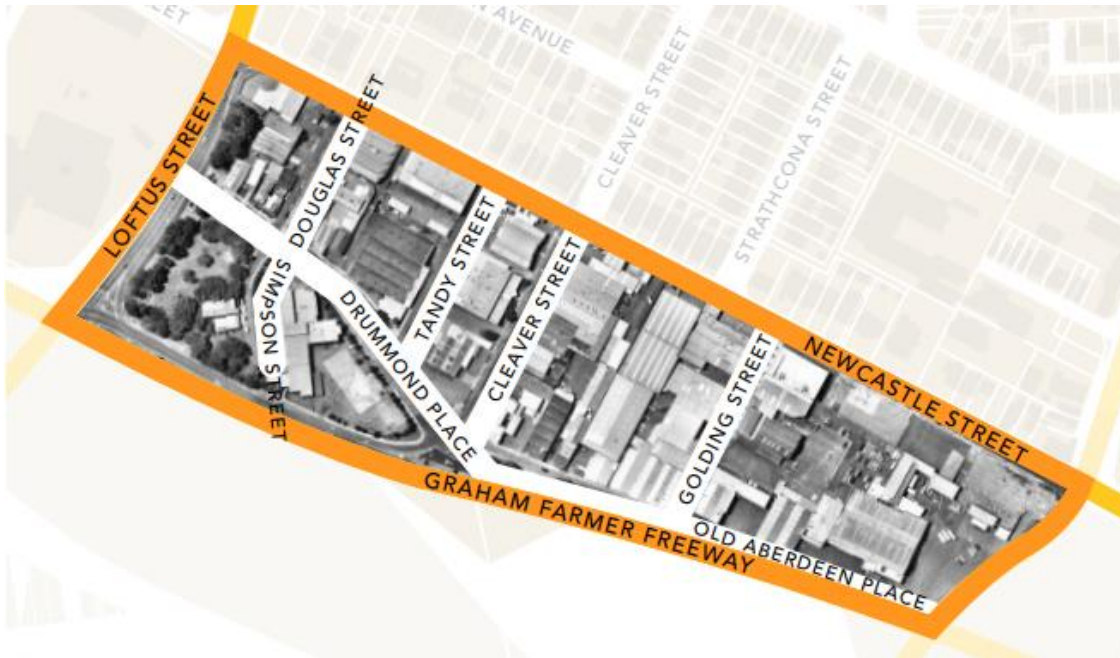
Table 16.4 North Perth on street - proposed changes

	RECOMMENDATIONS FOR NORTH PERTH ON-STREET PARKING	PRIORITY	BENEFIT
1.	Undertake regular surveys of patterns of demand.	Urgent	<i>Establish peak times and duration of stay.</i>
2.	Where occupancy regularly exceeds 85%, introduce pay parking at a fee higher than in the nearby off-street car parks. Recommended fee is \$2.50 per hour, 7am-midnight, no maximum.	Necessary	<i>Increase the churn of bays. Parkers should pay more to park on-street to encourage use of off-street car parks.</i>
3.	Within two years after pay parking on-street is implemented, consider change to Demand Responsive Pricing based on surveyed patterns of demand.	Desirable	<i>Respond to very high demand at different times.</i>
4.	Implement consistent start and finish times of 8am-6PM Mon-Sat in all on-street parking. Change all 1/2P and P5 to 15minP.	Necessary	<i>Easier to understand and to comply. Easier to enforce and survey.</i>
5.	Where pay parking on-street is not applied, eliminate 1P and replace with 2P.	Necessary	<i>Encourage visitors to stay longer - up to 2 hours.</i>
6.	Change Loading Zone operating times to 8am-6pm Mon-Fri.	Necessary	<i>Consistency with other time restricted parking.</i>
7.	Communicate that Loading Zones are free, unrestricted parking after 6pm and on weekends	Necessary	<i>Make more effective use of all bays after hours.</i>
7.	Introduce some 15minP No Ticket Required, on streets with paid parking.	Necessary	<i>Cater to PUDO parkers.</i>
8.	Remove any ACROD bays on-street after the number of off-street bays is increased	Desirable	<i>Reduces risk for ACROD parkers.</i>

17 Pickle Precinct

The Pickle District is situated in West Perth between Leederville and Northbridge. It is a home to new and diverse creative businesses including art galleries, artist and design studios, a boutique theatre, photographic studios and creative co-op working spaces.

Many business provide on-site parking for both their employees and visitors. There are no public car parks and no pay parking for the public in the precinct.



17.1 Key findings from survey and site visits

Table 17.1 Pickle District March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023							
					SURVEY	TUE 7/3/23	
			SUPPLY		OCCUPIED	1230- 1315	VACANT
PICKLE Precinct ON-street							
Newcastle St	Loftus to Charles	56			56	100%	0
Douglas St	All	15			0	0%	15
Simpson St	All	8			8	100%	0
Macvean Ln	All	0			0	0%	0
Tandy St	All	0			0	0%	0
Cleaver St	G Farmer Fwy to Newcastle	13			13	100%	0
Golding St	All	9			6	67%	3
Drummond Pl	All	31			29	94%	2
Old Abdeen Pl	All	24			21	88%	3
	TOTAL ON-street	156	0		133	85%	23

An occupancy survey was undertaken on Tuesday 7th March from 1230-1315hrs. The weather was fine. Survey results indicate:

- A very high level of demand, >85% for most of the on-street parking, plus many cars park on the kerbs.

The pictures below illustrate some of the issues.



17.2 Specific issues and recommendations

17.2.1 On street parking

Issues

- There is an unnecessary number of parking restrictions in the precinct, including 1/4P, 1/2p, 1P and 2P and no restriction.
- Some streets have restrictions from Mon-Fri, others to 12 noon Sat.
- No ACROD parking is available.



The focus of the recommended changes is to establish consistency within the precinct and to simplify the parking restrictions.

As discussed in Section 7.3 above, it is recommended that all 1P time restrictions are reviewed and replaced with 2P unless absolutely necessary.

Additionally, where necessary for pick-up and drop-off, the only parking for less than 1 hour should be 15minP.

Consideration to be given to introducing pay parking in certain streets where there is regularly high-demand. Based on results from the March 2023 survey, this would apply to parts of Newcastle St, Simpson St, Cleaver St, Drummond Place and Old Aberdeen St. Golding St should not be excluded. Pay parking will increase the churn (turnover) of bays in these streets.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct, where surveyed occupancy regularly exceeds 85%.

Table 17.2 Pickle District on street - proposed changes

	RECOMMENDATIONS FOR PICKLE PRECINCT ON-STREET PARKING	PRIORITY	BENEFIT
1.	Undertake detailed surveys of patterns of demand.	Urgent	<i>Establish peak times and duration of stay.</i>
2.	Where occupancy regularly exceeds 85%, introduce pay parking. Recommended fee is \$2.50 per hour, 8am-6pm Mon-Fri. no maximum.	Urgent	<i>Increase the churn of bays.</i>
3.	Prohibit parking on the kerb 8am-6pm Mon-Fri.	Urgent	<i>Improves the amenity for pedestrians.</i>
4.	Implement consistent start and finish times of 8am-6pm Mon-Fri in all on-street parking. Change all 1/2P and P5 to 15minP.	Necessary	<i>Easier to understand and to comply. Easier to enforce and survey.</i>
5.	Where pay parking does not apply, eliminate 1P and replace with 2P.	Necessary	<i>Encourage visitors to stay longer - up to 2 hours.</i>
6.	Change Loading Zone operating times to 8am-6pm Mon-Fri.	Necessary	<i>Consistency with other time restricted parking.</i>
7.	Communicate that Loading Zones are free, unrestricted parking after 6pm and on weekends	Necessary	<i>Make more effective use of all bays after hours.</i>
8.	Introduce some 15minP No Ticket Required, on streets with paid parking.	Necessary	<i>Cater to PUDO parkers.</i>

18 William Street Town Centre Precinct

This precinct is either side of William Street bounded by Bulwer Street and Newcastle Street, Forbes Lane, and Wellman Street as outlined in blue and highlighted in red on the drawings below.

The area includes the City of Vincent's William Street car park and several other small privately owned car parks some of which use private enforcement companies. There is also on-street ticket parking in several streets. Newcastle Street is the boundary with City of Perth's paid parking.



18.1 Key findings from survey and site visits

Table 18.1 William Street Town Centre March 2023 parking occupancy survey

City of Vincent. PUBLIC PARKING SUPPLY & USE. MAR 2023									
						SURVEY		MON 20/3/23	
WILLIAM ST TC OFF-street			SUPPLY			OCCUPIED	1100-1200	VACANT	
	Car Park	Between	Public Bays	Acrod	Senior & Pram				
1	William St		48	2		34	71%	14	
TOTAL OFF-street			48	2	0	34	71%	14	
WILLIAM ST TC ON-street									
	William St	Newcastle to Brisbane	62			46	74%	16	
	William St	Brisbane to Bulwer	2			0	0%	2	
	Newcastle St	Forbes La to William. North	5			1	20%	4	
	Monger St	50m east of William	7			6	86%	1	
	Robinson Av	50m each side of William	7			5	71%	2	
	Brisbane St	50m each side of William	12			10	83%	2	
	Wade St	Ruth to Brisbane	5			4	80%	1	
	Ruth St	Wade to William	2			2	100%	0	
	Bulwer	50m each side of William	1	1		1	100%	0	
	Edith	50m west of William	8			7	88%	1	
	Brisbane Pl	All	8			3	38%	5	
	Forbes Rd	Wellman to William	16	1		16	100%	0	
	Wellman St	All	8			6	75%	2	
	Washing La	50m east of William	0			0	0%	0	
	Little Parry St	50m east of William	0			0	0%	0	
TOTAL ON-street			143	2	0	107	75%	36	
TOTAL PARKING			191	4	0	141	74%	50	

An occupancy survey was undertaken on Monday 20 March from 1100-1200hrs. The weather was fine. Survey results indicate:

- A very high level of demand, >85% for most of the on-street parking.
- Optimal usage of the William Street car park.
- Private enforcement companies use LPR systems to monitor use of private car parks.

The pictures below illustrate some of the issues.

18.2 Specific issues and recommendations

18.2.1 William Street car park

Issues

- Easy to access from two streets.
- Searching pattern is straightforward.
- ACROD bays are non-compliant.
- The car park is generally well utilised.
- Signage is unnecessarily confusing with a 2P limit between 8am-7pm and then no time restriction for the remaining 3 hours until 10pm
- The fee at \$4.40 per hour is the same as for on-street parking.
- Identification signage should be improved.



In addition to the recommendations common to all precincts (refer Section 12), the following should be applied at the car park.

Table 18.2 William Street car park - proposed changes

NO	RECOMMENDATIONS FOR WILLIAM STREET CAR PARK	PRIORITY	BENEFIT
1.	Ensure the two ACROD bays are fully compliant. Current design excludes some ACROD permit holders.	Urgent	Allows all ACROD permit holders easy access to the bays.
2.	Eliminate the 2P maximum.	Necessary	Allow drivers to pay for however long they wish to stay.
3.	The fee is currently identical to the on-street rate. It should be less to encourage cars to park off-street and thereby reduce on-street congestion. Recommended fee is \$1 for first hour and then \$4.40 per hour with no maximum.	Urgent	Increased volumes and utilisation as a result of a reduced fee is more appropriate for the precinct.
4.	Improve the car park identification signage on William Street	Desirable	More parkers will become aware of the car park.
5.	Insert the applicable parking time restrictions and fees on the car park identification signs.	Desirable	Drivers prefer to know the restrictions and fees prior to entering the car park.

18.2.2 On street parking

Issues

- There is a confusing array of parking restrictions and operating hours in the precinct. Including 1/4P, 1p, 2P and unrestricted
- Some streets have restrictions or ticket parking commencing at 7am, others at 8am.
- Finishing times vary – 5.30pm, 6pm, 7pm, 8pm, Midnight or 12 noon Sat. Examples are shown below.



The focus of the recommended changes is to establish consistency within the precinct and to simplify the parking restrictions.

As discussed in Section 7.3 above, it is recommended that all 1P time restrictions are reviewed and replaced with 2P unless absolutely necessary.

Additionally, where necessary for pick-up and drop-off, the only parking for less than 1 hour should be 15minP.

Consideration to be given to increasing ticket parking fees in certain streets where there is regularly high-demand.

City of Perth in Newcastle Street charge \$4.50/hour and \$5.00/hour 8am-6pm Mon-Sat.

Based on results from the March 2023 survey, fee increases should be considered in parts of Monger St, Brisbane St, Wade St, Ruth St, Bulwer St, Edith St and Forbes Rd. It would increase the churn (turnover) of bays in these streets.

In addition to the recommendations common to all precincts (refer Section 12), the following changes should be implemented for on-street parking in the precinct, where surveyed occupancy regularly exceeds 85%.

Table 18.2 William Street town centre - proposed changes

	RECOMMENDATIONS FOR WILLIAM STREET TOWN CENTRE ON-STREET PARKING	PRIORITY	BENEFIT
1.	Undertake regular surveys of patterns of demand.	Urgent	Establish peak times and duration of stay.
2.	Where occupancy regularly exceeds 85%, increase the ticket parking fee based on the Parking Framework.	Necessary	Increase the churn of bays.

	RECOMMENDATIONS FOR WILLIAM STREET TOWN CENTRE ON-STREET PARKING	PRIORITY	BENEFIT
3.	Eliminate the 2P maximum in ticket parking areas.	Necessary	<i>Allow drivers to pay for however long they wish to stay.</i>
4.	Consider a change to Demand Responsive Pricing based on surveyed patterns of demand.	Desirable	<i>Respond to very high demand at different times.</i>
5.	Implement consistent start and finish times of either a) 8am-6PM Mon-Fri, orb) 8am-midnight. Change all 1/4P to 15minP.	Necessary	<i>Easier to understand and to comply. Easier to enforce and survey.</i>
6.	Where pay parking on-street is not applied, eliminate 1P and replace with 2P.	Necessary	<i>Encourage visitors to stay longer - up to 2 hours.</i>
7.	Communicate that Loading Zones are free, unrestricted parking after 6pm and on weekends	Necessary	<i>Make more effective use of all bays after hours.</i>
8.	Introduce some 15minP No Ticket Required, on streets with paid parking.	Necessary	<i>Cater to PUDO parkers.</i>
9.	Remove any ACROD bays on-street after the number of off-street bays is increased	Desirable	<i>Reduces the risk for ACROD parkers.</i>

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