



**CITY OF  
MANDURAH**

# City Centre Parking Plan 2023 - 2033



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# 1. Introduction

## 1.1 Purpose

Efficient parking is essential in a growing Strategic Centre such as Mandurah. Given that all vehicle trips start and end with a parking event, parking supply and management is central to integrated transport and land use planning.

It is important to balance the need for parking by effectively reducing demand, balancing supply and providing alternative transport options. It should be recognised that it is not possible or desirable in a growing city, to meet all access demands by private vehicle.

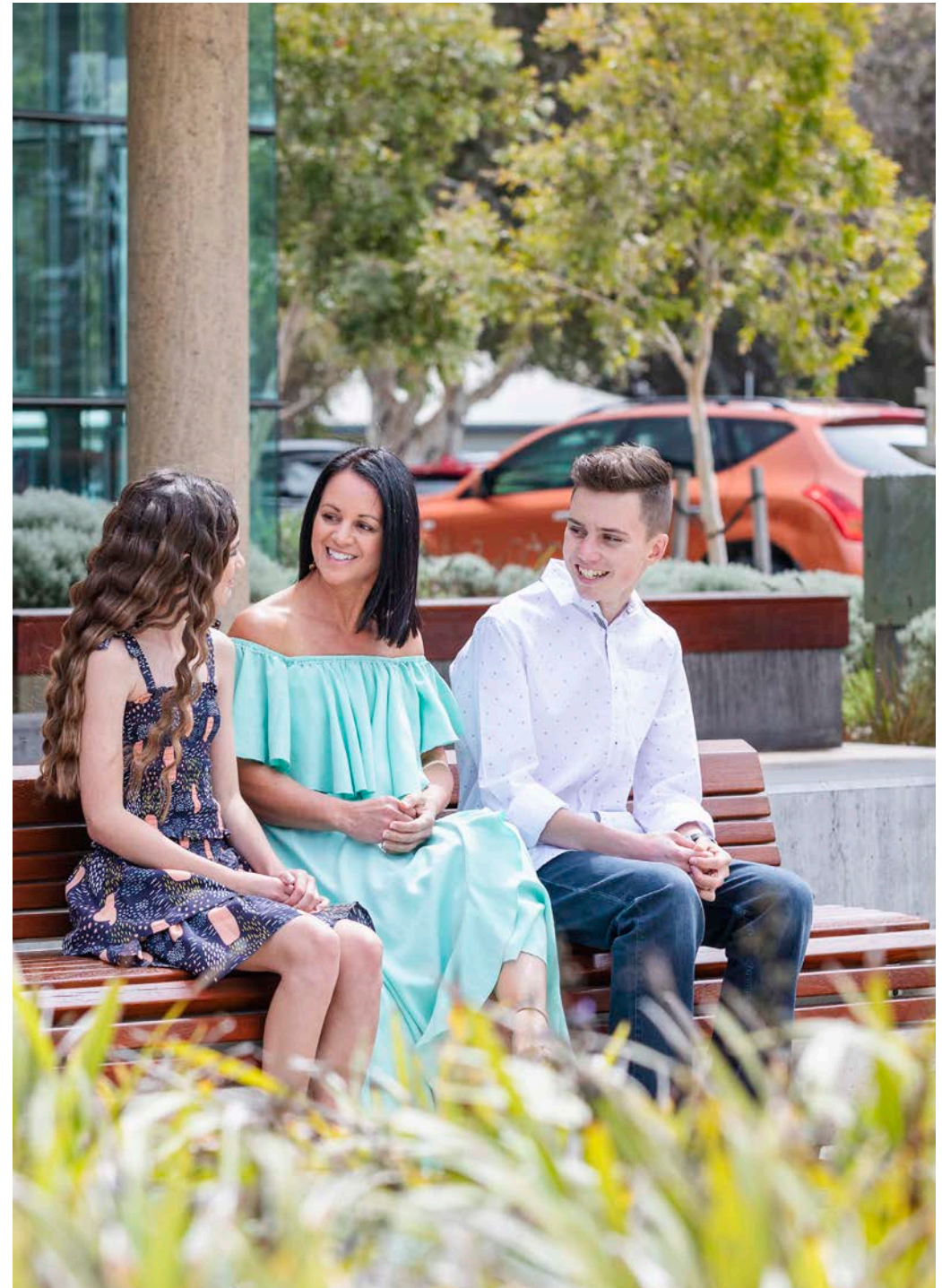
Well-managed car parking can bring real benefits to the community, businesses and visitors by:

- Allowing the community to access local businesses and services more easily by increasing bay turnover;
- Reducing parking frustrations and negative feedback;
- Potentially increasing revenue for local businesses by increased footfall; and
- Supporting the desired urban form and pedestrian-first environment through well located parking supply in the City Centre.

If parking is not actively managed, there can be a range of unintended consequences such as increasing congestion, pollution, urban heat islands, inactive and visually unappealing spaces between buildings and sub-optimal use of land.

In September 2011, Council adopted the City Centre Car Parking Strategy, which recognised that:

***‘a key challenge for the City is to provide sufficient parking to address mobility, access and economic needs whilst also balancing the competing land uses which are necessary to ensure a sustainable, vibrant and thriving pedestrian oriented City Centre.’***



Since September 2011, there have been significant changes that have impacted parking management for the City Centre. These changes include:

- Population growth
- New Mandurah Bridge
- The delivery of the Waterfront Project
- Development of Economic Research
- Improved technologies in wayfinding, parking vacancy monitoring and more sustainable transport
- Public and alternative modes of transport
- The viability of multi-decked car parking due to cost
- Access and use of cash in lieu contributions
- Security and lighting requirements, and
- Walkability and inclusion requirements

The development of the City Centre Parking Plan (CCPP) provides an opportunity to review the recommendations of the 2011 City Centre Car Parking Strategy and will enable parking management improvements to be made in the short to medium term, whilst also projecting and planning for the longer-term.

The CCPP will:

- analyse the current parking situation
- assess the demand and supply of parking facilities
- develop strategies to inform decision-making to ensure that the City's parking management is aligned with the strategic vision for the place, and
- provide a prioritised set of deliverable actions for the next ten years

## 1.2 Strategic Alignment

Council's Strategic Community Plan 2024-2044 provides a direction for ensuring that the activities and services that the City delivers are prioritised in line with the expectations and aspirations of the community.

The Strategic Community Plan provides guidance on how to tackle the major challenges Mandurah will face in the future including addressing climate change and environmental pressures, improving education and economic outcomes, providing essential community infrastructure and ensuring that we maintain the social fabric that makes Mandurah such a great place to live.

Our Community Vision

*"Woven by waterways; a city that is thriving and connected to its people and nature"*

Our Purpose:

*"Shaping a vibrant city, delivering possibility for everyone."*



The aim of the City Centre Parking Plan is to provide a parking-specific action plan to assist in the achievement of the Community Vision and Purpose, and to deliver the objectives of the Strategic Community Plan's key focus areas, being economy, community, environment and leadership

The following Strategic Community Plan objectives relate to the City Centre Parking Plan:

## Focus Area 1: Economic

**Community goal:**  
Empowering our community to thrive

- 1.3. Well-planned, sustainable urban development
- 1.4. A thriving city that residents are proud to call home and people want to visit
- 1.5. A supportive business environment where investment is encouraged, and entrepreneurship prospers
- 1.6. A highly skilled workforce supported by strong education and training opportunities

## Focus Area 2: Community

**Community goal:** A City with a village heart, everyone has a place in our communities

- 2.2. Safe and connected communities
- 2.3. Inclusive and welcoming places, spaces and neighbourhoods
- 2.6. Modern health facilities and services that are local, accessible, affordable, and fit for purpose

## Focus Area 3: Environment

**Community goal:** Built in nature not on nature

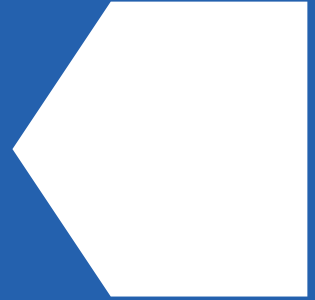
- 3.1. Nature has a voice in all decision making
- 3.3. Our natural environment is celebrated, protected and restored for generations to come
- 3.4. Our built environment is clean, accessible and sustainable

## Focus Area 4: Leadership

**Community goal:** Advocating and delivering possibility for everyone

- 4.1. A clear and shared vision for Mandurah's future
- 4.2. Sound decisions based on evidence and meaningful engagement
- 4.3. Effective advocacy focused on the needs of the community and strong relationships with key stakeholders
- 4.4. Well-maintained assets and facilities that meet the needs of our community
- 4.5. Responsible, transparent, value for money delivery of well planned, sustainable, projects, programs and services

The City Centre Parking Plan (CCPP) is one of the implementation tools of the City's Integrated Transport Strategy and the City Centre Master Plan as shown in **Figure 1**.



**Figure 1**  
Strategy Framework



## 1.3 Objectives

To set the intent for the CCPP, six objectives have been developed:



Reduce long-term growth in demand for parking across the City, through increased use of active transport modes in line with the City's Integrated Transport Strategy



Utilise technology and timed parking strategically to manage parking demand and parking bay turnover, using a model that prioritises short-term parking in the busiest locations and longer-term parking on the periphery



Parking is well located and accessible, particularly meeting the needs of people with limited mobility. Increase the use of under-utilised, existing car parks by making layouts more efficient and improving feeling of safety



Parking in high value areas is incrementally converted over time into more productive public uses that contribute to the economic growth, improved amenity and success of the City Centre



Introduce an intervention matrix to detail the actions that will be undertaken at appropriate trigger points to manage parking vacancy rates



Monitor parking occupancy levels on an ongoing basis to enable appropriate decision-making around parking management and to identify when intervention triggers have been reached.







## 1.4 Plan Area

Consistent with the City Centre Master Plan, the City Centre is divided into four precincts, as shown in **Plan 1**.

This allows for opportunities, challenges and possible solutions to be explored on a precinct-level, as each precinct operates slightly differently.

For the purposes of the preparation of the CCPP, the focus has primarily been on Precincts 1 to 3.

Extensive work was undertaken in 2017, to address car parking challenges in the Mandurah Ocean Marina. At that time, a community working group was formed and a series of recommendations (at an estimated cost of \$371,000) were endorsed by Council.

Proposed actions related to improvements to the movement network into and around the Marina, with a particular focus on parking areas, pedestrian safety, signage, parking enforcement and education.

Most of these identified actions have been implemented.

Whilst the Marina precinct was not included in occupancy surveys for this reason, recommendations relating to ongoing parking occupancy monitoring and interventions will apply to all four precincts.

On an ongoing basis, a key recommendation of the CCPP is to establish a City Centre Parking Plan Implementation Group. The purpose of the group is to lead the delivery of the CCPP actions, including budget allocation recommendations through the Long-Term Financial Plan, to undertake ongoing annual monitoring of occupancy levels (during the summer period for all four precincts) and to report on progress to Council.

# Parking Plan 1 Boundary and Precinct Areas

- P1 **Precinct 1 City Centre Core**
- P2 **Precinct 2 City Centre North**
- P3 **Precinct 3 Western Foreshore Precinct**
- P4 **Precinct 4 Marina Commercial / Residential**

*Note: Precinct 4 was not included in the 2022/23 Parking Occupancy Surveys*



## 1.5 SWOT Analysis

To ensure a thorough understanding of the existing parking environment in the City Centre, an analysis of the strengths, weaknesses, threats, and opportunities has been undertaken, as shown in **Figure 2**.

### Strengths

- Low speed pedestrian-oriented environment in some parts of the City Centre
- Free and plentiful parking is available within a 5-minute (400m) walking distance of several key destinations
- Some parking technology is in place (licence plate recognition)
- The City Centre is serviced by two bus services, with relatively high frequency from the Mandurah Train Station
- Current under-utilisation of parking east of Sholl St in Precinct One and throughout much of Precincts 2 and 3. This indicates adequate supply

### Weaknesses

- Safety concerns within the City Centre and public car parks
- Heavy focus on the desire to park directly on the Waterfront
- No parking restrictions on Sunday's or public holidays
- Lack of regular data collection around parking occupancy
- Public Transport Links to City Centre from surrounding suburbs are time-consuming and inconvenient leaving limited alternative transport options
- Limited wayfinding and signage
- There is limited user information on the City's website about parking options
- Poor pedestrian environment in certain locations discourages walking from peripheral, untimed car parks

### Opportunities

- More effective use can be made of all public parking facilities through a variety of interventions
- Simplification of time restrictions will result in greater compliance and an increase in bay turnover
- Regulation changes now enable cash-in-lieu revenue to be used for a range of different purposes, such as to fund upgrades to existing off-street car parks and surrounding streetscapes
- Improved facilities for people who ride and walk will encourage these mode share options
- The City owns land which could be used temporarily for additional off-street parking facilities (when required) or as overflow parking during events and peak periods
- Incorporating art into wayfinding and signage

### Threats

- Significant over-provision of parking in new developments will have a negative effect on built form outcomes by creating large voids of under-utilised space, creating car-based environments that disconnect pedestrians from activity generators/key destinations
- Long-stay timed parking arrangements in the busiest locations will result in low turnover of bays, resulting in people circulating to find a vacant bay, increasing congestion
- Sale of City owned freehold public off street car parks could potentially result in an under-supply of public parking, which would be to the detriment of the City Centre
- Restrictive and inconvenient transport options will increase demand for long-stay car parking

## 1.6 Community Engagement

The City of Mandurah has actively listened to the community's thoughts, ideas and concerns about local parking in the City Centre. Community input was collected through the community values survey, community engagement pop-ups and business drop-in sessions, community and business workshops, and face-to-face meetings with our business community.

The City Centre Master Plan and Parking Plan Engagement Report (2022) sets out the feedback from the various engagement methods, and how this has informed the development of both plans.

In relation to parking, the community were asked a series of questions relating to:

- the mode of transport they use to get to the City Centre?
- The length of time people spent in the City Centre?
- how long they would be prepared to walk from their parked car to their destination?
- how long it actually took to walk from their parking bay to their destination the last time they visited the City Centre?
- whether they can find a car park when they need one? and
- if you could improve anything about the City Centre, what would it be?

**Figure 3** provides a snapshot of the outcomes of the engagement in relation to parking.

One of the most common parking related comments has been that there is a need for more car parking. This suggestion is usually accompanied by the perception that this will assist businesses in the City Centre and will attract more people to the City Centre. However, current research indicates that the success of a City Centre hinges on a broader range of factors, such as being a place that people want to visit because of the amenity and having things to do for a range of age groups when you arrive.

If a place is attractive enough it may be that there is a willingness for trade-offs, such as utilising other modes of transport or parking a little further from the main destination or area of high activity/amenity and walking a little further, for those that are able to. An outcome of this is that the people walking will add to the level of activity in other parts of the City Centre (not just along Mandurah Terrace) and this may potentially lead to additional spending in local businesses.

There is no doubt that a balance needs to be struck to ensure the most efficient possible use of parking provided. The recommendations of the CCPP will endeavour to strike that balance.



### Figure 3 Engagement results Summary

*If you could improve anything about the City Centre what would it be?*

*Drop off/set down bays on the foreshore would be good, then I would be happy parking a bit further away*

*A long-term parking solution needs to be made that's secure and local to the city centre*

*Widen the footpath on Mandurah Terrace between Pinjarra Road and Tuckey Street and make pedestrians the priority rather than cars.*

*Improve lighting on the Eastern Foreshore and in car parks and walking routes from Sholl Street. Improve signage regarding available all day parking.*

*Just keep parking free!*

*No parking at top end of Mandurah Terrace. It is a real shame when you dine out at one of the restaurants and the beautiful view to the Estuary is obstructed by cars.*

## Value Survey Findings

 477 responses



**87%**

normally get to the City Centre by car



**30min-2hrs**

length of time most respondents (68%) spend in City Centre



**5min**

preferred length of walking time from car park to destination by majority of respondents (58%)



**90%**

said that it takes them 5minutes or less to walk from car park to destination



**70%**

are able to find a car park when they need one

## 2. Existing Parking Supply and Management

### 2.1 Existing Supply

Across the three precincts, there are over 2000 public parking bays, with 850 bays within Precinct 1 (City Centre Core), 980 bays within Precinct 2 (City Centre North) and 180 bays in Precinct 3 (Western Foreshore).

The distribution and location of the parking is shown in **Plan 2**.

Nearly 80 percent of these public parking bays are located 'off-street' in seventeen at-grade, formalised car parks, with the remaining 20 percent being located 'on-street'.

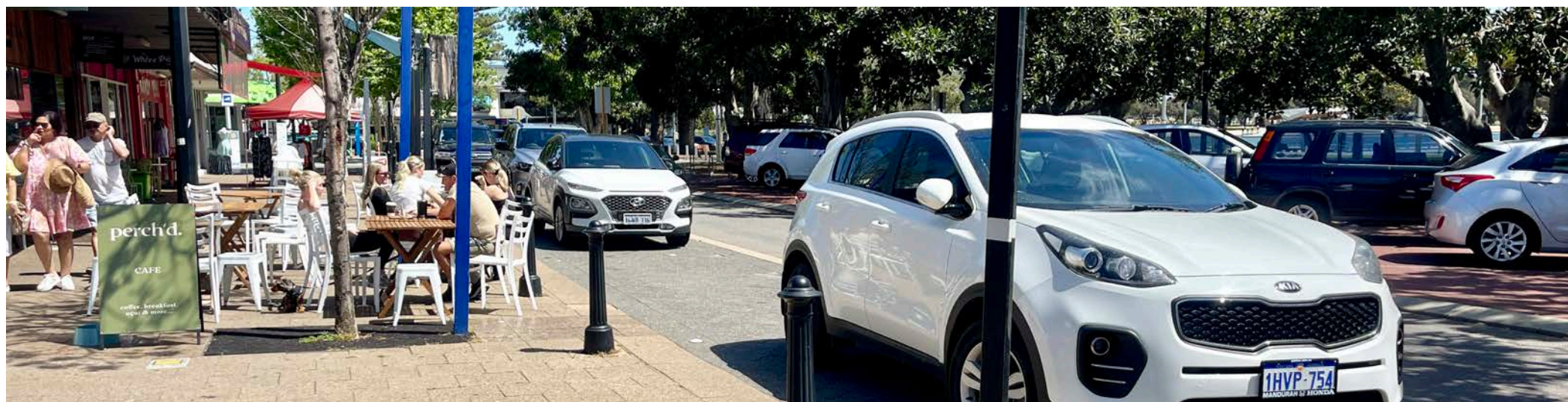
There are also 76 ACROD bays in total across the 3 precincts. This equates to 3.5 percent. As a benchmark, the Building Code of Australia (BCA) requires 1 in 50 (2 percent) ACROD bays for shops and the United Kingdom requires 3 in 50 (6 percent). Given Mandurah's aging population and the fact that there are over 90,000 ACROD permit holders in Western Australia, it is essential to ensure that people with disability are able to access all parts of the City Centre with ease.

Observations indicate that ACROD bays are sufficient in number and are at reasonable occupancy levels, but their distribution requires further consideration, as some of the most desirable locations have the lowest amount of ACROD bays. Locations with the most ACROD bays are Mandurah Performing Arts Centre (MPAC) car park, Leslie Street car park and Mewburn car park. Locations with the least amount of ACROD bays are in the off-street car parks along Mandurah Terrace.

There are 41 Motorcycle bays with an adequate distribution across the City Centre.

To support the functions of the City Centre there are three taxi/on demand transport bays, three loading bays and three existing set down/pick up areas.

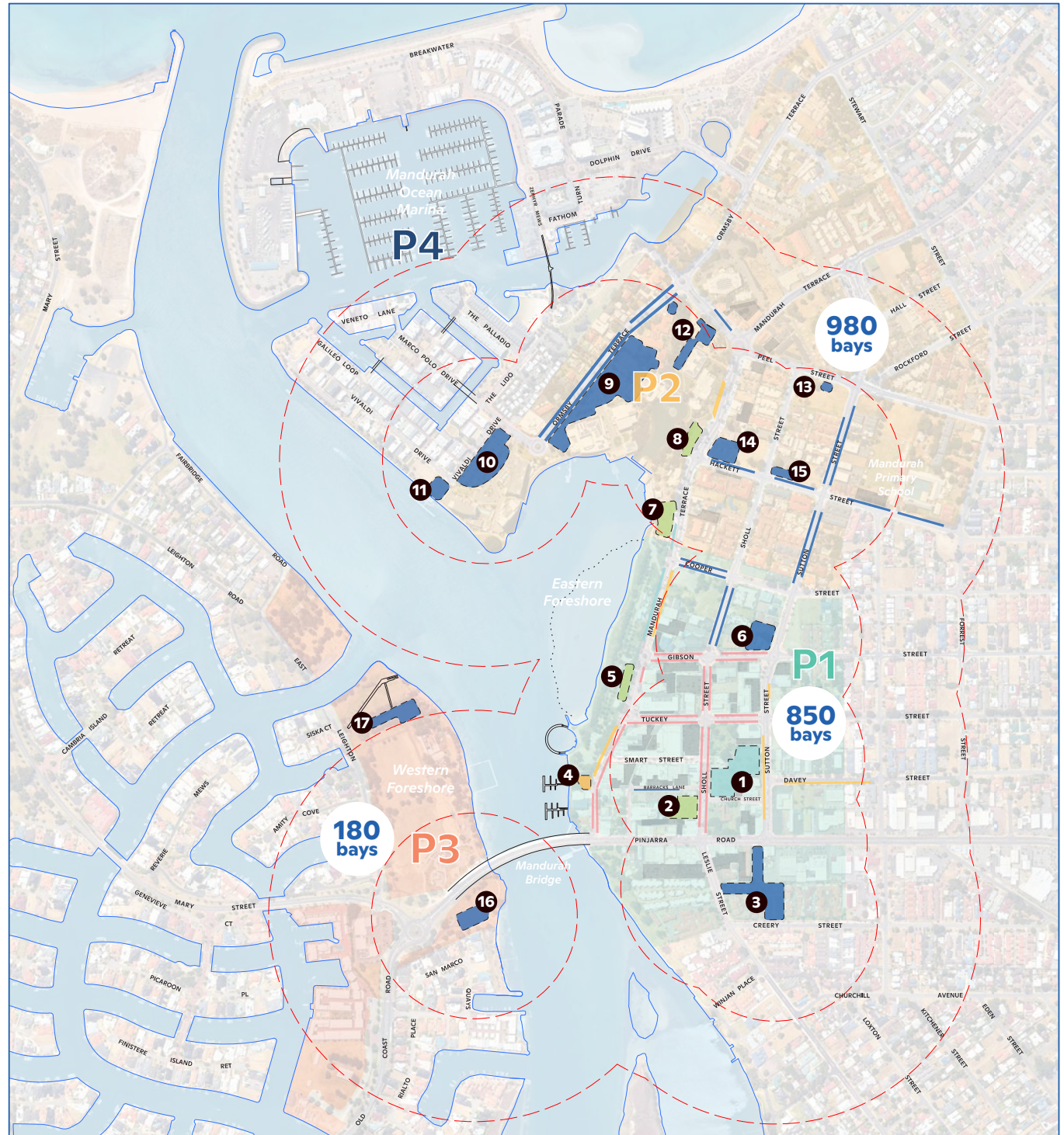
There are also several parcels of private land (particularly along Mandurah Terrace) that are currently utilised by the community for parking.



## Parking Plan 2 Existing Parking

-  **Off Street Public Parking: 1600 bays (80%)**
-  **On Street Public Parking: 400 bays (20%)**
-  **Off Street Private Parking**
-  **200m (2.5m walk) / 400m (5 min walk)**
-  **1 Hour Timed Parking**
-  **2 Hour Timed Parking**
-  **3 Hour Timed Parking**
-  **4 Hour Timed Parking**
-  **All Day Parking**

Car Park Name (Parking Station No/Name if allocated)	Public Bays	Average Occupancy
<b>Precinct 1: City Centre Core</b>		
1 Mewburn (1: Sholl Street Parking Precinct)	167	35%
2 Post Office (10: Sholl Street Parking Precinct)	67	55%
3 Leslie Street	188	13%
4 Eastern Foreshore South (4: Mandurah Terrace Precinct 1)	19	96%
5 Eastern Foreshore Central (3: Mandurah Terrace Precinct 2)	45	96%
6 Gibson Street (5: Gibson Street Parking Station)	56	41%
<b>Precinct 2: City Centre North</b>		
7 Eastern Foreshore North (8: Boardwalk)	59	74%
8 Civic Centre / Visitors Centre (9: Boardwalk)	26	77%
9 Mandurah Performing Arts Centre / Seniors Centre	318	59%
10 Vivaldi Drive	181	51%
11 Stingray Wharf	30	30%
12 City of Mandurah Administration (40 bays office hours use)	77	20%
13 Nell Regan Hall Site	12	1%
14 Hackett Street West	39	34%
15 Hackett Steet East	42	12%
<b>Precinct 3: Western Foreshore</b>		
16 Western Foreshore South	88	15%
17 Western Foreshore North (War Memorial)	91	20%



## 2.2 Existing Parking Management

Around 70 percent of off-street bays have no time restrictions and approximately 40 percent of on-street bays have no time restrictions. This enables users to stay for unlimited periods in a significant number of locations. A more strategic approach to the use of timed arrangements would be beneficial.

There is currently a range of various time restrictions, predominantly in locations within the City Centre Core.

These restrictions do not, however, apply on Sundays and public holidays, which are among the City Centre's busiest days.

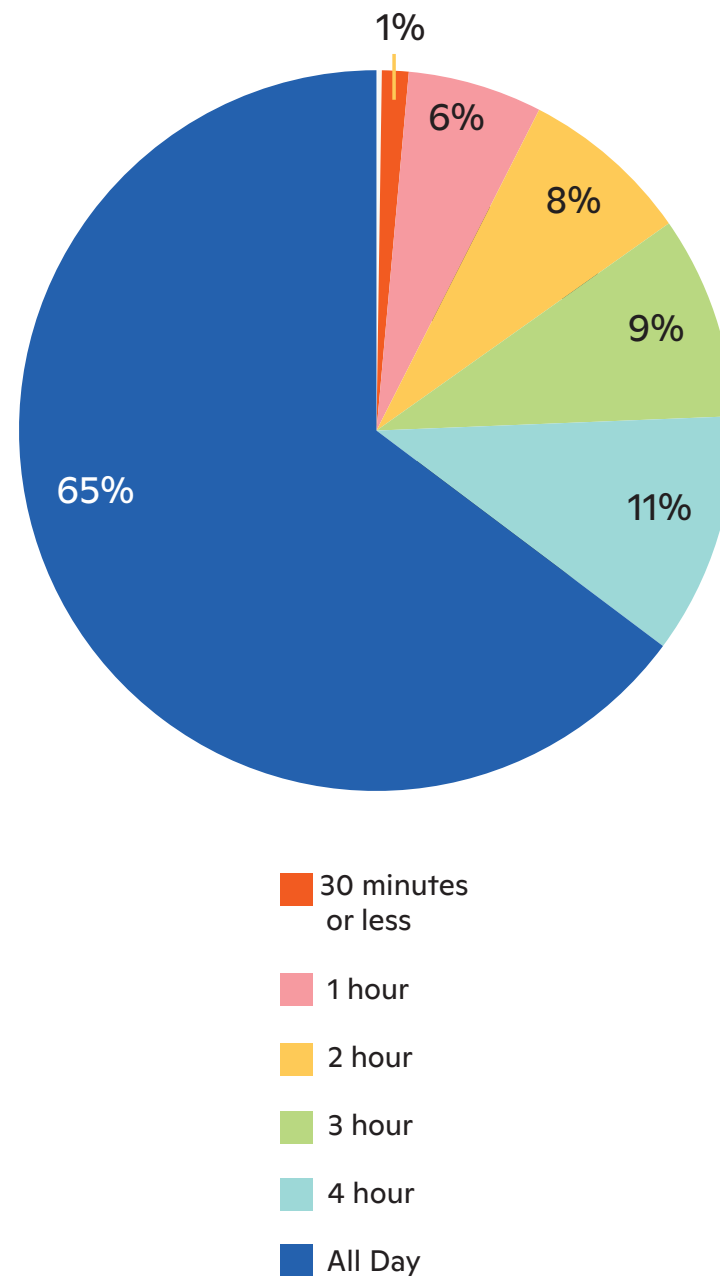
Furthermore, some areas do not have restrictions that apply on a Saturday.

In a day tripping tourist destination like Mandurah these restrictions no longer match the peak period requirements.

Over 85 percent of all public parking bays allow a visitor to stay for three hours or more, with under 2 percent of the available on and off-street public parking being higher turnover bays (short-term parking less than 30 minutes).

In high demand areas, this creates inefficiency and a lack of vehicle turnover and currently encourages longer-term parking in areas where a high turnover of customer parking would be an advantage, to support economic activity.

Figure 4 Time Restrictions by Percentage of Total Bays





## 2.3 Local Government Benchmarking

Analysis has been undertaken to compare the amount of parking in the City Centre to other places, with the results shown in **Table 1**.

It is difficult to draw like for like comparisons, however, it does provide an indication of relative supply.

Perth is the capital city for Western Australia and is the civic, cultural and economic heart of the State. It has an estimated total employment floorspace of just over 2 million square metres (2018) and is the primary centre of commerce and administration.





Fremantle is a Strategic Metropolitan Centre (as identified in the State Planning Framework) but is different to Mandurah in terms of context.

Fremantle has a residential population of approximately 31,000 people, a daily commuting workforce of around 8,000 people and is the most visited destination in Western Australia outside of Perth CBD, with about 1.2 million visitors annually. Whilst Fremantle is a larger activity centre, Mandurah's parking levels are comparable, approximately a third less within a similar sized area.

Rockingham is a neighbouring Strategic Centre and is similar to Mandurah in terms of the train station being remote from the City Centre and the waterfront being a significant attractor. The figures included in **Table 1** relate to the Rockingham Foreshore area only and not the entirety of the City Centre.

The amount of parking provision on the Rockingham Foreshore is significantly less than Mandurah, however, it should be noted that the area concerned is significantly smaller also.

**Table 1 Car Parking Benchmarking**

	 On-street bays	 Off-street bays (public)	 Indicative Areas (Km <sup>2</sup> )	 Bays per Km <sup>2</sup>
<b>Perth CBD<sup>1</sup></b>	6,000	11,000	7.5	2667
<b>Fremantle CBD<sup>2</sup></b>	1,000	2,300	1.3	2538
<b>Rockingham Foreshore<sup>3</sup></b>	416	414	0.23	3608 (830 bays)
<b>Mandurah City Centre</b>	423	1589	1.37	1468

<sup>1</sup>About City of Perth Parking

<sup>2</sup>A quick guide to parking in Freo

<sup>3</sup>Public Parking at the Rockingham Foreshore

## 2.4 Existing Occupancy Levels

To better understand the performance of the existing car parking environment in the City Centre, nine car parking occupancy surveys were undertaken between January and March 2022, to identify the amount of parking that exists within the precinct areas and the occupancy levels of that parking.

**Figure 5, Figure 6 and Figure 7** provide a snapshot of the data from nine occupancy surveys in the three precincts.

The occupancy survey methodology was designed to cover the busiest times of the day in the City Centre and included a range of days during the summer period, including school holiday and non-school holiday times, evenings and weekends. The data from the nine surveys was averaged to provide a representation of average peak occupancy levels. ACROD and Motorcycle parking were also included.

Additionally, data was collected for six private landholdings within the City Centre (some formalised through parking agreements and some not) that currently provide parking opportunities for the public, at particularly busy times. These were included to understand when they are being utilised and whether, at those particular times, there is capacity in existing formalised public car parks, that are slightly further east of Mandurah Terrace in terms of walking distance.

A further four occupancy surveys were also undertaken, two in July 2022 (during Winter in Mandurah ice skating event), one in November 2022 following the opening of the Giants in Mandurah and the Western Foreshore play space and one in April 2023, to further understand and assess the effect of these changes on parking. This data has been analysed separately.

Average peak occupancy overall for all on and off-street parking areas within the City Centre is generally **below 55 percent**.

A useful metric for determining optimum parking levels is **85% average peak occupancy**. At this level public parking is being used efficiently, providing accessible and convenient parking while ensuring that bays are available for newly-arrived vehicles.

Parking levels which **exceed 85% average peak occupancy** for a sustained period of time indicate that further intervention is required. These levels would create a greater circulation of drivers looking for vacant bays, causing inconvenience, adding to traffic volumes, potential congestion and a likely perception that there is not enough parking.

Parking levels **below 65% average peak occupancy** for a sustained period of time indicate that the parking is under-utilised, which is inefficient.

# Parking Occupancy

## Precinct 1 – City Centre Core



64%

Overall Average Peak Occupancy for Precinct 1

### Average peak occupancy rates

- 95%** ① Mandurah Terrace on-street parking (Pinjarra Road to Tuckey Street)  
36 bays available
- 91%** ② Mandurah Terrace on-street parking (Gibson Street to Cooper Street)  
48 bays available
- 96%** ③ Eastern Foreshore Central Car Park  
45 bays available
- 96%** ④ Eastern Foreshore South Car Park  
19 bays available
- 35%** ⑤ Mewburn Car Park  
167 bays available
- 41%** ⑥ Gibson Street Car Park  
56 bays available
- 84%** ⑦ Sholl Street Car Park  
64 bays available
- 13%** ⑧ Leslie Street Car Park  
188 bays available



# Parking Occupancy

## Precinct 2 – City Centre North



40%

Overall Average Peak Occupancy for Precinct 2

### Average peak occupancy rates

77%

- 1 Civic Centre Car Park  
26 bays available

74%

- 2 Eastern Foreshore North Car Park  
59 bays available

34%

- 3 Hackett Street West Car Park  
39 bays available

12%

- 4 Hackett Street East Car Park  
42 bays available

20%

- 5 City of Mandurah Administration Car Park  
77 bays available

59%

- 6 Mandurah Performing Arts Centre and Senior Centre Car Park  
318 bays available



# Parking Occupancy

## Precinct 3 – Western Foreshore



18%

Overall Average Peak Occupancy for Precinct 3

### Average peak occupancy rates

15%

1

Western Foreshore South Car Park  
88 bays available

20%

2

Western Foreshore North Car Park  
91 bays available



## 2.5 Analysis of Occupancy Levels

The overall average peak occupancy levels of all three precincts are under 65 percent, which indicates that there are opportunities for more efficient use of the existing parking supply, with improved management.

Within the City Centre Core (Precinct One), several locations reached peak occupancy. On and off-street parking locations adjacent to the Eastern Foreshore have extremely high occupancy rates, with average occupancy levels exceeding 90 percent. This leads to a perception of a lack of parking, however, it is likely due to the current timed parking arrangements enabling longer stays in these high demand locations, resulting in a lack of bay turnover.

Car parks on the eastern side of the City Centre such as Mewburn, Gibson Street car park, Leslie Street and Hackett Street East, are significantly under-utilised with average occupancy levels of under 45 percent. All these car parks, with the exception of Leslie Street, are within a two minute walk (250 metres) of the Eastern Foreshore. The low occupancy levels could be due to a number of factors such as wayfinding, safety concerns, current timed arrangements, and lack of awareness of alternative parking options.

As mentioned above, in some locations in the City Centre, the timed parking arrangements are not fit for purpose, as drivers are not encouraged to look for vacancies within a short walk. In other locations, the current timings do not match the need within the precinct, for example, for all day parking.

Vacant private landholdings on the corners of Cooper Street and Mandurah Terrace are used extensively on weekends, but there is capacity within existing car parks in close walking distance, at these peak periods. Should these landholdings be developed in the future, there is sufficient capacity within existing public parking.

Average occupancy levels within parking bays west of Sholl Street are 65 percent, with bays to the east of Sholl Street averaging 22 percent.

This could be due to the parking behaviour of seeking to park as close to the destination as possible. As the City grows, this is likely to become unsustainable.

There remains extensive capacity on the Western Foreshore in the Western Foreshore South and Western Foreshore North car parks. However, these car parks have seen an increase in average occupancy since the opening of the Giants in Mandurah and the Western Foreshore play space. Western Foreshore South from 15 percent to 25 percent average occupancy and the War Memorial car park from 20 percent to 35 percent. Capacity remains but this will require ongoing monitoring.



# 3. Future Parking Demand Analysis

## 3.1 Factors Affecting Parking Demand

Mandurah is a growing population centre serving a broad catchment. It is a significant employment centre and is also an important tourist destination for Western Australians, as well as interstate and international visitors. The population is forecast to continue to grow steadily, to reach approximately 120,000 by 2036.

This means that Mandurah will become home to almost 30,000 new residents over the next 10+ years. Much of this growth has been identified in the Local Planning Strategy, within the Central Mandurah area, through infill development.

It is likely that Mandurah will continue to welcome cars into the City Centre for many years to come, within a people-friendly, safe environment. As the City evolves into a larger strategic centre, it is likely that places will become busier, and the ability to accommodate higher numbers of vehicles will be constrained. As land becomes more constrained over time, it will become increasingly important to find the highest and best use for valuable public spaces and to become more sophisticated with non-car based transport.

The City Centre, with its unique waterfront, will continue to attract an increasing number of visitors. Without a proactive approach to parking management, demand and supply fluctuations could lead to a poor visitor experience, which may reduce visitation and ultimately would have an adverse economic impact.

Demand and supply fluctuations may eventuate because of public and private development activity. For example, developments may occur which drive visitation to the City Centre and/or developments may occur which convert existing formal and informal parking locations into other uses.

Additionally, the City of Mandurah’s Property Strategy details several parcels of land within the City Centre that have been identified to assist in the future economic development of the City, a number of which are currently utilised in the interim, for public car parking.

Future transport needs may also be different to what they are today for several reasons, including:

- the increased use of rideshare services (such as Uber, Lyft, etc)
- the potential wide-scale use of autonomous vehicles
- the increasing cost of fuel
- the increased uptake of walking and bike riding (particularly since the pandemic)
- the increasing use of micro-mobility through e-scooters and e-bikes, and
- the City Centre including an increasing residential population





The Integrated Transport Strategy includes a number of recommendations to meet the aspiration to be a location where walking and bike riding is a safe, connected and convenient mode of transport. The Strategy also contains recommendations to support the increased use of boats, as a form of transportation. Residents and visitors use marine transport to not only enjoy the waterways for recreational purposes, but to also visit the City Centre to patronise shop, restaurants attend events. Many residents living within canal estates have private jetties making it very convenient to use boats as an alternate mode of transport. The Values Survey, undertaken as part of the engagement for the City Centre Master Plan and Parking Plan, indicated that 6 percent of people regularly travel to the City Centre by boat. This presents an opportunity to further diversify the modes of transport used to access the City Centre.

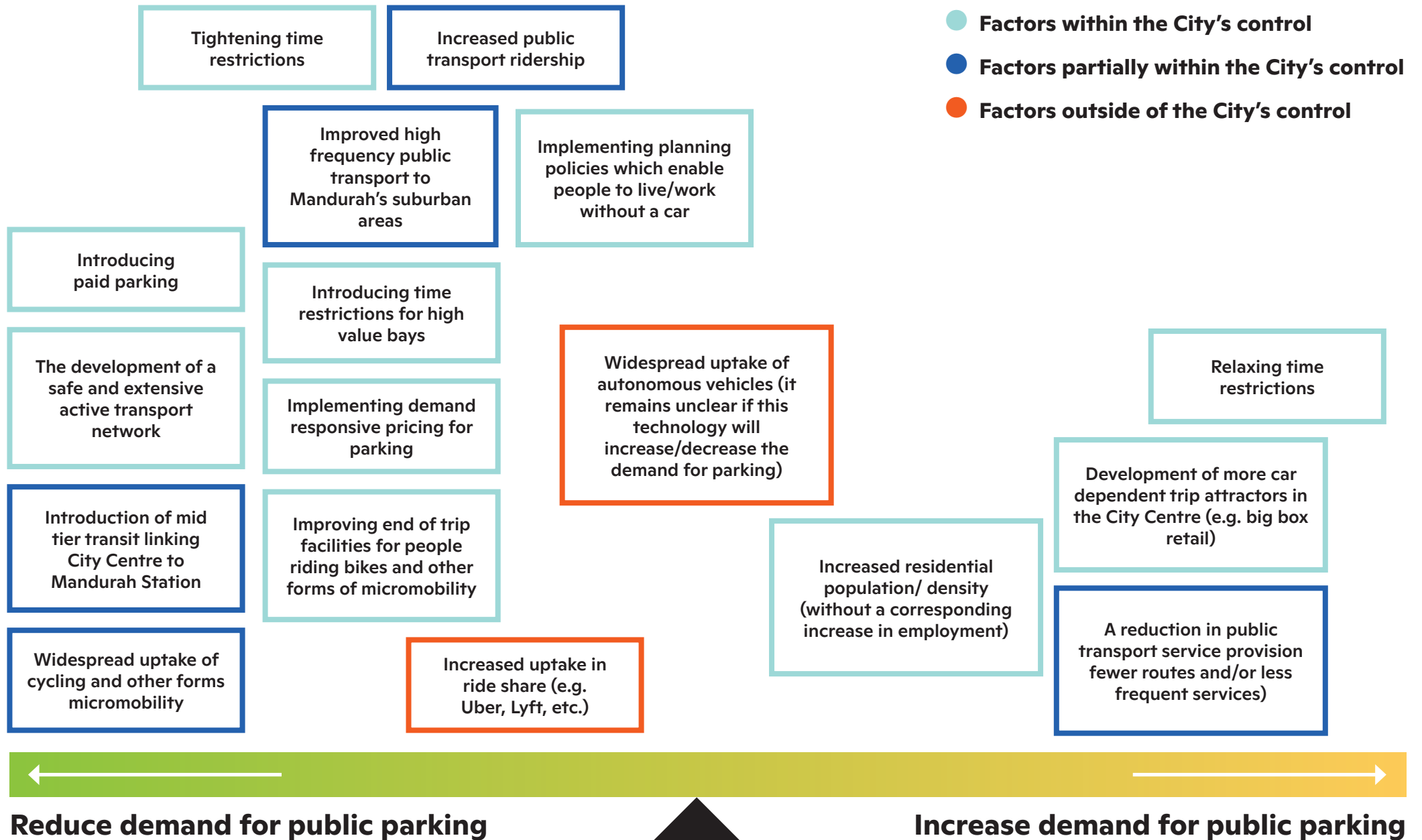
Whilst many of these changes will not occur overnight, it is worthwhile to plan for the changing parking needs and to look at short, medium and long-term solutions for car parking, to make it better for all.

In some locations, it may be appropriate to firstly, vary timing arrangements to increase efficiency and secondly, slowly remove parking in exchange for a higher and better land use with greater public benefit. This must always be balanced against providing adequate access for those that need it the most.

**Figure 8** outlines several factors that affect parking demand, some of which are in the City's control, including tightening or expanding timed parking arrangements, some of which are partially within the City's control, such as increased public transport ridership, and some of which are outside the City's control such as increased uptake in ride share.



**Figure 8 Factors Affecting Parking Demand**



## 3.2 Future Parking Requirements

Historically, parking has been provided based on anecdotal demand, as opposed to measured occupancy levels or demand forecasting. Measuring occupancy provides a much more in depth understanding of the parking environment.

In order to determine the future car parking requirements for the study area, analysis has been undertaken by consultants to project the growth in parking demand and what this might do to the average occupancy levels over a 20 year timeframe. As of 2022 there were 83,040 people in the City of Mandurah. The low, medium and high growth scenarios were derived by looking at forecast population growth for Mandurah. Forecasting the long-term growth in parking demand is difficult and contingent on a range of factors such as population, employment and changes in travel behaviour/mode share.

A low growth parking demand scenario assumes an increase of 1 percent of overall average occupancy levels for public parking within the City Centre. The medium growth scenario assumes a 3 percent increase and the high growth scenario assumes a 5 percent increase.

The lifetime of this current plan is to 2033, which is depicted by the marker line indicated on **Table 2**.

It is acknowledged that this model does not recognise parking demand and supply fluctuations that will occur over time, as a result of the factors mentioned previously. Whilst demand and supply are unlikely to be linear, the model does provide an indication of likely growth in demand for a range of scenarios.

Based on these low, medium, and high scenarios, the analysis indicates that by 2033, under a low and medium growth scenario, overall average peak parking occupancy for the City Centre will remain within the optimum range for efficient use of parking (65-85 percent). It is only under a high growth scenario that the overall average peak occupancy levels peak at 94 percent.

Intra-precinct occupancy rates suggest that there is some urgency to re-balance demand and supply, via adjustments to timed parking arrangements, particularly around the Eastern Foreshore. Parking supply across the City Centre, however, appears to be sufficient at present.

In the longer term, the City must continue to explore opportunities to facilitate parking supply while assessing the impact of new technologies and behaviours that may impact demand. It is also imperative that regular parking occupancy surveys are undertaken at a precinct level, to confirm Mandurah's parking demand growth trajectory.



**Table 2 Average Peak Occupancy and Growth Scenario Analysis**

Year	Low growth scenario (Parking demand increase 1% per year)	Medium growth scenario (Parking demand increase 3% per year)	High growth scenario (Parking demand increase 5% per year)
2022	55%	55%	55%
2023	56%	57%	58%
2024	56%	58%	61%
2025	57%	60%	64%
2026	57%	62%	67%
2027	58%	64%	70%
2028	58%	66%	74%
2029	59%	68%	77%
2030	60%	70%	81%
2031	60%	72%	85%
2032	61%	74%	90%
2033	61%	76%	94%
2034	62%	78%	99%
2035	63%	81%	104%
2036	63%	83%	109%
2037	64%	86%	114%
2038	64%	88%	120%
2039	65%	91%	126%
2040	66%	94%	132%
2041	66%	96%	139%
2042	67%	99%	146%
2043	68%	102%	153%

← **Current Year**

← **Lifetime of the Parking Plan**

<b>&lt;65%</b>	Ample parking supply
<b>65-85%</b>	Balanced parking supply
<b>&gt;85%</b>	Shortfall

# 4. Parking Management Options

There are many different demand management and parking intervention options available to assist in reducing long term growth in parking demand, managing existing public and private parking and planning for future parking.

These are explained in the following sections, and their relevancy or otherwise, to the Mandurah context.

## 4.1 Demand Management Options

### Travel Mode Shift

The promotion and encouragement of, and infrastructure investment in, alternative transport modes such as public transport, bike riding and walking can decrease the need for public car parking. Over the long-term, as patronage increases on alternative transport modes, reductions in the need for parking could then be expected.

There are several ways to improve the walking and bike riding experience which include the provision of dedicated street space, shade, wayfinding, lighting, considering safety, providing time for walking at signalised intersections, frequent street crossing opportunities and addressing gaps in the path network. The benefits of doing so, from a social, environmental, and personal health perspective, should not be under-estimated.

The Integrated Transport Strategy includes a key action to prepare District Level Active Transport Plans to include the following outcomes:

- Existing path audits
- Assess opportunities to seek data on walking and bike riding
- Community engagement
- Path prioritisation and
- Inclusion of recommendations in Asset Management Plans, Long Term Financial Plan and Capital Budgets.



### Advocacy and Education

Advocacy for, and education around, public transport are important methods of improving the awareness and availability of transport options to, from and within the City Centre.

Public transport services and needs change over time. Local government has a role to play in advocating for and advising on required changes to frequency, stop location and route planning of services, due to their close contact with the community. These changes can impact the location of on-street parking provisions and can encourage the reduction in parking bays, due to the increased uptake of public transport.

Mandurah's long, narrow shape makes accessibility and connectivity a challenge. Bus routes are long, convoluted, suburban based routes resulting in slow trip times and a lack of direct connection from the suburbs to the City Centre. Bus routes from the suburbs mostly terminate at the Mandurah train station, requiring the need for users to change onto another route to access the City Centre.

These factors make getting to the City Centre by public transport challenging and unattractive to users. It became clear through the community consultation that some visitors to Mandurah are unaware of how to get from the train station to the City Centre, via public transport. The City Centre is serviced by two bus services, with relatively high frequency from the Mandurah Train Station, however the awareness of these routes could be improved through opportunities such as bus branding and promotion of public transport options.

A key outcome of the Integrated Transport Strategy is to advocate for improvements to the bus network, as they have not been strategically reviewed or modified since the opening of the Mandurah Train Station in 2007. The improvements should include rapid transit routes north and south along Mandurah Road and Old Coast Road corridors to reduce travel times.

From an education perspective, undertaking and continuing to be involved in community awareness campaigns will encourage behaviour change and mode shift towards active mobility forms of transport.

## New and Emerging Technologies

The uptake of electric vehicles, autonomous vehicles and other sustainable technologies such as electric bicycles, scooters and skateboards may also have a substantial impact on private car ownership, congestion and parking requirements. These types of technologies require charging stations and, as more vehicles are in circulation throughout Mandurah, more vehicle charging stations are likely to be required. Additional challenges to accommodating e-rideables include, potential changes to infrastructure such as shared paths and the provision of fit for purpose parking, so that this form of mobility can be encouraged and integrated into the existing transport network in a safe way.

These technologies are emerging and will mature over time. It is important that the City continues to monitor demand for this type of infrastructure and investigate different models for implementation.

The most obvious location for any increase in public charging infrastructure is adjacent to existing chargers within the car park adjacent to the Civic Centre car park on Mandurah Terrace (Car Park No 8 on **Plan 2**).



## 4.2 Intervention Options

Interventions are ways to manage parking through a variety of measures such as:

- wayfinding and signage;
- monitoring parking occupancy;
- upgrades to existing parking;
- timed limits, enforcement;
- paid parking;
- additional parking supply;
- private car park management;
- private parking ratios;
- payment-in-lieu of parking;
- peak period/event parking,; and
- decked parking.

### Wayfinding and Signage

Wayfinding encompasses all the ways in which people orient themselves in physical space and navigate from place to place. This can include things like consistency in branding, street art, signage, landmarks, and gateways.

Wayfinding signage is a system of signs and directories that can efficiently guide people to key attractors and parking nodes within the City Centre. In a parking sense, wayfinding signage can direct and guide drivers to short, and long-term car parking, at the earliest point of entry into the City Centre. This reduces searching time and the unnecessary circulation of cars.

Art within streets, on built form and as public art can be used as a complimentary element to wayfinding. Low-cost, unique artistic treatments and interventions can be effective for orientation and in providing direction for pedestrians.

During the community engagement phase, it became apparent that there is a lack of public awareness of alternate parking locations within the City Centre. Much of the existing signage at the entry points of

the off-street public car parks is old or outdated, in terms of branding, and there is insufficient signage at a number of key entry intersections upon approach to the City Centre, to direct drivers to appropriate parking locations.

There are several opportunities for the provision of improved parking information, such as:

- updated and additional signage at the entry points of the seventeen off-street car parks to indicate the availability of public parking and incorporate consistent naming
- the implementation of parking specific wayfinding signage (as part of a wider wayfinding strategy) to direct drivers to all day parking locations, at the earliest point of entry to the City Centre
- the integration of the existing car parks into an existing GPS system such as Google Maps or Apple Maps, or both
- the provision of improved brochures/maps on the City of Mandurah website, and
- consideration of smartphone apps and other technologies to provide real-time bay availability.

For the parking specific wayfinding signage, recommended locations are:

- Intersection of Sutton Steet and Mandurah Terrace
- Intersection of Peel Street and Sutton Street
- Intersection of Pinjarra Road and Sutton Street
- Intersections along Mandurah Terrace to direct people eastwards, and
- Intersection of Pinjarra Road, Old Coast Road and Mary Street to direct people to parking on the Western Foreshore.

For locations refer to Plan 3.

Smartphone apps can ensure that information is easily accessed, which in turn will increase the satisfaction of locals and visitors to the City Centre. There are also numerous options available for smart parking technology, such as: in-ground parking sensors,

loop detectors at entry and exit of off-street car parks and CCTV cameras which can be transmitted to provide real time information to smartphones, websites and digital signage.

Care should however be taken when introducing parking related smart technology, given the initial and ongoing costs and the short life cycle of technology, which could lead to potential redundancy.

### Timed Parking

The main reason for timed parking is to ensure an increased turnover of cars, so that one car parking space can be used by as many cars as possible each day. This allows drivers to find car bays more easily, as one car is not parked in the space all day, assisting local businesses by attracting customers and ensuring maximum land use efficiency. Timed parking can be used strategically to influence parking location and duration, serving as a lever to encourage the use of parking areas that have lower occupancies.

On-street and short-term parking can be used to encourage higher turnover in the busiest locations such as along Mandurah Terrace, with off-street bays providing for longer term car parking on the periphery, supporting local businesses by increasing foot traffic through the City Centre.

Changes to timed parking arrangements can be implemented using a staged, incremental approach, on an 'as needed' basis, or when average occupancy levels require.

There is currently a range of different timed parking arrangements, from 15 and 30 minute bays, one, two, three and four hour bays and all day parking. The times and days that restrictions apply varies, and this can be confusing for users. Additionally, restrictions do not apply on Sundays and public holidays (or indeed on Saturdays in some locations), which are among the City Centre's busiest days. This creates inefficiency and a lack of vehicle turnover. It is recommended that all on and off-street, timed parking signage across all precincts, be updated to apply timed restrictions to Saturdays, Sundays and public holidays, and to apply consistently at applicable times and days.

Long-term parking, which is expected to largely cater for the future demand of the City Centre employment sector, should be provided at the periphery of the centre. This includes ensuring that sites are within 10 minutes walking distance of key employment destinations and the pedestrian routes to key locations are safe, attractive and direct.

Within Precinct One: City Centre Core, there are several existing car parks which are allocated for all day parking, including Leslie Street and Gibson Hall. This does not currently include the Mewburn car park (currently four- hour parking), which is under-utilised and is considered to be the most central and well-located car park, in terms of direct connections to the Eastern Foreshore, through Smart Street and Barracks Lane. Changing a portion of Mewburn car park to all day parking presents an opportunity for employees within City Centre businesses, to be able to stay all day.

Through the community engagement, many businesses indicated that their staff have concerns regarding safety after hours, when accessing all day parking. Staff are unable to park their cars, or move their cars, closer to their place of work due to the timed restrictions preventing this. To address this concern, it is recommended that the timed restrictions cease at 5pm instead of 6pm. This change, in addition to car park upgrade works to improve safety, will assist in addressing these concerns. It is noted that parking occupancy levels are lower during the evening and night-time period, as such, this should not have a negative impact on turnover.

Within Precinct Two: City Centre North, the options for off-street, all-day parking include Hackett Street West and East, Nell Regan, Mandurah Performing Arts Centre, Vivaldi Drive and Stingray Wharf car parks.

Within Precinct Three: Western Foreshore, both off-street car parks (North and South) allow users to stay all day.

Through promoting these peripheral long-term parking locations, the pedestrian economy and local businesses may be more broadly activated throughout the City Centre. Peripheral parking is also

expected to decrease the need for motorists to undertake repeat circuits of Sholl and Tuckey Streets and Mandurah Terrace, to locate on-street parking. This shift in driver behaviour would also be facilitated by an improved wayfinding signage system.

In contrast, short term parking should be prioritised at on-street locations and within the highly utilised, off-street car parks in the City Centre Core, to accommodate short term visitors. Time restrictions for on-street parking should generally be in the range of 15 minutes to two hours and enforcement of vehicle turnover should be actively applied.

Access to these locations must, however, be easy for those that need it the most. Supporting people with low mobility at high attraction locations supports the City's commitment to being inclusive. The distribution of ACROD parking is considered later in this section.

Off-street, short term parking options within Precinct One, the City Centre Core, include the Eastern Foreshore South (two hours) and Central (mostly three hours, with two 15 minute bays) car parks, which are both heavily utilised. There is also on-street parking along Mandurah Terrace (one and two hours) and also on Tuckey, Gibson, Sholl and Sutton Streets.

The provision of additional shorter timed bays within the Eastern Foreshore South and Central car parks will encourage a greater turnover of bays in this heavily occupied location, close to several 'fast transaction' type businesses. It should be noted that the Eastern Foreshore Central car park forms part of the broader redevelopment of the Eastern foreshore and there is an opportunity to reconsider the layout of this car parking to improve amenity.

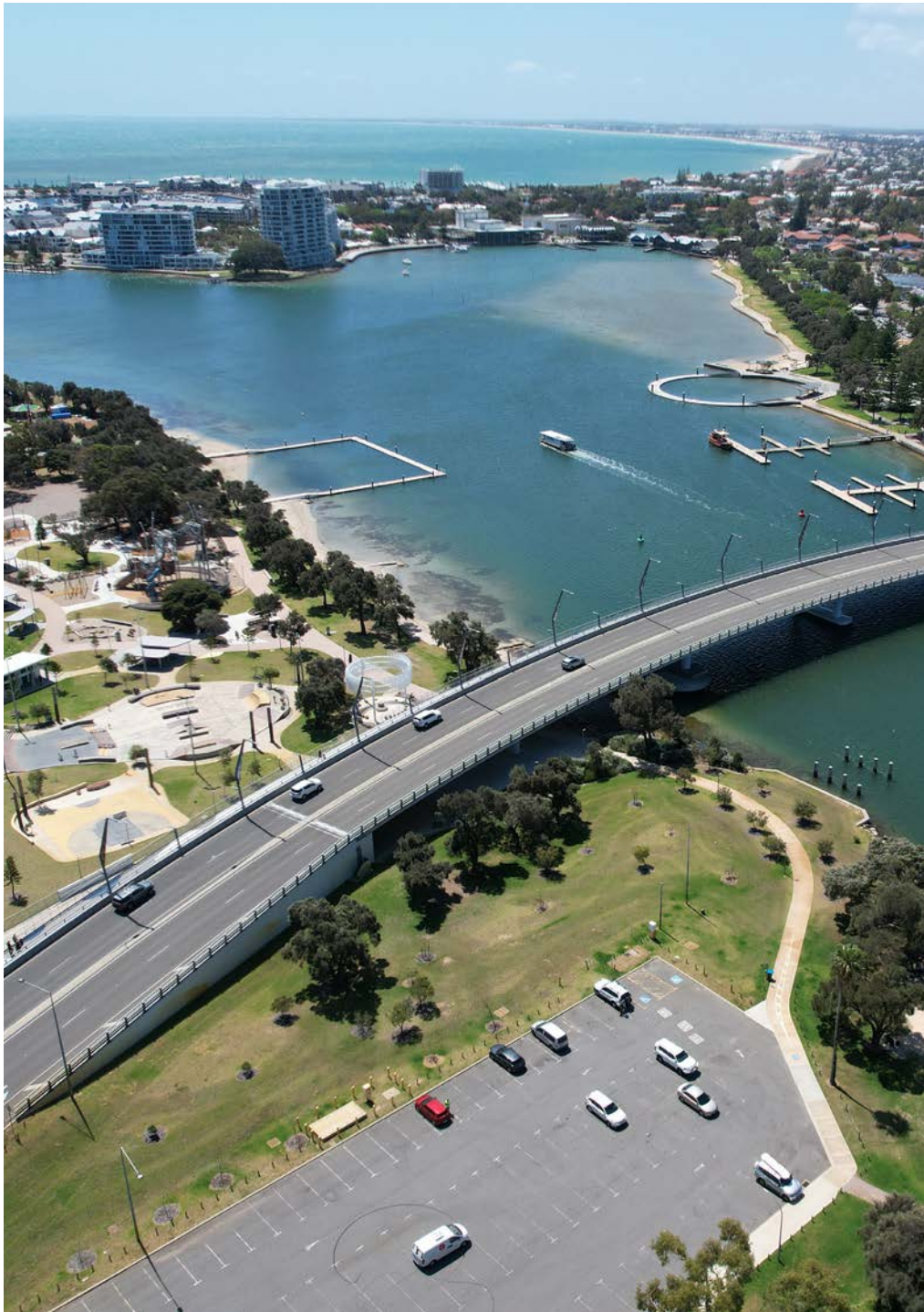
Within Precinct Two: City Centre North, the options for off-street, short-term parking include Eastern Foreshore North (three hours, with seven 30-minute bays). There is also on-street parking along Mandurah Terrace (one, two and four hours) and also on Cooper, Hackett and Peel Streets.

In accordance with the need to increase bay turnover in high demand locations and the incremental approach of progressively tightening timed parking arrangements, it is recommended that the high occupancy 45-degree parking bays along Mandurah Terrace, between Gibson and Hackett Streets, are changed from four hour timed parking to three hours, every day. In addition, it is recommended that the timed parking arrangements in the Eastern Foreshore Central and Eastern Foreshore North car parks, are changed from three hour to two hour parking.

The introduction of additional pick up and set down bays in high demand locations and activity nodes would be beneficial to support this increase in shorter timed parking arrangements. These pick-up/set-down bays would enable people to drop off passengers and belongings, and drive to park in a longer-stay parking bay, within a five-minute walk (Refer Plan 2). Recommended locations for these pick-up and set-down zones are discussed later in this section.







## Upgrades to Existing At-Grade Off-Street Public Parking

Car parks that are well lit, safe, easy to navigate with good surface condition and line marking, have appropriate landscaping and signage are key factors in ensuring that locations are utilised. The provision of safe, highly legible pedestrian links within parking areas is essential, as is the connection to the surrounding pedestrian network and beyond to key activity nodes.

There are examples across the City where the standard of car parks is impacting their utilisation. Through the engagement process, safety concerns (particularly at night) within Mewburn car park, were frequently mentioned. There are existing CCTV cameras in several locations throughout the City Centre, some of which include car parks.

Improving the general amenity of existing car parking can enhance feelings of safety. For example, introducing activity which attracts people to the area, and enabling good passive surveillance through the location of pathways and entries, can make it more attractive and increase pedestrian movement through the space. Crime prevention through environmental design is most effective when aligned with other interventions. Active surveillance, appropriate access management, landscaping maintenance, lighting and CCTV should all be considered in an integrated manner. Any requests for additional CCTV locations will be considered in accordance with the CCTV Masterplan 2023 and associated procedures.

**Table 3** details locations that have been identified for recommended car park upgrades.

**Table 3 Existing Car Park Upgrades**

Car Park Name	Upgrades Recommended	Rationale	Timing	Estimated Cost
<b>Precinct One: Mewburn</b> <b>Light Touch Option</b>	<ul style="list-style-type: none"> <li>• Tree pruning/uplifting</li> <li>• Improve signage (particularly from Sutton Street) and encourage access from Sutton Street</li> <li>• Change a portion from four hour parking to all day parking</li> </ul>	<ul style="list-style-type: none"> <li>• Light touch option to be effected if there is a realistic prospect of fast tracking the development of the site, in accordance with City Centre Master Plan vision</li> </ul>	Short term	Light touch option - \$50,000
<b>Precinct One: Mewburn</b> <b>Full Upgrade Option</b>	<ul style="list-style-type: none"> <li>• Re-configure layout/review one-way system/consolidate crossovers</li> <li>• Re-surfacing and line-marking</li> <li>• Tree pruning/uplifting</li> <li>• Upgrade lighting</li> <li>• Landscaping</li> <li>• Review and consider CCTV coverage</li> <li>• Improve signage (particularly from Sutton Street) and encourage access from Sutton Street</li> <li>• Change a portion from four hour parking to all day parking</li> <li>• Review position of existing building footprint to improve pedestrian connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Poorly utilised both day and night</li> <li>• Community feedback of safety concerns</li> <li>• Represents the most important area to increase occupation to assist pedestrian movement and increased business foot traffic in the City Centre core</li> </ul>	Short term	<p>\$50,000 Design - (24/25)</p> <p>Full Upgrade option - \$2M – (25/26 and 26/27) subject to LTFP review</p> <p>Costs include the upgrades to the adjacent George Robinson Gardens as recommended in the CCMP</p>
<b>Precinct One: Eastern Foreshore Central</b>	<ul style="list-style-type: none"> <li>• Review footprint</li> <li>• Improve interface between Mandurah Terrace and Eastern Foreshore</li> <li>• Upgrade lighting</li> </ul>	<ul style="list-style-type: none"> <li>• Consistent with long-term objective to incrementally reduce car parking from high value locations</li> </ul>	Short term	Refer to Waterfront Redevelopment project – options currently being developed

<b>Precinct Two: Eastern Foreshore North</b>	<ul style="list-style-type: none"> <li>• Re-configure layout and access arrangements</li> <li>• Improve pedestrian space surrounding car park</li> <li>• Resurfacing and line-marking</li> <li>• Introduce set-down/pick-up zone</li> </ul>	<ul style="list-style-type: none"> <li>• Necessary to improve pedestrian connections and access to the commercial premises and foreshore.</li> </ul>	Short term	Refer to Waterfront Redevelopment project
<b>Precinct Two: Hackett Street East</b>	<ul style="list-style-type: none"> <li>• Remove Japanese Pepper tree (weed species)</li> <li>• Reconfigure layout to increase bay numbers and create more functional RV, long vehicle and trailer bays</li> <li>• Re-surfacing and line marking</li> <li>• Landscaping</li> <li>• Signage</li> <li>• Creation of RV bays</li> </ul>	<ul style="list-style-type: none"> <li>• Existing RV waste station on site</li> <li>• Poorly utilised but is well-located with direct access to the Eastern Foreshore and the wider City Centre North precinct</li> </ul>	Medium term	\$10,000 design (26/27) \$150,000 delivery (27/28)
<b>Precinct Two: Mandurah Performing Arts Centre</b>	<ul style="list-style-type: none"> <li>• Review layout and access points</li> <li>• Re-surfacing and line marking, if required</li> <li>• Review lighting levels</li> <li>• Drainage improvements</li> <li>• Improve pedestrian connectivity between Mandjar Square and Marina, including sight lines</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that the layout is functional and efficient</li> <li>• Damage to existing surface due to tree roots</li> </ul>	Medium term	\$50,000 design (24/25) \$950,000 delivery (26/27)

## Pedestrian Connectivity

There are several connecting streets/routes that are particularly important in providing safe, pedestrian connectivity from all day car parks to key activity nodes.

Within Precinct One: City Centre Core, the key pedestrian routes from eastern car parks to the Eastern Foreshore are:

- Barracks Lane
- Smart Street Mall
- Tuckey Street, and
- Pedestrian crossings across Pinjarra Road

Barracks Lane forms an important link between the precincts' primary all-day parking location (Mewburn) and the businesses located on the southern end of Mandurah Terrace. The orientation of businesses backing onto Barracks Lane creates dark areas with poor passive surveillance. Upgrades to this streetscape are essential to improve the general amenity.

Additionally, the existing on-street parking on Barracks Lane is not currently in the City's ownership. It is recommended that the land be ceded to the City of Mandurah and the road dedication process be pursued and completed as a priority, to enable the potential implementation of timed parking.

View corridors are important distant views of a key building, landmark or other amenity 'framed' by a gap in the surrounding buildings. In the Mandurah context, this is generally views through the City Centre to the water. These views corridors assist people to orientate themselves in an urban environment and to help them navigate through it.

Smart Street is an existing east-west pedestrianised route in the City Centre Core. Currently, the view corridor from Sutton Street to the Eastern Foreshore is impacted by the location of the Mewburn building. There is an opportunity to consider the relocation of the functions within the Mewburn Building to open up this important view corridor

Tuckey Street provides another important east-west route from all-day parking at Gibson Street car park to the Eastern Foreshore. This streetscape was upgraded in 2010 and 2011.

Pinjarra Road presents somewhat of a barrier from a pedestrian perspective, between the Leslie Street car park and the southern parts of the main City Centre Core. Pinjarra Road has been progressively upgraded from Mandurah Road in a westerly direction over the last five years. The upgrade of the western end represents the last stage of these upgrades, however the form and style of the improvements needs to reflect the change in urban form and to address the existing challenges in integrating both sides of this street.

For Precinct Two: City Centre North, the key pedestrian routes are:

- Hackett Street, and
- Routes through Mandurah Performing Arts Centre car park to the Mandurah Ocean Marina.

For Precinct Three: Western Foreshore, the key pedestrian routes are:

- From Western Foreshore South car park underneath the bridge, and
- From the Western Foreshore North car park, linking back to the play infrastructure and skate park, along the foreshore (water side).

Future upgrades to lighting and pedestrian path connectivity within the identified locations must be considered carefully to ensure optimum outcomes. This will occur through the implementation of the recommendations of the City Centre Master Plan, through scheduled renewals and upgrades of streetscapes and through the Western Foreshore Commercial site redevelopment.

The City of Mandurah continually strive to make access more inclusive. This includes considerations around wayfinding from accessible bays, accessible ablution blocks and key community infrastructure. When designing these places and spaces, it is important to consider access for all mobility needs, including for the visually impaired.



## Enforcement

The primary goal of compliance focused enforcement is to ensure residents and visitors are not over-staying and to encourage an efficient turnover of bays, to allow equal opportunity for all users. Although unpopular, it is essential that parking times are adhered to, to ensure that bay usage is efficient and longer-term users utilise areas outside high demand areas.

Enforcement is necessary when:

- Occupancy extends beyond signed restrictions
- Changes to parking restrictions occur within an activity centre
- Parking behaviour is creating safety issues

The City is planning for the provision of parking enforcement over a seven-day cycle. This can be achieved within current resources using existing licence plate recognition technology.

With high use on weekends, this is important to support local businesses. All revenue from parking infringements over the next three-year timeframe is proposed to be placed in a Reserve Fund, to be spent directly on the implementation of the short and medium-term recommendations of the City Centre Parking Plan and/or City Centre Master Plan.

In very high occupancy areas, the City has budgeted for the installation of in-ground parking sensors. These sensors allow enforcement without multiple attendances and allow data to be collected on bay occupancy.

## Paid Parking

Paid parking is an extremely effective way of changing parking behaviour as it can influence parking location, travel mode, travel time and parking duration. It is also an effective way to recognise the value of the most prime parking locations. Paid parking generally results in improved compliance and reductions in car use and traffic congestion, among other environmental benefits.

In Mandurah, there is currently no paid public parking and it is unlikely to be necessary to introduce paid parking, until such time as occupancy levels increase and other interventions, such as reduced permitted parking times, have been used. Current data suggests that there may be sufficient parking capacity in Mandurah to address current demand to 2033. However, paid parking should be considered amongst the suite of interventions that the City may utilise, at an appropriate time as the City Centre grows.

Paid parking can provide revenue to contribute towards the ongoing maintenance of parking infrastructure, but also for the long-term provision of decked parking, when necessary.

However, the introduction of paid parking should be carefully considered, as it may cause a 'spill-over' effect of pushing parking into adjacent non-paid residential areas. There is also a risk that paid parking can deter the community from using the City Centre, in preference to other retail centres (such as the Mandurah Forum), where parking is free.

Critical to the success of any future paid parking system is the need to ensure that the City Centre is supported by a rapid public transit network and the City Centre has reached an appropriate development scale to provide diversity in retail, employment, and leisure opportunities, all of which contribute to 'outweighing' the cost of paid parking. Feedback received through the City Centre Master Plan and Parking Plan engagement process is that efficient access by public transport is limited, from the surrounding suburbs to the City Centre.

Dynamic parking pricing is a method by which parking charges can be adjusted based on parking demand. Rates can be fixed during a specific time or day and can be raised during periods of peak occupancy and reduced during periods of low occupancy. This is a more responsive way to address parking demand and ensure appropriate bay turnover levels as it can be location and time specific. Prices can also be decreased to encourage more people to an under-utilised location, or they can be increased to free up some spaces in heavily utilised areas, where people are willing to pay for the convenience of parking 'at the front door'. Dynamic parking should be considered, should paid parking become a reality in the City Centre.

## Private Car Park Management

There are several private car parks within the City Centre that service specific businesses.

Parking restrictions within parking bays on private land are usually managed by the landowner or business owner, however, they can be managed by the City of Mandurah where there is an established parking agreement between the landowner and the City.

Several private parking agreements already exist within the City Centre, however, there is the potential for the City to provide a more consistent approach to private parking agreements and signage, to ensure that the signage includes the business name, parking time limit and the hours during which this time limit applies. It can also be a requirement of the agreement that bays are available for public use outside of business hours, to assist in delivering the overall goals for parking management in the City Centre. This presents an opportunity for both private businesses but also increases the efficiency of the use of the bays during the hours they are not required by that operator.

Encouraging existing businesses to allow their car bays to be utilised outside their normal business operating times is a positive way to increase parking provision levels, as additional capacity can be created where private businesses have parking that is unused at particular times of the day, or on weekends. At present there is inefficiency in the

utilisation of private parking which impacts the economic performance of the City Centre. A review of all existing parking agreements would provide an opportunity to improve consistency and to incorporate reciprocal arrangement considerations, where possible.

### Private Parking Ratios

Most local governments set minimum parking ratios (or requirements) for individual land uses in Local Planning Schemes, to ensure that the parking demand generated by a private development, for staff and customers, is internalised and accommodated on private land.

Ratios that require excessive off-street parking provision can contribute to several issues, including:

- underused parking bays in non-peak periods
- more traffic, air and noise pollution
- suboptimal built form and use of land, and
- the inflation of new development costs, which is passed on to customers, tenants and home buyers.

Conversely, parking ratios that are too low can lead to Local Governments having to fund increasing provision of public parking, to compensate for the overspill generated by private developments. Finding the correct balance and settings for the provision of private parking is therefore essential.

With the goal of reducing private car usage, maximum parking ratios can be introduced into the Local Planning Scheme, to provide a limit on the supply of parking. This should, to some extent, be contingent on the provision of convenient alternative transport options and end of trip facilities, to become viable for people to move from using their private vehicle to an alternative travel mode. Mandurah does not yet have this provision.

The City currently has contemporary planning provisions within the Local Planning Framework, with comparatively modest parking requirements for on-site parking provision. It is recommended that the parking requirements be reviewed to ensure that an appropriate balance is struck and that the approach remains fit for purpose moving forward. This does not necessarily mean that parking minimums will increase as excessive parking standards are counter-productive to achieving positive built form outcomes. Any future modifications to parking standards and ratios within the Local Planning Framework will be consistent with State Government requirements.





## Payment-in-lieu of Parking

Payment-in-lieu is a one-off fee paid to local governments by developers when the minimum parking ratios for their development cannot be met on-site, or where on-site provision is not desirable in terms of built form, traffic or pedestrian management. This fee is based on the cost to provide a parking bay using current land costs in the development and the construction costs to build the required parking.

These funds can be used to:

- improve existing parking infrastructure;
- invest in achieving other more active transport goals, and
- to develop additional parking infrastructure (such as at-grade and decked parking) in the longer term.

Payment-in-lieu cannot, however, be sought unless a Payment in lieu of Parking Plan (PILP) has been effected.

The preparation of a PILP should be prioritised, as it has the potential to generate funds that could be used to implement the actions of the CCMP and CCPP. This process would involve modification to the provisions of the Mandurah Strategic Centre Precinct Structure Plan.

There are currently funds held in Reserve which have been provided by developers within the City Centre precinct. These funds could be utilised on the implementation of the recommendations of the CCPP, once a PILP has been produced and adopted by Council.

## Provision of Other Bay Types

Public parking spaces can be allocated to a variety of specific uses including:

- Loading zones
- Accessible parking (ACROD)
- Taxi/On-Demand Transport parking
- Bus parking
- Motorcycle parking
- RV parking
- Set down/pick-up locations



The appropriate distribution across the City Centre, of these various types of parking is essential, to enable adequate access for servicing local businesses, prioritised access for those people utilising other modes than a private vehicle and to ensure sufficient accessibility to key activity nodes, for those that need it the most.

There are currently five, well-utilised loading zones throughout the City Centre, two on Mandurah Terrace (between Pinjarra Road and Tuckey Street), one within Mewburn car park, one within Eastern Foreshore North car park and one on Barracks Lane adjacent to Brighton Plaza.

It is recommended that the existing taxi rank on Tuckey Street be converted to a combined taxi rank/loading zone. This location is currently under-used by taxis but is used extensively for loading and for vehicles awaiting access to the adjacent Woolworths loading dock.

Existing locations with the most ACROD bays are Mandurah Performing Arts Centre car park, Leslie Street car park and Mewburn car park. The locations with the least amount of ACROD bays are in the on and off-street car parks along Mandurah Terrace. It is recommended, therefore, that the priority locations for increasing the ACROD bay numbers are within the Eastern Foreshore Central and North car parks, and within the angled on-street bays along Mandurah Terrace, from Gibson to Cooper Streets.

Australian Standards for ACROD bays do not always allow for larger vehicles (minibuses) and increasingly, vehicles with rear access hydraulics which can't be used effectively in a standard bay. Longer bays are, therefore, required. One such bay has been provided on the western side of Mandurah Terrace between Pinjarra Road and Tuckey Street. There are opportunities to include additional provision for these longer than standard length bays, to enable use by these vehicles. The dual use of existing and proposed set down/pick up bays (in Eastern Foreshore South, Central and North car parks) for this purpose will also assist in creating increased provision and access for people with disabilities.



The need to protect these longer rear access ACROD bays is recognised. Signage can be incorporated to encourage standard ACROD bays users to use the existing standard ACROD bays provided, leaving the longer rear access bays available for this specific type of vehicle.

There are currently three taxi/on demand transport bays throughout the City Centre, at Mandurah Terrace (between Pinjarra Road and Tuckey Street), on Tuckey Street (adjacent to the northern elevation of Woolworths) and one on Ormsby Terrace. These taxi/on-demand transport bays can serve a dual purpose of providing additional capacity for loading zones, subject to appropriate signage, as can the existing and proposed set-down/pick-up zones also.

Parking for buses/long vehicles is currently available on Mandurah Terrace, adjacent to the Civic Centre. There is an opportunity for Hackett Street East car park to service this function and also Western Foreshore South car park, for use in association with a set down/pick up zone on the Western Foreshore.

The distribution and quantity of Motorcycle parking in the City Centre is adequate, however, it was highlighted through the consultation process, that consolidating several motorcycle bays together would support collective group riding and enhance the safety of motorcycles. Whilst this is acknowledged as desirable, it is considered that a review of the provisions within the Parking and Parking Facilities Local Law 2015 is the best mechanism to allow multiple motorbikes to find parking in the City Centre, through allowing multiple motorbikes to be parked together in car parking bays. This has the benefit of enabling a variety of locations across the City Centre to be used for this purpose, instead of identifying one specific location.

Parking for recreational vehicles (RV) is currently serviced from Hackett Street East, with an existing dump point and water available. There is an opportunity to reconfigure the layout of this car park to improve circulation and provide signage to maximise the use of these facilities.

The addition of the high-quality recreational equipment and proposed commercial offering on the Western Foreshore presents an opportunity for this precinct to increasingly be a destination for people with trailers, caravans and RVs, with good connections to the regional road network. To maximise its attraction providing for larger vehicles in this precinct, provision should also be made for RV/trailer parking at Western Foreshore South car park, to effectively 'book end' north and south of the City Centre.

There are currently three existing set down/pick up areas, one in Eastern Foreshore South car park, one on Mandurah Terrace and one in Mandurah Performing Arts Centre car park. In accordance with the need to increase bay turnover in high demand locations and the incremental approach of progressively tightening timed parking arrangements, the introduction of additional pick up and set down bays in high demand locations would be beneficial. These bays enable drivers to drop off and pick up passengers and belongings close to high demand locations, and then park in long stay car parking within a five minute walk. Recommended locations for these bays are Eastern Foreshore Central, Eastern Foreshore North and the Western Foreshore.



## Peak Period and Event Parking

It is evident during large public events, and on occasional weekends during summer and at Easter, that there is insufficient parking supply to meet demand. Parking for these short-term events cannot be provided for on a permanent basis but must be well managed. Efforts are currently made to prepare for these peak periods by communicating parking options ahead of any event, on a case by case basis.

There is an opportunity to prepare for this on a more formalised basis, to enhance the experience of locals and visitors, through the preparation of a Peak Period Overflow and Events Parking Plan. Temporary locations should be identified that can accommodate overspill parking and alternative travel modes and/or shuttle bus services considered.

With improved permanent and temporary signage and appropriate communications, suitable locations for overflow parking provision during peak periods could be opened, to cater for the increased demand. Suitable locations could include Nell Regan site, Hackett Street and Hall Park or sites further out of the City Centre, including John Tonkin College and/or the decked car parking at the train station.

## Additional At-Grade Parking Provision

Twenty five percent of the City Centre public parking supply is located on City owned, freehold land, not including car parks located on reserved land. As mentioned previously, the City of Mandurah's Property Strategy identifies certain sites which have been earmarked to assist in the future economic development of the City, a number of which are currently used for public parking in the interim.

The development over time of these sites will inevitably present fluctuations in parking demand and supply, through the reduction in available parking (supply) when sites are developed and also the increase in need (demand) after development of these lots generate additional visitation to the City Centre. This double impact could potentially result in an under-supply of public parking for certain

periods, which would need to be carefully considered through the proposed intervention matrix and managed priority of sites.

Changes to the supply and location of parking are appropriate in the continued maturity and development of the City Centre. A balance should be sought between the continued provision of parking and the stimulation of Mandurah's economy, employment generation through development and investment in the City Centre and the conversion of the City's vacant freehold sites to more productive uses.

The recommendations of the Parking Plan aim to strike this balance. In the meantime, the City will continue to advocate for improvements in the provision of public transport and will ensure that developers give due regard to the parking needs of their developments through the Local Planning Framework.

Precinct One, City Centre Core, is the precinct where fluctuations in demand and supply have the potential to have a negative effect on economic activity. There is a desire, therefore, to retain an element of public parking at Mewburn, within any potential re-development of the site, to ensure the continued provision of public parking in this central location.

The Mandurah Strategic Centre Precinct Structure Plan requires that any redevelopment of the Mewburn site should aim to provide a similar amount of parking and open space to that which currently exists.

The City currently leases land to provide additional City Centre parking. Given current parking occupancy rates, these commercial arrangements should be reviewed as they come up to assess their cost/benefit.

The provision of too much at-grade car parking can negatively impact on the urban form by dissecting spaces, disconnecting pedestrians from key attractions and creating large voids of underutilised space. Investment in the provision of additional off-street parking facilities should, therefore, only be considered when the levels of service

for parking are not being met, despite implementation of a range of parking management measures. This may occur sooner (or later) dependent on several factors such as the City's growth, or the sale or re-development of existing City owned freehold land that is currently used for parking.

Given the current occupancy levels of the City's existing parking, additional provision is considered a longer-term strategy. As the availability of land within the City Centre becomes more constrained, and consequently land values increase, the provision of a supply of land for additional at grade parking becomes more important. Targeted lots have been identified in the City's Property Strategy (Acquisitions), for this purpose. These lots will provide long-term protection of adequate at-grade public parking provision, should other freehold parcels be developed, and a multi-deck parking option remains unviable. The City of Mandurah has a City Centre Acquisition Reserve in order to be in a position to act on appropriate land acquisitions, as and when opportunities arise.

Notwithstanding the above, there are several existing committed projects that will provide additional at-grade, public provision of parking and will delay any further provision to the long-term, in accordance with the intervention matrix. These include locations at Sutton Farm and on the Western Foreshore, in both on and off-street provision.

The additional parking in these locations will address the likely increase in demand for parking due to the continued development of the Western Foreshore Leisure Precinct. It will also provide supplementary parking to service the southern end of the City Centre Core Precinct, given the safe and direct pedestrian experience currently provided for on the bridge.

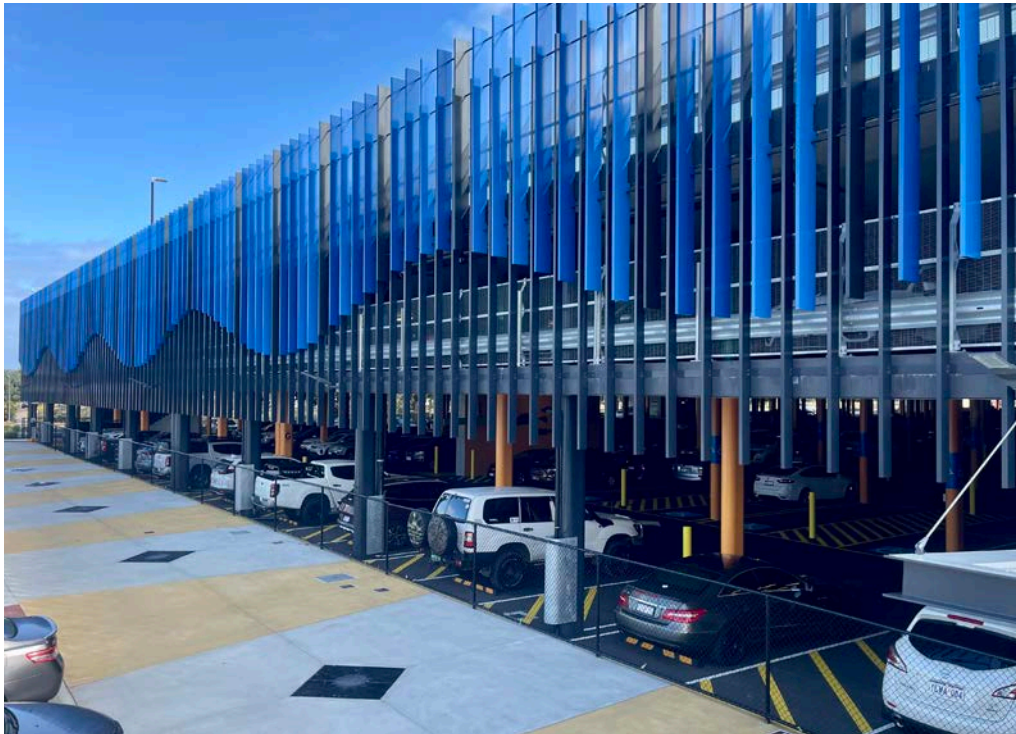
On the Western Foreshore there is adequate space available to increase the provision of parking without impacting its amenity or use as an events facility, if designed in smaller pockets to ensure that parking does not dominate the space. There is also significant opportunity to increase the verge bays, potentially in a staged

approach, initially on the grass and formalised over time. Whilst not additional provision as such, City of Mandurah Administration building car park in Precinct Two, currently provides 77 parking bays which could be used during evenings and weekends to provide additional parking supply. This would require some simple changes to incorporate appropriate signage but would greatly assist at peak times.

In the longer-term and/or upon upgrade or renewal of existing streetscapes, there are opportunities for additional on-street parking provision within Precinct Two: City Centre North, within the Cooper Street and Sholl Street (between Cooper and Peel Streets). The implementation of additional on-street provision in these locations may be contingent upon one or more of the following occurring:

- The potential development of private land on corner of Mandurah Terrace/Cooper Street which currently provides overspill parking
- Average peak occupancy levels in the City Centre North precinct increasing beyond 85 percent consistently during summer peak periods
- The potential development of Hackett Street West car park





## Decked Parking

Consolidated parking structures can provide a parking solution where demand is high in heavily utilised, dense, urban areas. Decked parking can result in a more efficient use of available land, however, they are costly to build, not only in terms of land value costs but also in construction and ongoing maintenance costs. Generally, the viability of decked parking is contingent on a paid parking model, as the costs associated with it would have to be funded through a user pays arrangement, within a reasonable pay-back period.

Decked parking would not therefore be feasible without the prior introduction of paid parking within Mandurah, as any decked facility would be unlikely to be used, if parking remained free and plentiful elsewhere.

The construction of decked parking should be deemed as a last resort, after all other parking measures have been exhausted and

proved unsuccessful in restraining parking demand and encouraging transport mode shift. The guiding principle is to manage the existing parking infrastructure more efficiently in response to increasing demand, through the intervention matrix.

Notwithstanding the above, there may be a time as the City grows, when land availability within the City Centre becomes more constrained and consequently land values increase, when decked parking may be viable. It is, therefore, important to ensure that future planning for the potential location for decked parking is considered.

Currently, based on existing development patterns within the City Centre, appropriate locations for decked parking would be Mewburn car park, potentially within a consolidated, mixed-use re-development of this site, as a central location within the City Centre Core.

For the City Centre North and Marina precincts, Mandurah Performing Arts Centre and Vivaldi drive car parks are suitably located.

Any multi-deck car park design must consider issues such as their future adaptability should demand not be as strong as predicted. This can be done through higher-than-normal floor to ceiling heights, ensuring floorplates are flat and making the ramps external or isolated from the main structure. While it may sound fanciful for a car park to be repurposed, if the basic structure has the correct dimensions, then there is no reason why it couldn't be possible.

Many buildings are adaptable, but for car parking structures to be adaptable, this must be designed in from the start.

It will be important to continually monitor and review the viability of decked parking, based on objective data from occupancy monitoring and updated costing analysis.

However, it is acknowledged that decked parking will not form part of the required parking mix in the next five to 10 years. The requirement for a desktop review at five years and full review at 10 years of the CCPP will ensure regular consideration is undertaken.

## 5. Intervention Matrix

In summary:

- growth is happening
- there are ways to reduce parking demand
- there are ways to better manage our existing parking to enable existing capacity to be better utilised, and
- there are options to introduce various interventions measures, as and when average parking occupancy increases in the longer term

The Intervention Matrix as outlined in **Figure 9** details the specific actions that will be undertaken, at specific trigger points. The successful operation of the intervention matrix relies upon regular and ongoing analysis of the parking environment.

In order to maintain an understanding of usage patterns and trends of the existing parking environment with the City Centre, annual parking occupancy surveys are required. This data is essential to identify priority areas for decision-making around parking management and to identify when intervention triggers have been reached.

Parking technology and licence plate recognition technology are mechanisms available that can be used effectively for this purpose and manual occupancy surveys can also be undertaken to supplement the data collection, or where the technology is not currently operational.

Importantly, bay counting technology can be used to provide real time updates to visitors about vacancies, through website, app and signage.

Data on occupancy levels and turnover can be gathered using a combination of parking sensors, CCTV and parking surveys. This data needs to be recorded and analysed before changes are made to parking and then assessed against once changes are made, to evaluate the success, or otherwise, of the action. A review of the existing methodology and infrastructure required to achieve this, is required.

To assist, it is recommended that a trial of 100 in-ground sensors be installed in high demand car bays. This will enable the assessment of their utility from a compliance perspective (in increasing the turnover of bays) and in association with a parking app, with a view to expansion if successful.

In addition to the intervention matrix, a clear, prioritised list of short, medium and long-term recommendations has also been prepared to detail the implementation strategy for the CCPP.

Actions have been categorised into what are considered to be 'quick wins' (**Refer Figure 10**), where the City can provide sufficient resources to implement these actions within the current budget baseline, and then a series of short (one to two years), medium (three to four years) and long-term (five+ years) recommendations (**Refer Figure 11**).

Figure 9 Intervention Matrix

## Proposed Interventions

1	Ongoing monitoring of occupancy levels Regular enforcement of parking restrictions
2	Steadily tighten timed parking restrictions
3	Develop additional at-grade on and off-street parking provision currently committed
4	Acquisition of identified additional freehold land consistent with Property Strategy
5	Develop additional available at-grade parking identified in the CCPP for longer term provision
6	Introduce Paid Parking
7	Raise price of paid parking Dynamic parking pricing
8	Construct decked car park

## Proposed Triggers

When average peak occupancy is less than 85%

When average peak occupancy exceeds 85% consistently during December - February

**Figure 10 Quick Wins**

Within current budget cycle



All Timed Parking Arrangement Changes



Additional RV and trailer bay locations



Naming and Signage of 17 Off-Street car parks



Creation of loading zone in western end of Barracks Lane



Integration of car parks into GPS systems



Changes to Taxi rank on Tuckey Street to incorporate loading zone



Installation of 100 in-ground sensors initially



Signage for City of Mandurah Administration Building car park to enable use outside of office hours



Changes to increase ACROD bay numbers



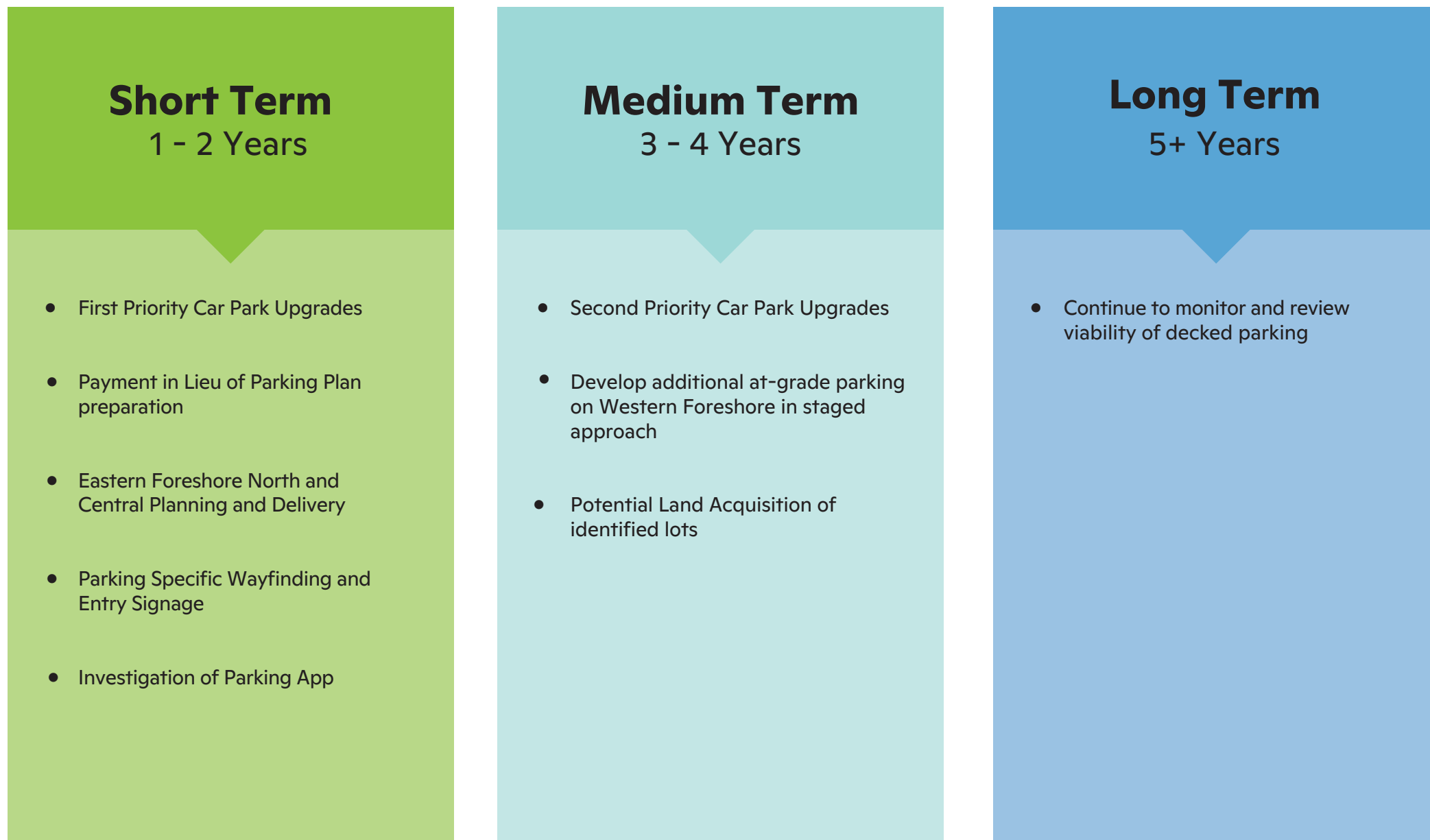
Prepare Peak Period Overflow and Events Parking Plan



Review motorcycle parking in the City Centre



**Figure 11 Staged Implementation and Recommendations**



# 6. Implementation

## 6.1 Actions and Recommendations

The range of actions within the City Centre Parking Plan will require sustained effort and cross-functional work to ensure delivery, as outlined in **Table 4** and **Plan 3**.

A key outcome is that an internal City Centre Parking Plan Implementation Group ('Implementation Group') is established, to lead the delivery of the CCPP actions including:

- budget allocation through the Long-Term Financial Plan
- undertake ongoing annual monitoring of occupancy levels (during summer period for all four precincts), and
- report on progress to Council

Numerous lower priority actions may be implemented through the regular scheduled renewals asset management process, whilst other, higher priority actions will require sustained funding through direct budgeting, and/or in combination with other sources.

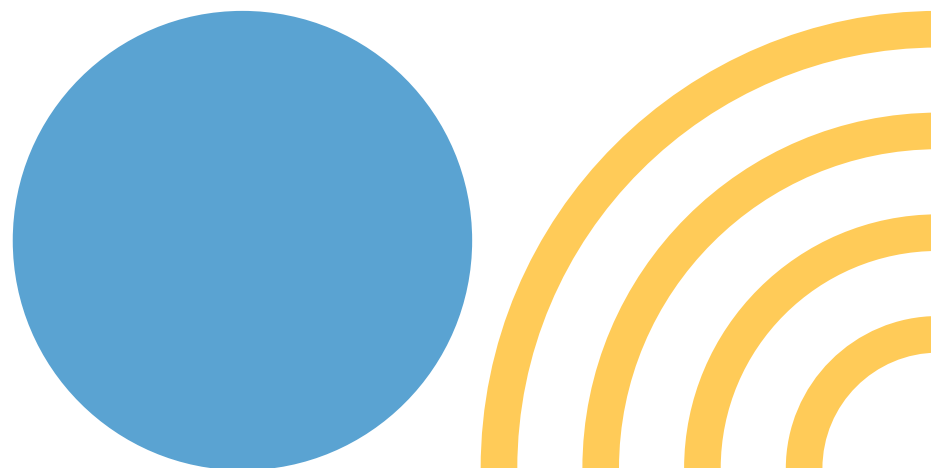
## 6.2 Funding Sources

There are a range of funding sources available for the implementation of the actions of the CCPP, as follows:

- Existing operational budget within Long Term Financial Plan
- Additions to the Long-Term Financial Plan
- Grant Funding and Advocacy
- City Brand – Aspiration Campaigns by attracting Private Investment
- Existing Cash in Lieu Reserve Funds
- Future Cash in Lieu Contributions
- City Centre Parking Infringement Revenue, and
- Renewals

Additionally, there are currently funds held in Reserve which have been provided within the City Centre precinct.

These funds could be utilised on the implementation of the recommendations of the CCPP, once a Payment in Lieu of Parking Plan has been developed.



## Parking Plan 3 Recommendations

New or Upgraded Off Street Parking

New or Upgraded On Street Parking

1 Hour Parking

2 Hour Parking

3 Hour Parking

4 Hour Parking

All Day Parking

Parking Specific Wayfinding Signage



**Table 4 Implementation Table**

Action 1: Wayfinding								
Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
1.1 Update all Car Park Entry Signage. Identify opportunities to direct people to alternative parking locations	Seventeen (17) off-street car parks	Subject to consideration at next LTFP Review	\$20,000	-	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	80	-	-	-	-	Support: Corporate Communications; Traffic Maintenance
1.2 GPS Integration of car park locations (such as Google Maps/Apple Maps) to ensure online wayfinding	Seventeen (17) off-street car parks	Within existing operating budget	-	-	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	5	-	-	-	-	
1.3 Investigate the development of a Parking App	Use of data that can be linked to sensors, loop systems or other counting technology to provide real time data on parking availability	Subject to consideration at next LTFP Review	-	-	-	-	\$10,000	Lead: Development and Compliance
		Internal staff resources (est. hours required)	-	-	-	-	50	

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
1.4 Implement parking specific wayfinding signage, as part of wider wayfinding strategy, incorporating art into signage	Intersections of: <ul style="list-style-type: none"> <li>Sutton Street/Mandurah Terrace</li> <li>Peel Street/Sutton Street</li> <li>Pinjarra Road/Sutton Street</li> <li>Mandurah Terrace (multiple)</li> <li>Pinjarra Road/Old Coast Road/Mary Street</li> </ul>	Subject to consideration at next LTFP Review	-	\$50,000	\$50,000	-	-	Lead: Transform Mandurah – City Centre
		Internal staff resources (est. hours required)	-	100	-	-	-	Support: Strategic Planning and Urban Design; Corporate Communications; Traffic Maintenance
1.5 Update and improve City Centre parking collateral material to ensure details of all accessible parking infrastructure is included	To assist in the promotion of available accessible parking options	Subject to consideration at next LTFP Review	\$15,000	-	-	-	-	Lead: Ranger Services
		Internal staff resources (est. hours required)	30	-	-	-	-	Support: Corporate Communications; Community Sector Projects
1.6 Prepare a Peak Period Overflow and Events Parking Plan & Implementation		Subject to consideration at next LTFP Review	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	Lead: Festivals and Events
		Internal staff resources (est. hours required)	20	20	20	20	20	



## Action 2: Timed parking

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
2.1 Introduce Timed Restrictions on Sundays and public holidays and ensure consistency in applicable times and days	Updating of all signage at all public on and off-street parking bays. Includes a modification to all timed parking restrictions to cease at 5pm instead of 6 pm to support staff safety.	Subject to consideration at next LTFP Review	\$20,000	-	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	125	-	-	-	-	Support: Traffic Maintenance; Rangers
2.2 Ongoing implementation of changes to timed parking arrangements	Incrementally on an 'as needed' basis, or when occupancy levels require.	Within existing operating budget	-	-	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	-	-	-	-	-	Support: Traffic Maintenance
2.3 Change a portion of Mewburn car park from four hour parking to All Day parking	Mewburn car park	As per action 2.1		-	-	-	-	As Action 2.1
		Internal staff resources (est. hours required)	Included in Action 2.1	-	-	-	-	

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
2.4 Provide five x shorter timed bays (30 minutes) - northern strip of bays	Eastern Foreshore South	As per action 2.1	Included in Action 2.1	-	-	-	-	As Action 2.1
		Internal staff resources (est. hours required)		-	-	-	-	
2.5 Provide two additional short-term bays in this location. Change existing 15 minute bays to 30 minute bays.	Eastern Foreshore Central	As per action 2.1	Included in Action 2.1	-	-	-	-	As Action 2.1
		Internal staff resources (est. hours required)		-	-	-	-	
2.6 Change from four hour parking to three hour timed parking	Mandurah Terrace (west side - Gibson Street to Hackett Street)	As per action 2.1	Included in Action 2.1	-	-	-	-	As Action 2.1
		Internal staff resources (est. hours required)		-	-	-	-	
2.7 Change from three hour parking to two hour parking	Eastern Foreshore Central; Eastern Foreshore North	Within existing operating budget		To be undertaken in line with Waterfront Redevelopment works				Lead: Project Management
		Internal staff resources (est. hours required)						Support: Traffic Maintenance





## Action 3: Staged Program for the Upgrade of Existing Car Parks

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
3.1 Detailed design for upgrade to Mewburn car park	Mewburn car park	Within existing operating budget	\$50,000	-	-	-	-	Lead: Technical Services
		Internal staff resources (est. hours required)	50	-	-	-	-	
3.2 Delivery of Mewburn car park upgrade works	Mewburn car park	From existing Cash-in-Lieu Reserve and Subject to consideration at next LTFP Review	-	\$1M	\$1M	-	-	Lead: City Works
3.3 Detailed design for upgrade to Eastern Foreshore Central car park	Eastern Foreshore Central car park	Within existing operating budget	To be undertaken in line with Waterfront Redevelopment works					Lead: Project Management; City Works
3.4 Delivery of Eastern Foreshore Central upgrade works	Eastern Foreshore Central car park	Within existing operating budget		To be undertaken in line with Waterfront Redevelopment works				Lead: Project Management; City Works
3.5 Detailed design for upgrade to Eastern Foreshore North car park	Eastern Foreshore North car park	Within existing operating budget	To be undertaken in line with Waterfront Redevelopment works					Lead: Project Management; City Works

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
3.6 Delivery of Eastern Foreshore North car park upgrade works	Eastern Foreshore North car park	Within existing operating budget						Lead: Project Management; City Works
3.7 Detailed design for upgrade to Hackett Street East car park	Hackett Street East car park	Subject to consideration at next LTFP Review	-	-	\$10,000	-	-	Lead: Technical Services
		Internal staff resources (est. hours required)	-	-	50	-	-	
3.8 Delivery of Hackett Street East car park upgrade works	Hackett Street East car park	Subject to consideration at next LTFP Review	-	-	-	\$150,000	-	Lead: City Works
3.8 Detailed design for upgrade to MPAC/Seniors Centre car park	MPAC/Seniors Centre car park	Within existing operating budget	\$50,000	-	-	-	-	Lead: Technical Services
		Internal staff resources (est. hours required)	100	-	-	-	-	
3.9 Delivery of MPAC/Seniors car park upgrade works	MPAC/Seniors Centre car park	Subject to consideration at next LTFP Review	-	-	\$950,000	-	-	Lead: City Works



## Action 4: Upgrades to Existing Streetscapes

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
4.1 Design and delivery of streetscape upgrades to consider shade, footpaths, formalisation of on-street parking as an implementation of the City Centre Streetscape Concept Plan (see City Centre Master Plan Action M1.1)	1. Barracks Lane 2. Sholl Street (north of Gibson Street) 3. Cooper Street 4. Hackett Street	Subject to consideration at next LTFP Review	-	-	As per City Centre Master Plan Implementation			Lead: Strategic Planning and Urban Design
		Internal staff resources (est. hours required)	-	-	-	-	-	Support: Technical Services
4.2 Review existing land tenure along southern side of Barracks Lane	Enable one hour timed parking to be implemented in the on-street bays	Within existing operating budget	-	-	-	-	-	Lead: Strategic Planning and Urban Design
		Internal staff resources (est. hours required)	-	20	-	-	-	Support: Legal and Property Services

## Action 5: Provision of Other Bay Types

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
5.1 Convert existing taxi rank to combined taxi rank / loading zone	Tuckey Street	Within existing operating budget	\$300	-	-	-	-	Lead: Traffic Maintenance
		Internal staff resources (est. hours required)	4	-	-	-	-	
5.2 Increase ACROD bay numbers by converting four x standard bays	Eastern Foreshore Central; Eastern Foreshore North; Western Foreshore	Within existing operating budget	-	To be undertaken in line with Waterfront Redevelopment works		-	-	Lead: Project Management; Support: Traffic Maintenance
		Internal staff resources (est. hours required)	-	-	-	-	-	
5.3 Provide four x RV and Caravan Parking Bays	Western Foreshore South car park	Within existing operating budget	-	-	\$4000	-	-	Lead: Traffic Maintenance; City Works
		Internal staff resources (est. hours required)	-	-	20	-	-	
5.4 Create additional set down/pick up areas	Eastern Foreshore Central; Eastern Foreshore North; Western Foreshore	Within existing operating budget	-	To be undertaken in line with Waterfront Redevelopment works		-	-	Lead: Project Management; Traffic Maintenance
			-			-	-	

## Action 6: Staged Program for Provision of Additional At-Grade Parking

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
6.1 Acquisition of lots for the provision of additional at-grade, off-street parking provision	As identified in the City's Property Strategy (Acquisitions)	City Centre Acquisition Reserve	To be determined based on availability and market rate					Lead: Strategic Planning and Urban Design
		Internal staff resources (est. hours required)	Ongoing					Support: Legal and Property Services; Statutory Planning and Lands
6.2 Design and delivery of on-street parking as part of streetscape upgrade works in action 4.1	<ul style="list-style-type: none"> <li>Sholl Street</li> <li>Cooper Street</li> <li>Hackett Street</li> </ul>	Subject to consideration at next LTFP Review	-	-	Included in Action 4.1		Lead: Technical Services; City Works	
6.3 Design and delivery of on and off-street parking to service the Western Foreshore Leisure Precinct	Western Foreshore	Subject to consideration at next LTFP Review	-	\$720,000	\$825,000	-	-	Lead: City Works
6.4 Design and Delivery of on and off-street parking in association with Sutton Farm development	Sutton Farm	Within existing operating budget	\$770,000	-	-	-	-	Lead: Technical Services
								Support: City Works





## Action 7: Ongoing Monitoring

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
7.1 Install in-ground sensors in car bays (approx. 100 bays) as a trial	Eastern Foreshore South; Eastern Foreshore Central; Mandurah Terrace (between Pinjarra Road and Gibson Street)	Within existing operating budget	\$40,000	-	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	30	-	-	-	-	Support: Systems and Projects
7.2 Review existing infrastructure used for parking bay occupancy monitoring. Assess the utility of various options in association with a parking app	All on and off-street public bays	Subject to consideration at next LTFP Review	-	\$20,000	-	-	-	Lead: Development and Compliance
		Internal staff resources (est. hours required)	-	30	-	-	-	Support: Systems and Projects

## Action 8: Strategic Recommendations

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
<b>8.1</b> Payment in Lieu of Parking Plan Preparation and Implementation	As required by the Planning and Development (Local Planning Schemes) Regulations 2015	Within existing operating budget	-	-	-	-	-	Strategic Planning and Urban Design
		Internal staff resources (est. hours required)	100	-	-	-	-	
<b>8.2</b> Direct revenue from parking infringements to Reserve Fund for three years	Enable the money to be spent directly on the implementation of the short-term actions	Re-directed revenue	\$192,000	\$192,000	\$192,000	-	-	Financial Services; Rangers Services
		Internal staff resources (est. hours required)	-	-	-	-	-	
<b>8.3</b> Consolidate public parking on City owned or Crown land (Contingent on Mewburn car park upgrades)	Reduce expenditure on leasing land for public parking at commercial rates  Providing public parking on private land presents a risk to ongoing supply due to lack of control over future use	Within existing operating budget	-	-	-	-	-	Legal and Property Services
		Internal staff resources (est. hours required)	5	-	-	-	-	

Project / Initiatives	Location / Details	Funding Type	Year 1 (24/25)	Year 2 (25/26)	Year 3 (26/27)	Year 4 (27/28)	Year 5+ (28/29+)	Responsibility
<b>8.4</b> Monitor and review viability of decked parking	Based on objective data from occupancy monitoring and updated costing analysis	Within existing operating budget	-	-	-	-	-	Development and Compliance
		Internal staff resources (est. hours required)	-	-	-	-	10	
<b>8.5</b> Monitor and review the parking ratios within the Local Planning Framework (as part of Mandurah Strategic Centre Precinct Structure Plan project)	To ensure that they reflect contemporary practice and remain fit for purpose	Within existing operating budget	-	-	-	-	-	Strategic Planning and Urban Design
		Internal staff resources (est. hours required)	40	-	-	-	-	
<b>8.6</b> Review all existing parking agreements to improve consistency and incorporate reciprocal arrangement considerations, where possible	Over private land	Within existing operating budget	-	-	-	-	-	Rangers Services
		Internal staff resources (est. hours required)	40	-	-	-	-	
<b>8.7</b> Review the provisions of the Parking and Parking Facilities Local Law 2015 to allow multiple motorbikes to find parking in the City Centre	Through allowing multiple motorbikes to be parked together in car parking bays	Within existing operating budget	-	-	-	-	-	Development and Compliance
		Internal staff resources (est. hours required)	10	-	-	-	-	



**CITY OF  
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