City Centre Car Parking Strategy

City of MANDURAH

Final September 2011

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Executive Summary

The *City Centre Car Parking Strategy* forms a key element to achieving the aims of the *Mandurah Central Revitalisation Strategy* and the *Mandurah City Centre Precinct Plan* by planning for the rationalisation and consolidation of car parking and in providing a strategic framework in which to encourage a shift in commuter expectations and travel behaviours, in line with the sustainable growth and development of the City Centre.

The Strategy recognises 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. Furthermore, the Strategy acknowledges that the current expectations of private vehicle users to 'park at the door' of business or key destinations is not sustainable in the longer term and that greater consolidation and management of car parking is required.

An overview of current parking demand and behaviour provides a context under which the Strategy is prepared. The economic analysis undertaken by Pracsys on floorspace demand for the City Centre is then applied in determining anticipated future demand for car parking, which is projected at an additional 2 100 bays. Projected costs and potential funding in providing the additional bays is subsequently considered.

A range of strategies and actions to meet the anticipated car parking demand are identified, including the commitment of an annual budget toward public parking, the redevelopment of a long term integrated transport strategy, the preparation of a business plan for the introduction of a paid parking system, the implementation of a paid parking system, the identification and establishment of consolidated decked public parking facilities and the development and implementation of TravelSmart and public transport initiatives. Indicative timeframes are also specified for the range of actions. The Strategy concludes with defining the process required for implementation, monitoring and review of the Strategy and its associated recommendations.

The strategies and actions defined within the *City Centre Car Parking Strategy* are expected to facilitate the necessary shift towards more sustainable and integrated land use, specifically in relation to transport and access opportunities within the City Centre.

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City Centre Car Parking Strategy

City of MANDURAH

1. Introduction and Background

1.1 Purpose of the Strategy

As contemplated under the *Mandurah City Centre Precinct Plan*, the Mandurah City Centre is expected to experience increased density and redevelopment over time. As a result of this expected growth, the existing supply of car parking will need to increase.

An increase in car parking supply will however need to be consistent with the desired urban form outcome sought for the City Centre as defined under the *Mandurah City Centre Precinct Plan*, which seeks amongst a range of objectives, to reduce car dependency and increase pedestrian activation.

In line with this intent, the *Car Parking Strategy* seeks to facilitate sustainable car parking practices, in which the provision of car parking is not driven by user demand but rather is balanced against competing land uses, including an improved public transport network and accessibility for cyclists and pedestrians. The outcome of which is to reduce commuter travel times, assist in reducing greenhouse emissions and carbon footprints per capita and achieve a more robust and resilient city centre.

It is intended that the *City Centre Car Parking Strategy* will form a key component of an integrated transport strategy for Mandurah.

1.2 Objectives of the Strategy

The key objectives of the Mandurah City Centre Car Parking Strategy are:

- address demand management, not demand satisfaction;
- foster an environment of change in attitudes and past practices towards parking supply;
- accommodate the reasonable needs for car access;
- expand the role for alternative modes of transport to access the city centre; and
- facilitate the development of a City Centre which focuses on 'people access' rather than 'vehicle access'.

1.3 Key Outcomes

The key outcomes sought from these five objectives are;

- facilitate economic growth and development, and the desired urban form intent of the Mandurah City Centre;
- facilitate a more compact scale of development through the consolidation of car parking;
- encourage a modal shift in travel patterns from personal motor vehicle trips to public transport, cycling, walking and shared vehicle use;
- deliver necessary car parking infrastructure through at-grade on-street parking bays, decked parking facilities and the infrastructure required to encourage alternative modes of transport;
- to provide public car parking predominantly on the periphery of the City Centre to enable the freeing up of land in the core of the centre for more robust mixed-use development and to encourage the use of walking, cycling or public transport to access destinations;
- to provide public parking either on-street or within parking facilities that are located behind buildings or sleeved by development;
- introduce paid parking as a source of revenue for improving and maintaining paid car parking infrastructure;
- introduce way-finding signage and real-time information that will assist motorists in locating available parking in a more timely and cost efficient manner;
- introduce way-finding signage for alternative travel modes which will assist pedestrians and cyclists in improved accessibility within the city centre;

- provide resources and infrastructure (i.e. staff, parking systems) to continue to improve the
 effectiveness of the car parking system; and,
- in a broader sense, improve economic, social, environmental and public health outcomes by reducing the community's dependency on car travel in favour of sustainable transport alternatives.

1.4 Strategy Area

The *Car Parking Strategy* focuses on the central commercial, tourist and recreational area of Mandurah, described by the following sub-precincts:

- City Centre Precinct;
- Civic and Cultural Precinct;
- the key tourist / commercial areas within the Mandurah Ocean Marina;
- the southern-most portion of the Mandurah Terrace Precinct; and
- Hall Park / Western Foreshore, inclusive of the existing car park south of Mary Street, through to the northern most car park, directly south of the War Memorial.

For the purposes of the Strategy, this area is referred to as the 'Study Area', which is shown in **Figure 1** together with the sub-precincts prescribed above.



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Figure 1 - Study Area

Western Foreshore

City Centre

Civic and Cultural

1.5 Existing Planning Context

The following key documents have directly informed the preparation of the Strategy.

1.5.1 Directions 2031 and Beyond

Directions 2031 and Beyond is the highest level of strategic spatial planning for the Perth and Peel Regions and establishes a vision for the future growth of the Perth and Peel Regions.

The overarching vision of Directions 2031 is defined as:

"By 2031, Perth and Peel people will have created a world class liveable city; green, vibrant, more compact and accessible with a unique sense of place."

This vision is complemented by six key themes, one of which being an 'accessible city'. Notably *Directions 2031* establishes a range of strategies to facilitate an 'accessible city', these being;

- connect communities with jobs and service;
- improve the efficiency and effectiveness of public transport;
- encourage a shift to more sustainable transport modes;
- maximise the efficiency of road infrastructure;
- manage and reduce congestion;
- protect freight networks and the movement economy;
- consider parking in the overall transport picture;
- plan and develop urban corridors to accommodate medium-rise higher density housing development; and
- plan and develop transit oriented developments to accommodate a mixed use and mediumrise higher density housing development.

Directions 2031 seeks to reduce the growth of individual car use by encouraging changes in travel behaviour and supporting the creation of neighbourhoods and activity centres that are based on walking, cycling, and access to effective public transport services. The *Car Parking Strategy* incorporates the key policy provisions that underline the promotion of this modal shift.

Directions 2031 further recognises the importance of parking in terms of the careful management of broader accessibility objectives in relation to parking supply and demand.

The Strategy also acknowledges the need to determine the role of parking in relation to public transport, particularly in terms of parking impacts, modal choice and in reducing traffic congestion. The Strategy further acknowledges the Department of Planning's intention to undertake a metropolitan parking framework for key activity centres, which importantly will include the Mandurah City Centre (an identified 'Strategic Metropolitan Centre' under *Directions 2031*).

1.5.2 State Planning Policy 4.2 - Activity Centres for Perth and Peel

State Planning Policy 4.2 Activity Centres for Perth and Peel (SPP 4.2) establishes a State level framework for the planning and development of activity centres throughout the Perth and Peel Regions. Consistent with *Directions 2031*, Mandurah City Centre is identified as a 'Strategic Metropolitan Centre' under SPP4.2.

SPP4.2 outlines a range of broad planning requirements both for new and redeveloped activity centres and includes broad land uses, a hierarchy of activity centres, the location and function of centres, urban design criteria and the integration of activity centres with public transport.

Section 5.3.2 of SPP4.2 outlines general requirements in relation to traffic and parking within activity centres and states that centres should;

- take account of the need for access and parking priority accorded to different users and modes including public transport, freight/delivery, people with a disability, bicycles, pedestrians and private cars and balance competing user needs such as workers and visitors;
- promote an efficient supply of car parking by a suitable allocation of on-street, off-street public and shared parking including cash-in-lieu and reciprocal / shared use arrangements;
- prioritise access by different users and modes eg. central locations for short-stay parking with commuter and other long-stay parking near the edge of centres;

- enable most parking in higher-order centres to be supplied in the form of public or common user facilities, rather than reserved for a class of users eg. customers of a particular site or business; and
- identify necessary improvements to public transport, walking and cycling infrastructure and capital and recurrent service funding needs.

For land within the boundary of an activity centre, SPP4.2 specifies that as a rule, upper limits to car parking should be established with consideration of reciprocal and shared parking arrangements and the availability of on-street or other public parking.

The Policy provides the following upper limit parking provisions as a guide;

- 2 bays per 100 square metres for showrooms and offices and 4-5 bays per 100 square for shops;
- minimum parking may be required, however there should be some flexibility for proponents to provide less or no parking on-site and contribute cash-in-lieu towards facilities and services for common-use parking, public transport and alternative modes;
- parking facilities should be located, scaled, designed and landscaped so as to ensure the built form structure does not visually dominate frontages to streets or other public spaces and minimises disruption to the continuity of the urban form and pedestrian amenity within the walkable catchment.

For 'Strategic Metropolitan' and 'Specialised Centres', the Policy provides the following additional guidance:

- the location and management of parking supply should prioritise access between different user groups and specify targets (eg. short stay turnover, supply and management of service/delivery parking, compliance and an enforcement regime for public parking);
- base parking supply and management standards on reciprocal use and other efficiency opportunities, especially common-user parking facilities;
- ensure that the access, circulation and parking needs for all users including cyclists, motor cyclists, disability parking, service/delivery vehicles, public transport and essential services are catered for; and
- require a regulatory parking fee system that supports the efficient supply and use of parking and alternatives to private car use.

1.5.3 Mandurah Central Revitalisation Strategy

The *Mandurah City Centre Revitalisation Strategy* is aimed at stimulating employment generation and enterprise development through redevelopment and enhancement of the Mandurah City Centre.

The Revitalisation Strategy further emphasises the importance of safe, legible, attractive and pedestrian-friendly streets.

The key objectives of the Strategy are;

- redesign and plan the City Centre blocks to create a 32% commercial space for each block and thereby offering expanded employment and enterprise development opportunities;
- provide for 40 000 m² of additional retail floor space within the City Centre area and an additional 3 040 hectares of developable land through the redesign process;
- maximise the additional floor space to generate approximately 4 000 long term sustainable employment positions (full time and casual) following construction;
- provide 375 new (construction) jobs during the initial implementation process;
- expand the tourism industry to a conservative 5% that will translate into an estimated additional 200 sustainable jobs and the injection of \$5.7 million into the Peel Region economy;
- further develop the skills base in the Peel Region workforce through enhanced employment opportunities; and

 determine an indicative budget breakdown of costs associated with the final strategic plans, in association with the identification of realistic funding opportunities for capital works.

One of the key outcomes of the Revitalisation Strategy was a range of recommendations, which primarily involved the formulation of the following documents;

- Detailed Design Guidelines for each precinct within the study area;
- Comprehensive Car Parking Strategy;
- Streetscape and Open Space Manual;
- Cultural Strategy
- Economic Strategy for business and events; and the
- refinement of the Building Height Policy for the study area;

Relevant parking management proposals contained within the Revitalisation Strategy and directly applicable to the Car Parking Strategy are:

- possible new multi-decked parking station with residential units above and commercial/community/entertainment/office uses on the ground floor between the Cultural Centre and Ormsby Tce;
- Tuckey Street designed with wider footpath, new angled parking and special landscaping;
- Sutton Street to accommodate buses, cycle lanes, on-street parking and footpaths on both sides;
- Central parking area between Sholl Street and Sutton Street to be redesigned to incorporate a 'market square' decked parking station, new buildings around market square and upgrading of George Robinson Gardens.

1.5.4 Mandurah City Centre Parking Strategy (2005) Draft Report (unpublished)

In order to inform the preparation of a Car Parking Strategy for the City Centre as recommended by the *Mandurah Central Revitalisation Strategy*, in 2005 consultants ARRB Transport Research prepared a car parking report on behalf of the City of Mandurah.

The findings of the report acknowledged the need to move away from a 'predict and provide' approach to car parking, suggesting that an 'appropriate supply of parking may well be below the level of unconstrained demand'.

The report further recognised that in providing for the reasonable demands for car parking, the following key town planning and urban design requirements and issues should be considered:

- the special character and ambience of Mandurah as a growing focus for residents, workers, tourists and day-visitors;
- the location of Mandurah at the mouth of the Peel Inlet and its intended mix of residential, commercial and civic functions;
- broader, multi-modal options and targets for accessibility to, from, and within the City Centre;
- the need to design and locate major car parks in a manner that enhances the urban form, function and fabric of the Mandurah City Centre; and
- the desirability of developing decked parking facilities that integrate other land uses and activities, including commercial, retail, residential and other uses, if appropriate.

The report further made a number of recommendations which included the need to:

- implement shared parking opportunities;
- implement a paid parking management system;
- consolidate car parking facilities;
- identify strategies for the funding of car parking facilities; and
- identify potential decked car parking sites.

Further to recommending a number of future decked car parking sites, the report also provided economic justification for the provision of multi-level decked car parks, primarily due to the facilities being more cost effective to construct than at-grade parking once land values reach a specific value.

1.5.5 Data Collection & Audit of Parking Provisions in Perth Metropolitan Centres (Luxmoore Parking Consultants Report (2009))

In October 2009 Luxmoore Parking Consultants on behalf of the Department of Planning, prepared a report to establish an evidence base in which to formulate parking policy within key metropolitan activity centres. This research was used to inform policy in relation to the management of parking for key strategic activity centres, including the Mandurah City Centre.

The report identified a number of common issues which needed to be addressed across the key activity centres:

- There is a need to influence behaviour to significantly increase the proportion of employees who use alternative modes of travel to work. This will require precinct parking strategies to support the changes.
- The upgrade of public transport is essential to support this travel behaviour change.
- Funding for additional public transport is constrained. There is therefore a need to consider subsidies and user pay options to assist in funding specific additional public transport.
- The introduction of and/or increases in public pay parking will not only permit travel demand management and reduce the demand for long term parking in these centres, it can also assist the funding of public transport options.
- Employees, especially lower paid staff and shift workers, are particularly sensitive to market related parking fees especially as in many areas, upgraded public transport is unlikely to be available for some time after the new parking charges are implemented.
- The lag between the introduction of pay parking and the implementation of additional public transport options has the potential to increase traffic and parking overflow on the amenity of surrounding residential streets.

Of specific relevance to Mandurah, the report/audit further acknowledged that whilst there was currently an 'ample supply of parking spread throughout the city centre' there was a disproportionate use of existing car parking areas due to some locations being highly utilised whilst others were under-utilised.

Furthermore, the report acknowledged that due to the redevelopment of the City Centre and the Civic and Cultural Precinct area, an additional 5 400 public parking bays would be required to address the car parking needs for new development in both precincts.

It is relevant to acknowledge however that the additional bays determined by Luxmoore Parking Consultants, were based on a broader study area than provided for in this Strategy and were based on previous floorspace projections within the City Centre (which have since been reduced). In acknowledging these factors, the report's findings which are most relevant to the Study Area are as follows:

- A substantial reduction in the parking requirements, with office and retail requirements reduced by 50%. These assume that a high proportion (75% in the case of retail and office parking) is provided as public parking and is thus available for shared use, and the promotion of the use of public transport.
- The provision of additional on-street and off-street parking including the construction of several multi-level parking facilities. Long stay parking is to be at the periphery. The majority of car parking for the Civic and Cultural precinct is to be kept at the edges of the precinct.
- Public parking may be integrated into private development as a height and density bonus.
- Reduce the demand for additional car parking associated with the redevelopment of the City Centre and Civic and Cultural precincts. Achieve this by providing shared public parking for a high proportion of the additional supply and by reducing the on-site parking requirements in recognition of the reduction in demand resulting from shared parking plus increased use of public transport.
- Encourage cash-in-lieu and the provision of off-street parking in private developments to assist in funding the additional public parking facilities.

1.5.6 City of Mandurah Land Use Plans (Precinct Plans)

A range of Precinct and local structure plans apply over the Study Area;

- City Centre Precinct Plan;
- Mandurah Terrace Precinct Plan;
- Inner Mandurah Precinct Plan;
- Mandurah Ocean Marina Outline Development Plan;
- Peninsula Hotel Outline Development Plan; and
- Civic and Cultural Precinct Plan (draft).

In order to assist with determining development outcomes for the Study Area, a composite land use zoning plan has been prepared consistent with land use zonings of the relevant Precinct and local structure plans (as shown in **Figure 2**). Where a Precinct Plan has not been prepared, the relevant zoning from Council's Town Planning Scheme No 3 is applicable.

The *Mandurah City Centre Precinct Plan* was adopted for final approval by Council in November 2010 and is currently awaiting final approval by the Western Australian Planning Commission (WAPC). As with each of the plans listed above, once approved by the WAPC, the Mandurah City Centre Precinct Plan will guide land use development and the built form within the City Centre and provide planning guidelines and controls in regard to a range of precinct areas, land uses and built form, including vehicle parking and access.

It is the provisions of the *Mandurah City Centre Precinct Plan* that has primarily informed the preparation of the Mandurah City Centre Car Parking Strategy.

Section 2.2.5 of the Precinct Plan is of particular relevance to the Parking Strategy:

"In the City Centre, it is desirable to require reduced parking rates based on:

- a proportion of parking being provided as public parking and therefore available for reciprocal use. Reciprocal parking allows for the most efficient use of available bays whereby uses that have different periods of peak demand can utilise the same parking facilities; and
- promoting the use of public transport, particularly for the location where high density employment and housing is being promoted.

In addition to reduced parking rates, the Precinct Plan simplifies the cash in lieu payment provisions, which will be a contribution to public parking, and to provide a greater proportion of sites for development. Reduced parking rates are based on allowances for reciprocal use for parking in the Precinct Area for retail and commercial uses. Residential dwellings provide their entire parking requirement as private parking and therefore the potential for any reductions in this sector is limited.

The parking ratios to be provided have been prepared acknowledging current demands and car dependency within Mandurah, whilst attempting to provide development incentives by unlocking areas that would otherwise been allocated to parking within sites. Sometime in the future, maximum ratios may be introduced to ensure that car parking does not dominate development outcomes."

Further to the provision for car parking, the *Mandurah City Centre Precinct Plan* outlines the following key design requirements for car parking within the City Centre:

- security and lighting;
- traffic and pedestrian access;
- landscaping;
- disabled access;
- shelter;
- signage;
- bicycle parking and end of trip facilities; and
- integration with adjoining development.

1.6 Key Considerations in Preparing the Strategy

As supported by reports prepared by Luxmoore Parking Consultants (*Data Collection and Audit of Parking Provisions and Management in Perth Metropolitan Centres*) and ARRB Transport Research (*Mandurah City Centre Parking Strategy – Draft Report*), the provision and management of car parking should be regarded as an integral component of a transport system.

The planning challenge for the City is to provide sufficient parking to address mobility, access and economic needs whilst also balancing the spatially and economically limited availability of land for car parking purposes.

Importantly, the previous practice of 'predict and provide' is no longer appropriate or sustainable. For the City to achieve its vision of becoming a vibrant centre with diverse commercial, retail, entertainment and lifestyle opportunities for residents and visitors, it will need to encourage a thriving pedestrian environment, facilitated through strategies which encourage public and alternative travel modes and reduced car dependency within the City Centre.

As addressed under Section 1.5.2, SPP4.2 Activity Centres for Perth and Peel, provides a guide to upper car parking limits for activity centres. Importantly however, this guide applies to the entire hierarchy of centres (irrespective of whether the centre is a strategic centre or a neighbourhood' centre). With the City Centre's identification as a 'Strategic Metropolitan Centre' and a key focus of the City Centre being to enhance pedestrian activation and move away from a 'predict and provide' supply of car parking, the *Mandurah City Centre Precinct Plan* therefore appropriately defines car parking requirements which fall below the generic upper limit guide specified under SPP4.2. Furthermore, the car parking provisions established within the *City Centre Precinct Plan* are supported by ARRB Consulting in the study undertaken in 2005.

The Precinct Plan establishes minimum car parking provisions and not upper limit provisions, as encouraged under SPP4.2, primarily due to the current development status of the City Centre which does not reflect an appropriate development and density level to warrant the introduction of upper limits. As has been acknowledged within the *City Centre Precinct Plan* however, the City intends to review the car parking provisions in the future, with the intention to introduce upper limits, once it is deemed development / density is at an appropriate scale to benefit from capped car parking.

A comparison of the parking standards applied under the Precinct Plan and the SPP4.2 are reflected in **Table 1**.

Location	City Centre Precinct Plan (minimum requirements)	SPP4.2 Activity Centres Policy (upper limits)
Retail	3 bays per 100 m ²	4-5 bays per 100 m ²
Office	1 bay per 70 m² (approx 1.43 bays per 100 m²)	2 bays per 100 m ²

Table 1 Comparison of Parking Standards

In order to encourage sustainable car parking practices consistent with the intent of the *City Centre Precinct Plan* and SPP4.2 and to project the anticipated future supply of car parking required in order to meet future growth, the following key considerations have formed the basis of the Car Parking Strategy:

- apply the car parking requirements specified under the Mandurah City Centre Precinct Plan to determine projected future supply;
- maximise public parking opportunities on-street or within car parking facilities (at-grade behind buildings, or decked screened within development);
- ensure car parking strategies encourage efficient and effective utilisation of car parking bays;
- provide public car parking predominantly on the periphery of the City Centre which will
 ensure land within the core of the city centre is 'freed' up for more robust mixed-use
 development, and pedestrian activity is encouraged to access key destinations; and
- manage car parking to provide reasonable vehicle access into the city centre, 'access' does not however mean people should be able to park 'at the door' of businesses.



Strategic Plan Area

Figure 2 - Composite Zoning Plan

City Centre Car Parking Strategy

2. Parking in the City Centre (Supply, Demand & Requirements)

MANDURAH

2.1 Existing Car Parking

2.1.1 Existing Car Parking Supply

An audit of the existing car parking was undertaken for the Study Area. **Table 2** and **Table 3** provide an overall summary of the total supply of private and public parking within the Study Area and the number of on-street and off-site bays. **Figure 3** provides an overview of the major parking locations. **Table 4** provides a breakdown of the locations of public parking bays.

It is relevant to acknowledge these counts reflect existing parking provided for non-residential uses and as such, directly assist in determining future public parking requirements.

Appendix 2 provides the detailed audit on which Tables 2, 3 and 4 have been based.

Table 2 Summary of Total Parking Bays (Private / Public)

Location	Public Bays	Private Bays	Total Bays	% of Total by Precinct
Mandurah Terrace	7	371	378	7.8%
Mandurah Ocean Marina	846	63	909	18.8%
Civic and Cultural Precinct	512	105	617	12.8%
City Centre	905	1815	2720	56.2%
Western Foreshore	218	0	218	4.5%
Total	2488	2354	4842	
	51.38%	48.62%		

Table 3 Summary of Total Parking Bays (On-Street / On-Site)

Location	On Street	On Site	Total Bays	% of Precinct On Street
Mandurah Terrace	7	371	378	1.8%
Mandurah Ocean Marina	388	521	909	42.7%
Civic and Cultural Precinct	53	564	617	8.6%
City Centre	416	2304	2720	15.3%
Western Foreshore	0	218	218	-
Total	864	3978	4842	
	17.84%	82.16%		

Table 4 Summary of Public Parking Bays (On-Street / On-Site)

Location	On Street	On Site	Total Bays	% of Precinct On Street
Mandurah Terrace	7	0	7	100.00%
Mandurah Ocean Marina	388	458	846	45.86%
Civic and Cultural Precinct	53	459	512	10.35%
City Centre	416	489	905	45.96%
Western Foreshore	0	218	218	-
Total	864	1624	2488	
	34.73%	65.27%		



Public Car Parks (Station No.)







Figure 3 - Existing Parking

2.1.2 Existing Car Parking Occupancy

The audit of car parking within the study area determined that the existing car parking supply is largely development driven and in the most part, not efficiently utilised.

Although the public at-grade car park adjacent to Gloria Jeans and the on-street parking bays adjacent to the Commonwealth and ANZ banks (along Sholl and Tuckey Streets) are relatively well utilised (between 76 to 99% during the day), the vast majority of available car parking bays within the study area are underutilised during business hours, ranging in occupancy rates of between 26% to 75%.

It is relevant to acknowledge however that the western and eastern foreshores are both key destinations for the local community and visitors to the City, particularly during the weekends and peak holiday periods. During these periods public car parking within close proximity of key destinations and facilities are often at capacity. As growth continues within the City it is expected that increased pressure will also be placed on existing car parking locations within walking distance of the western and eastern foreshore. Furthermore, as commercial, retail and residential redevelopment occurs within the City Centre over time, continued pressure is expected to be placed on public car parks within walking distance of key destinations, particularly during business hours.

Importantly, existing car parking encroaches significantly into the core of the 'Retail / Main Street' and 'Central Employment' sub-precincts of the City Centre. Whilst the current location and provision of car parking provides motorists with an opportunity to park 'at the door' of key destinations, as redevelopment of the City Centre occurs, land values rise and pressure from competing land uses increases, this will become a less viable and sustainable option. As such, the future development of the City Centre as a commercially vibrant, pedestrian oriented environment will require the rationalisation and consolidation of car parking to ensure the highest and best use of land.

2.2 Determining Car Parking Demand

In order to determine the future car parking requirements for the Study Area, the anticipated floorspace demand analysis undertaken by economic consultants Pracsys, has been applied.

Table 5 Estimated Floorspace Demand

	Potential Floorspace (square metres / units)
Shop Retail	115 000
Other Retail	10 000
Office	60 000
Residential Dwellings (including tourist) (additional/redeveloped)	1850 units

Table 6 Minimum Parking Requirements Relative to Floorspace Demand

	Standard Parking Ratio
Shop Retail	3 bays per 100 m ²
Other Retail	3 bays per 100m ²
Office	1 bay per 70m ²
Residential Parking	1 bay per unit + 0.25 visitor bays per unit

It is relevant to acknowledge the Mandurah City Centre Precinct Plan requires all residential parking as private parking. Visitor parking for residential dwellings (@ 0.25 per dwelling) has been included in the calculation of demand for public car parking however, as this may be provided as on-street reciprocal parking.

Table 7 Total Anticipated Parking Demand

	Total Bays Required (Private / Public)	Potential Public Bays Required (should 75% of bays be provided off-site)
Shop Retail (of which lots greater than 1000 m ² are to provide 25% of parking on-site)	3450	2588
Other Retail (of which lots greater than 1000 m ² are to provide 25% of parking on-site)	300	225
Office (of which lots within the Central Employment Precinct are to provide 25% of parking on-site)	857	643
Residential Parking (of which visitor parking may be provided off-site)	1850 (residential bays)	462 (visitor off-site parking)
	6457	3918

2.3 Future Car Parking Supply

2.3.1 Key Principles

The parking provisions specified under the *City Centre Precinct Plan* have been prepared based on current demands and car dependency within Mandurah, whilst also attempting to provide development incentives by unlocking areas that would otherwise have been allocated to parking within sites. It is envisaged however that sometime in the future, maximum car parking ratios will replace minimum ratios to ensure that the provision of car parking does not hinder or restrict the ability to achieve good urban form or development outcomes for the City Centre.

2.3.2 Anticipated Car Parking Supply

In determining the anticipated future car parking supply a range of factors were considered, including the existing supply that is likely to be lost due to redevelopment, the proportion of additional bays required which are to be provided on-site and the resultant shortfall in public parking bays which will need to be met by the City.

Table 8 below provides a summary as to the way in which the anticipated car parking supply has been determined.

Table 8 Summary of Anticipated Car Parking Supply

	Parking Bays
Existing Supply	4 800
Potential Loss of Existing Supply through Redevelopment	- 3 000
Surplus / Buffer	1 800
Anticipated Demand (Rounding off of off-site bays as per Table 7)	- 3 900
Additional Bays to be Provided to Meet Anticipated Demand	2 100

Based on the justification provided within **Table 8**, it is projected that in order to meet the anticipated demand, the City will need to consider the provision of approximately **2 100** additional bays.

It should be acknowledged however that the additional bays anticipated is based on a 'worst case scenario' and *does not* consider the following factors which are likely to reduce demand into the future;

- landowners/developers providing more than the minimum car parking required on-site;
- future reductions in the provision of car parking as a result of the introduction of capped parking rates; and
- the introduction of rapid public transit network which is expected to encourage greater public transport use and less dependency on private vehicles.

2.3.2.1 Long Term Parking

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. Importantly however, the provision of well located, high amenity facilities is a key factor to ensure that the City Centre employment sector supports periphery parking, which includes ensuring sites are within 10 minutes walking distance of the key employment destinations and the pedestrian route is safe, attractive and direct.

Through creating a periphery of long-term parking locations, the pedestrian economy and local business 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 way-finding signage system to encourage a change in parking behaviour and break the existing 'parking at the door' expectation of commuters.

2.3.2.2 Short Term Parking

In contrast, short term parking should be prioritised in on-street locations and within the core of the inner city centre to accommodate short term visitors. Time restrictions for on-street parking should generally be in the range of 15 minutes to 2 hours and enforcement of vehicle turnover should be actively applied.

This short term on-street parking would however be on the proviso of sufficient and appropriately located public parking in long-term parking locations. Importantly, a pricing strategy and time restrictions should be used to direct people to the most appropriate parking location for their particular duration of stay.

2.3.3 Car Parking Design Requirements

AARB Transport Research advises the following land areas are required for the construction of an at-grade and a decked car parking bay;

- at-grade car park 27 square metres
- decked car park
 35 square metres

Due to the finite availability of land within the City Centre (including the opportunity for on-street parking) and the expected increased land values within the study area over time, the provision of at-grade parking becomes a less sustainable alternative, particularly in the longer term.

This is confirmed by ARRB Consulting who have advised that once land values exceed \$1 000 per square metre and a 300 bay / 3 level facility is provided, or where land values exceed \$850 per square metre and a 400 bay / 4 level facility is provided, the construction of a decked car parking facility becomes the more cost effective parking option, as multiple levels of bays may be provided over the same land parcel.

Based on these considerations, it is therefore important to ensure that sites of an appropriate land area and location are identified within the study area for potential decked car parking facilities.

In order to determine the minimum land area required for a decked car parking facility, the following formula has been applied;

• 35 m² x 100 bays (@ ground floor level) = 3 500 m²

The above formulae is based on the area required for a decked car parking bay, multiplied by the minimum critical number of bays / levels (300 bay / 3 level) required for a decked facility to be more cost effective than at-grade parking. Based on this formulae a minimum lot size requirement of **3 500 m2** is therefore required for the identification of potential decked car parking sites. Notably however, this minimum lot size does not consider;

- boundary setbacks (if required);
- the land area to be set aside for sleeved development; and
- the additional land area for construction of external walls, ramps and other internal / external building requirements.

Further to the minimum lot size requirements for a decked car parking site, ARRB Transport Research further identify a range of other key considerations in relation to both the identification and development of future decked car parking sites;

- decked sites should be strategically located, connected to final destinations and supportive of adjoining land uses;
- Council may need to acquire land, investigate land swaps and/or joint ventures for the purpose of developing future car parking facilities; and/or
- Council may need to investigate opportunities for the ceding of land by a developer as a requirement of a development or as a substitution for cash-in-lieu payment.

Whilst the advertised draft Strategy had identified privately owned sites, due to the reduced number of anticipated parking bays (as a result of reduced City Centre floorspace areas), the required number of bays will be adequately met through publicly owned sites (either owned by the Crown and managed by the City of Mandurah or owned by the City of Mandurah).

The City does not however underestimate the risk and potential income from the construction of decked car parking facilities and recognise that these are long-term projects that need multiple activity generators in order to be efficiently utilised and economically viable.

2.3.3.1 Decked Car Parking Facilities

Future public parking structures are most appropriately located in walking distance of several key destinations within the study area including the central employment and retail/main street precincts of the City Centre, the Mandurah Ocean Marina, the Civic and Cultural Precinct and the Mandurah Terrace Precinct.

It is expected that future decked car parking facilities will be at a minimum of 3 levels / 300 bays and at a maximum of 600 bays. This range in levels is based on the minimum number of levels determined as being cost effective (i.e. 300 bays / 3 levels) and to minimise traffic congestion and demand in and around individual sites.

The location, size and use of decked car parking facilities need to be carefully considered as these structures have the potential to impact on the surrounding amenity, road network and built form of the City Centre and broader study area.

Consistent with the intent of *State Planning Policy 4.2 - Activity Centres for Perth and Peel* and the urban form intent of the *Mandurah City Centre Precinct Plan*, all future decked car parking facilities are to be sleeved by mixed-use development.

In addition to the above considerations, **Table 9** provides the principles applied as key criteria in the determination of potential locations for decked car parking facilities:

Criterion	Description
Ownership	Crown Land or Council owned land is the preferred tenure for car parking. Private freehold land generally is subjected to market forces to consider the highest and best use of the land. Consideration to be given to land being ceded to Council, or acquisition of land, land swaps, joint ventures, etc.
Sustainability	The development of a car park station/structure will be consistent with the economic, environmental, community and governance objectives of Council.
Accessibility	The location is highly accessible from a legible road network for motorists and pedestrians. Consideration is given to its potential integration with multiple modes of transport. Location is consistent with maintaining expected traffic volumes and movements on road network. Location is connected to final destinations.
Public Transport Linkages	Location has potential for links and/or connections with public transport service routes.
Walking Catchment	Location is within 10 minutes walking distance to traffic generating uses. Preference is walking distance to high-traffic generating uses.
Capability	Location is physically capable of integrated development taking into account land characteristics.
Proposed Land Uses and Setting	Identification of land-use competition and consideration of surrounding land-uses in terms of appropriateness of the location.
Development Opportunities	Public / Private investment for development of structure.
Surrounding Development	Interface considerations in relation to surrounding land uses.
Duration of Stay	Identified for short-term (1 \rightarrow 2 hours) or Long-term (2-3 hours \rightarrow all day) parking.
User Pays	Site is suitably located for staff, resident and visitor paid parking opportunities.

2.3.4 Funding of Car Parking Facilities

Luxmoore Parking Consultants estimate the approximate cost of a decked car parking bay at **\$24 000**. This figure does not however, include the cost of providing the land.

Importantly, the cost of providing car parking should be a true and accurate representation of the actual economic outlays, including land costs. For estimation purposes, a figure of **\$40,000** per bay has therefore been applied in determining the potential costs in providing the anticipated car parking supply of the study area.

Notably, this figure and the estimated construction costs of providing decked car parking facilities is based on advice provided by ARRB Consulting in their draft report of 2005, and where commercial land is valued at 1300 - 3600 per m² and construction costs total 24000.

Table 10 Potential Costs in Providing Decked Parking

	Parking Bays
Anticipated Public Decked Parking Bays Required	2 100*#
Cost of Providing (@ \$40,000 per bay, inclusive of land)	\$84 million
Cash in Lieu Contributions (@ \$30,000 per bay)	\$63 million
Shortfall	\$21 million

* subject to all additional bays being constructed as decked car parking

number of bays do not consider factors which are likely to reduce anticipated demand including, the introduction of maximum car parking provisions, increased public transport servicing the City Centre, improved cycle/pedestrian access and landowners/developers providing greater than the minimum car parking requirements on-site.

2.3.4.1 Cash in Lieu Contributions

The *Mandurah City Centre Precinct Plan* acknowledges that the \$30 000 cash-in-lieu payment per bay is at a 'discounted rate from the actual cost' of the construction of a parking bay.

In order to reduce the anticipated costs in providing car parking, consideration should therefore be given to reviewing cash-in-lieu contributions specified under the Precinct Plan to ensure contributions reflect *actual* costs (including the market value of the land on which the parking would otherwise be provided). Doing so, will ensure funding by the City is minimised as much as possible.

2.3.4.2 Paid Parking

In addition to cash-in-lieu contributions by developers, the introduction of paid parking would further contribute to the funding of public car parking facilities.

ARRB Consultants highlight the following key elements to a successful paid parking management system;

- wherever possible, charge consumers directly rather than indirectly for parking;
- manage and price the most convenient parking spaces to favour priority users and charge higher rates and use shorter pricing periods, at more convenient parking places (e.g. onstreet spaces and parking near high parking demand areas);
- use variable fees that are higher for peak locations and peak times;
- improve fee payment options to make them more effective and convenient;
- avoid discounts for long-term parking leases (e.g. cheap monthly rates);
- consider the appropriateness of an escalating price structure in more convenient parking locations to encourage parking turnover (e.g. say \$1.00 first hour; \$1.50 second hour; \$2 each subsequent hour);

- apply parking fees consistently throughout a district, region or town centre, although the amount of the parking fees may vary by location;
- enhance coordinated regional parking management by expanding the times and locations for priced parking rather than simply raising fees at existing fee-paying facilities; and
- set parking prices to equal, or exceed, public transport fares (eg. daily parking fees should be at least equal to a round-trip public transport journey and monthly parking fees should be at least equal to the cost of a monthly transit pass).

Whilst the introduction of paid parking will contribute to the funding and maintenance of decked car parking facilities and associated resources, it also important to consider the potential benefits and disadvantages of the introduction of a paid parking system.

Benefits include;

- the hidden subsidies for motor vehicle use which are currently underwritten by ratepayers / Council, are more appropriately funded by vehicle users;
- higher car occupancy rates are encouraged;
- increased use of public transport or alternative travel modes are encouraged;
- parking is more efficiently utilised and managed;
- commuter travel patterns are better managed; and
- paid parking ensures non-ratepayers contribute to funding of parking infrastructure and resources and thus supports a more equitable 'user pays' system.

Disadvantages include;

- capital costs: equipment (i.e signs parking meters, ticket printers, access gates etc.), installation and administration (i.e staff and resources);
- maintenance and operating costs related to the ongoing management and maintenance of a paid parking system including repairs/maintenance, human resourcing and depreciation of infrastructure;
- introduction of fees within the City Centre and broader study area may cause spill-over impacts in adjacent non-paid parking areas; and
- if not timed appropriately, there is a high risk that paid parking will deter the community from the City Centre in preference of other major retail centres where paid parking has not been introduced (i.e Centro Mandurah).

Whilst a greater number of benefits have been identified, importantly, these benefits may be undermined by an inappropriately timed paid parking system.

Crucial to the success of the City Centre and a future paid parking system is therefore the need to ensure that a paid system is not introduced until such time as the City Centre is supported by a rapid public transit network and the City 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. Understanding perceptions of the community insofar as the appropriate scale of public transport and development deemed sufficient in which to outweigh the 'cost' of paid parking is therefore a key consideration. Future considerations may include the introduction of paid parking which would initially involve a nominal paid parking fee, which is increased over time relative to the staged growth of the public transport network, the growth in public transport users and redevelopment within the City Centre.

Detailed assessment of these key factors and the appropriate triggers and timing for the introduction of paid parking should therefore be a key consideration.

2.3.4.3 Height and Density Bonuses for Provision of Public Parking

To further facilitate the funding of public parking facilities, both Luxmoore Parking Consultants and ARRB Transport Research acknowledged the use of height and density bonuses to provide developer incentive for the construction of a decked facility sleeved by development.

2.3.4.4 Federal and State Grants

Through Infrastructure Australia, Royalty for Regions and other Federal and State grants, funding could potentially be sourced for infrastructure and capital works.

It would therefore be appropriate for the City to monitor and investigate various grant funding sources and opportunities.

City Centre Car Parking Strategy

MANDURAH

3. Strategic Recommendations

3.1 Strategies and Actions

Based on the anticipated car parking supply and the overview of the key considerations outlined under Section 3, a range of strategies have been established.

The following strategies encourage high levels of accessibility, amenity and urban form within the Mandurah City Centre and also achieve the key objectives of the Car Parking Strategy;

Strategy Aim 1	Redevelop a Long-Term Transport Strategy;	
Strategy Aim 2	Contribute to the Urban Form and Development of the City Centre;	
Strategy Aim 3	Establish Parking Standards and Requirements;	
Strategy Aim 4	Preparation of a Business Plan for the Introduction of a Paid Parking System;	
Strategy Aim 5	Commit an Annual Budget to Public Parking;	
Strategy Aim 6	Identify and Establish Public Parking Facilities; and	
Strategy Aim 7	Develop and Implement TravelSmart and Public Transport Initiatives.	

In support of the seven strategies outlined above, Section 3 outlines a range of associated actions and an implementation timeframe.

The timeframes specified under primarily refer to 'short', 'medium' and 'long term'. Whilst these timeframes are to provide an indicative guide, for the purposes of clarity these timeframes are defined as;

- short term 0 5 years
- medium term 5 10 years
- long term more than 10 years

In some instances, actions do not have specified timeframes and are recommended to be acted upon 'as required' or on an 'ongoing basis'.

Strategy Aim 1 Re-develop a Long-Term Transport Strategy

The Car Parking Strategy is to form a component of the Integrated Transport Strategy that will achieve several actions within the 'Connected City' strategy of the Community Charter and Strategic Plan 2009-2012.

Action		Implementation	
1.1	Allocate budget within the next financial year for the redevelopment of an Integrated Transport Strategy.	short term	
1.2	Undertake traffic modelling for the Mandurah Inner Area	short term	
1.3	Revise existing <i>Mandurah Inner Area Strategic Plan</i> to deliver a long-term integrated transport strategy with particular emphasis on the Mandurah Inner Area.	short term	
1.4	Pursue transformation of the 'Foreshore Express' into a free transit service for the City Centre (CAT service), to be operated in the future by the PTA.	short term	
1.6	Liaise with the Public Transport Authority (PTA) on the expansion of Transperth services and/or Central Area Transit system. Lobby the PTA for improved bus services, having regard to commuter patterns and demand for travel between the City Centre and local destinations (i.e. train station, Peel Education Campus, Peel Health Campus, Halls Head (District Town Centre), regional and sub-regional destinations.	short to medium term	
1.7	Through the footpath programme, identify and address any path connection issues in order to improve or provide safe and legible routes for travel on foot, by bicycle and motorised wheelchairs.	short term to medium term	
1.8	Investigate opportunities to strengthen pedestrian connectivity between the Civic and Cultural Precinct and the North Harbour of the Mandurah Ocean Marina (i.e. a potential pedestrian footbridge from the Peel Street cul-de-sac to Dolphin Drive).	short term to medium term	
1.9	Liaise with the City of Rockingham, Shire of Murray and State Government on the long term consideration for the delivery of an integrated rapid mass transit system (potentially a 'bus rapid transit' or 'light rail transit' system) to connect inter- regional destinations such as Rockingham, Mandurah and Pinjarra and in the longer term, Keralup and Nambeelup	long term	

Strategy Aim 2 Contribute to the Urban Form and Development of the City Centre

Ensure supply of car parking and related infrastructure contributes to a vibrant and efficiently designed City Centre with attractive and safe streets and spaces.

Actio	n	Implementation
2.1	Commit to the continued streetscape upgrades within the study area and on route between future car parking facilities and key destinations to provide improved pedestrian and cycle links including street trees, landscaping, lighting, paving treatments, shelters, signage and universal access.	short term
2.2	Continue to pursue State and/or Federal Government grants and funding for streetscape improvements within the Study Area.	ongoing (as required)
2.3	Investigate and implement methods for the delivery of parking information in a real-time format for the benefit of the City, motorists and pedestrians. Parking information signage should be appropriately located so as to be unobtrusive and incorporated into the city centre's architectural character.	short to medium term

Strategy Aim 3 Establish Parking Standards and Requirements

The behaviour patterns of motorists, and the circulation, access and co-ordination of car parking areas are supported through parking standards and requirements within the City Centre.

Action	ı	Implementation
3.1	Refine appropriate methodologies for data collection including the measurement of occupancy rates and determination of peak demand and car parking trends.	medium term (ongoing)
3.2	Investigate best practices in the design and engineering of public parking facilities including; landscaping, lighting, construction material, paving treatments, pedestrian and bicycle links, consideration of safety and security measures, signage and universal access. As an outcome, prepare standard design guidelines for the development of future decked car parking facilities.	medium term (ongoing)
3.3	The capping of the supply of car parking for individual developments to be introduced into the statutory planning framework. Capped ratios to have regard to State Planning Policy 4.2 - <i>Activity Centres for Perth and Peel</i> .	medium term
3.4	Incorporate requirements under Scheme 3 and associated Precinct and local structure plans to consider motorcycle parking, cycle parking and end of trip facilities as car parking bay substitutes.	medium term

Strategy Aim 4 Preparation of a Business Plan for the Introduction of a Paid Parking System

Acknowledge the cost implications to provide car parking and seek to minimise outlay. While initial costs are a budgeting matter, supply of car parking may need to be accelerated to address demand and as such, Council should aim for cost-neutral maintenance of its car parking assets.

Actio	n	Implementation
4.1	Initiate the preparation of a business plan for the introduction of a paid parking system. Issues to consider are the capital and ongoing costs, funding, timing (including appropriate triggers for the introduction of paid parking) and the most efficient and cost effective paid parking system for the City.	medium to long term
4.2	Undertake a tendering process to secure a paid parking systems supplier for the provision of paid parking infrastructure	medium to long term
4.3	 Introduce paid parking within the City Centre Peak period fees should be high enough to encourage a shift in travel modes or times Parking fess during peak demand periods and at the most convenient locations should be high enough to generate a maximum 85% to 90% occupancy rate. If prices are too low, parking becomes saturated causing motorists to cruise around in search of a space. Offer convenient locations and several options for payment including acceptance of coin, credit card, and notes Use small time units so drivers can avoid paying for more time than they need (i.e. for short term parking charge in 15 minute blocks) Charge higher fees and provide shorter time periods at the most convenient spaces to encourage high turnover. 	medium to long term
4.4	Investigate the merits of introducing a residential visitor parking permit system that allows visitor parking on-street outside of main activity area. Residential visitor parking permits may be purchased however would not be allocated parking spaces. Permits would not be issued however to residents on lots adjacent to Mandurah Tce, Sutton Street or within the area bound by Mandurah Tce, Pinjarra Road, Sutton Street and Gibson St.	medium to long term

Strategy Aim 5 Commit an Annual Budget to Public Parking

Allocate funds sourced from rates, grants, developer contributions, revenue from ticket parking and user-pays charges to a reserve car parking fund. All funds raised to be expended on the provision and maintenance of public car parking and improved access to/for alternative modes of transport within the city centre.

Actio	n	Implementation
5.1	Budget for an annual transfer of funds into the City's reserve car parking account for raising revenue for the long-term provision of decked car parking structures.	short term (ongoing)
5.2	Initial budget should be prioritised towards optimising on-street car parking bays where designed as part of a holistic and integrated streetscape upgrade program.	short term
5.3	Cash in lieu contributions and other sources of revenue collected for the purposes of car parking to be set aside for and/or spent on the provision and maintenance of existing and new car parking infrastructure or alternative transport modes to improve walking, cycling and public transport infrastructure.	on going

Strategy Aim 6 Identify and Establish Public Parking Facilities

Car parking is a public good that is in a finite quantity. Consolidation and management of these facilities will achieve the highest and best use of land within the City Centre.

Acti	on	Implementation
6.1	 Council favourably consider the following public landholdings as preferred locations for decked public car parking facilities: Mewburn Site Lots 94, 95, 111, 112 & 113 Sutton / Hackett St Civic Precinct Western Foreshore 	short term
6.2	Utilise the business planning process for decked car parking facilities with the intent to incorporate these infrastructure items into the long-term capital plan.	medium term
6.3	Undertake Cost Benefit Analysis for each proposed decked car parking facility as part of any feasibility study in determining how the structure would be operated and managed, how many parking bays should be constructed and when the structure should be constructed.	medium to long term (as required)
6.4	Subject to the favourable outcome of a cost benefit analysis, develop short and long term decked car parking facilities within and on the periphery of the City Centre.	medium to long term (as required)
6.5	Investigate the merits of producing an online (internal and external) database on car park locations, similar to the City of Perth's Interactive Parking Map.	medium to long term (as required)
6.6	Investigate opportunities to provide temporary public car parking to address the loss of available parking during construction of decked facilities. Council shall also consider as a component of building management, the appropriate parking for workers on construction sites in order to minimise the disruption of the use of public parking for other users of the City Centre.	medium to long term (as required)
Strategy Aim 7 Develop and Implement TravelSmart and Public Transport Initiatives

TravelSmart can assist the public in finding ways to minimise reliance on private vehicles, encourage more effective use of public transport and increase awareness of the benefits of walking and cycling.

Action		Implementation
7.1	Continue to undertake streetscape and path network upgrades to promote walking and cycling.	short term
7.2	Promote and undertake travel behaviour change programs such as <i>TravelSmart</i> to encourage an increased use of alternative travel modes. These programs should establish existing alternative mode usage and set targets which are reviewed as part of an assessment of the programs.	short term (ongoing)
7.3	Liaise with the State Government on promoting <i>TravelSmart</i> initiatives for businesses located within Mandurah.	short term (ongoing)
7.4	Maintain Council's organisational commitment for the <i>Workplace Transport Plan 2009 – 2012</i> and support future resurveys and revisions of this Plan for the long-term.	short term (ongoing)
7.5	Liaise with Perth Transport Authority (PTA) for the continued improvement of the public transport network, particularly in relation to reducing travel times, improving services across the municipal area and increasing the frequency and connectivity of services.	short term (ongoing)

3.2 Strategic Plan

3.2.1 Proposed Decked Car Parking Locations

Several potential public car parking locations were identified within the *Mandurah City Centre Precinct Plan* and the advertised draft Car Parking Strategy. These locations have been reviewed based on the reduced City Centre floor space areas and the anticipated car parking supply.

The review has resulted in the removal of six sites previously identified within both the Precinct Plan and the draft Car Parking Strategy. These six sites include the three privately owned 'Woolworths', 'Rivers' and 'Centrelink' sites and three publicly owned sites (the 'Nellie Regan Hall',' The Point' and the 'Leslie/Creery Street' sites).

Based on the factors outlined four sites are identified under Strategy Aim 6 for future decked car parking facilities. An indicative guide is also provided in relation to the car parking supply that each site may provide;

•	Mewburn Site	500 bays
٠	Sutton / Hackett Street	500 bays
٠	Civic Precinct	400 bays
٠	Western Foreshore	400 bays

The four sites identified are estimated to provide approximately **1 800** bays and have been selected based on the following factors;

- each site is under public ownership which makes future development less problematic from a land ownership perspective;
- future development of each site for decked car parking will not require the acquisition of additional land;
- the sites are all well located to key destinations within the City Centre and offer a range of locations, providing opportunities for short and long term parking in the future;
- the sites are currently utilised for at-grade car parking and as such, the existing uses will
 not jeopardise the potential of the sites to be redeveloped for future decked car parking
 facilities;
- all sites meet the key criteria addressed under Table 9 of the Strategy.

Inclusion of the Mewburn site is consistent with Council's resolution of November 2010 which endorsed a modification to the *City Centre Precinct Plan* requiring that future development of the site be subject to a separate, approved Development Guide Plan. Importantly, the modification to the Precinct Plan also included the commitment to accessible public car parking within the future Development Guide Plan.

It is also relevant to acknowledge that the broader 'Western Foreshore' site has replaced the previously advertised 'Mary Street / Mandurah Traffic Bridge' site. The removal of the 'Mary Street / Mandurah Traffic Bridge' site is primarily based on the current uncertainty as to the location / configuration of the future replacement of the Mandurah Traffic Bridge and concerns in relation to whether this specific location is the most appropriate for a decked facility given its spatial separation from other community / recreation facilities of the Western Foreshore. Thus, identification of the broader 'Western Foreshore' site is considered more appropriate, particularly as the City intends to prepare a Masterplan over the Western Foreshore in the medium term to guide future land use planning of this strategic land parcel. It is expected that the future Masterplan will consider the appropriate location and allocation of future car parking which may also include consideration of whether a decked or at-grade facility is most appropriate for this location.

Figure 4 provides an overview of the proposed decked car parking locations, the projected contribution of car parking bays per site, the walkable catchment areas from each site and key destinations within the study area.

Appendix 2 provides a separate detailed overview of each of the identified decked car parking locations and a brief justification for their inclusion as a potential car parking site / locality.

3.2.2 Shortfall in Provision of Anticipated Car Parking Supply

It is relevant to acknowledge that the four identified sites, which are projected to provide an approximate **1 800** bays, leaves a shortfall of **300** bays from the anticipated demand of **2 100** bays.

Importantly however, as addressed under Section 2.3.2 of the *Strategy*, the anticipated supply has been primarily determined on *current* car parking provisions as specified under the *Mandurah City Centre Precinct Plan*. Notably however it is expected that some of this short fall in parking is likely to be met by on-street parking. It is also expected over time the following factors will contribute towards a reduction in anticipated car parking demand;

- landowners / developers may provide more than the minimum car parking requirements on-site;
- when appropriate, the City intends to move towards introducing maximum car parking requirements consistent with SPP4.2, which will provide opportunities for significantly reduced car parking; and
- an increased rapid transit network and improved cycle / pedestrian access within the City Centre will encourage the use of public and alternative travel modes and reduce car dependency and subsequently car parking demand.

As a result of these factors, the projected shortfall of 300 bays is expected to be *absorbed* over time. The City therefore takes the position that no additional decked sites are required to meet the long term anticipated demand.

It is relevant to acknowledge that absorption of the 300 bays will reduce the anticipated costs to approximately \$18 million (inclusive of cash-in-lieu contributions of \$54 million, based on current development contributions @ \$30 000 per bay).



Proposed Parking Provision

	On-Street Parking (existing and short term introduction)
P	Parking Station (at-grade) (existing and short term introduction)
P	Decked Parking Station (long term introduction: refer table below)

Proposed Length of Parking (Public)

	Short Term	(1-2 Hour Parking)
	Medium Term	(3-4 Hour Parking)
		Day Parking for Strategic Plan Area
0	200m (2.5min) decked parking	walking distance to station
\bigcirc	400m (5min) wa decked parking	alking distance to station
\rightarrow	Key Vehicular B	Entry Point
0	Existing Parkin	g Stations
<u></u> ;	Strategic Pla	an Area
	Long term intro across Strategi	duction of paid parking c Plan Area

Decked Parking Structures Capacity

		Targeted Design Capacity
P1	Mewburn Site	500
P2	Sutton / Hackett Street	500
P3	Civic Precinct	400
P4	Western Foreshore may be at grade or decked pending preparation of master plan	400
	Total	1800

Strategy Aims and Outcomes Summary

The Strategy includes the following key outcomes:

1. Integrated Transport Strategy

Ensure funding available for preparation of an updated Integrated Transport Strategy Deliver a long-term integrated transport strategy with particular emphasis on the Mandurah Central Area

Transformation of the 'Foreshore Express' into a free transit service (CAT service), to be operated in the future by the PTA

2. Urban Form and City Centre Development

Street upgrades to encourage walking, cycling, public transport and slower car speeds Real-time parking information provided

3. Parking Standards and Requirements

Refine data collection in relation to occupancy rates, peak demand and car parking trends Prepare best practice design guidelines for public parking facilities Reduce parking requirements, together with requirements for cycle and end of trip facilities

4. Business Plan for Paid Parking System

Prepare a business plan for the introduction of a paid parking system Introduce paid parking

5. Commit Annual Budget to Public Parking

Budget for an annual transfer of funds to raise revenue for the long-term provision of decked car parking structures Cash-in-lieu contributions and other sources of revenue to be collected for the purpose of funding decked car parking structures

6. Public Parking

Establishment the following sites as preferred locations for decked facilities:

- Mewburn Site
- Corner Hackett and Sutton Streets
- Civic Precinct
- Western foreshore

7. Travel Smart Initiatives

Initiate travel behaviour programs and work with local businesses and residents to raise awareness and use of alternative travel modes Influence changes in behaviour to promote walking, cycling and public transport use





Figure 4 - Strategy Recommendations

3.3 Implementation, Monitoring and Review

3.3.1 Adoption of Mandurah City Centre Car Parking Strategy

The Mandurah City Centre Car Parking Strategy will be considered in relation to its long-term implications on the way the residents of Mandurah and visitors to the city access the City Centre.

The Council will be presented the finalised Car Parking Strategy with a recommendation for it to be granted final approval.

3.3.2 Committment to an Annual Budget for Future Car Parking Infrastructure

In adopting the City Centre Car Parking Strategy, Council will have also adopted the key recommendations of the Strategy which include the commitment to an annual budget for the provision of future car parking infrastructure.

3.3.3 Funding of Car Parking Infrastructure

The introduction of cash in lieu developer contributions (as defined under the *Mandurah City Centre Precinct Plan* and a future paid parking system will enable the generation of funds that will significantly contribute to establishing the necessary car parking infrastructure.

The revenue collected from paid parking should proportionally be utilised for the maintenance of parking bays (construction, enforcement, administration etc) and in capital works construction projects that relate to providing public transport and other alternative modes of transport.

Further, a proportion of the revenue collected from paid parking should be utilised for improving the attraction of alternative modes of transport including walking, cycling and public transport.

3.3.4 Monitoring of Parking Fees and Cash-in-lieu Contributions

It will be necessary to utilise parking survey data and income/expenditure revenue data collected from the paid parking programme to report on the progress of using parking fees in the provision of public car parking, parking maintenance and labour and improvements to public transport and alternative modes of transport.

In order to ensure car parking within the study area is being optimised, remains economically sustainable and contributes to meeting the key objectives of the Car Parking Strategy, bi-annual monitoring and reviews should be undertaken by Council officers to ensure the parking fees and cash-in-lieu contributions remain up to date, meet market demand and conducive to the proportional funding of future car parking infrastructure within the City Centre.

City Centre Car Parking Strategy

Appendix 1: Potential Decked Parking Locations Analysis

City of MANDURAH

1. Mewburn Site

Site Details		
Address	Lot 9 and 414 Sholl Street and Lots 139 – 141 Sutton Street ,	
Site Area	1.0181 ha	
Current Land Use	Car Park, Recreational Purposes	
Scheme 3 Zoning	Lots 414 and 139-141: City Centre Development zone Lot 9: Local Recreation reserve (to rezoned via Amendment 96 to City Centre Development zone)	
Precinct Plan Applicable	Mandurah City Centre Precinct Plan	
Precinct Plan Designation	Retail / Main-Street precinct: retail, shopping, leisure, entertainment, office, inner city living. Central Employment Precinct: office, employment, retail, residential, service uses	

City Centre Car Parking Location Criterion		
Ownership	✓ All lots owned by the City of Mandurah.	
Sustainability	 Development of the location will have negligible impact on environmental characteristics of the site. Economic feasibility would need to be determined. 	
Accessibility	 Highly accessible with potential for motorists to access the location from Sholl Street, Tuckey Street, Church Street and/or Sutton Street. Is currently a well known and well used at-grade car parking facility. Situated within close proximity of major shopping, eating and entertainment destinations. 	
Walking Catchment	 Location is within short walking distance to City Centre employment generators and eating and shopping activities. 	
Size of Structure	 Structure may be suitably sized for a substantial multi-level parking facility, sleeved with activating land-uses. 	
Capability	 Subject to land capability assessments, the location is considered able to be developed for medium-high density development which can incorporate a multi-decked parking facility. No known risk of Acid Sulfate Soils. 	
Proposed Land Uses and Setting	 Location is identified in Mandurah City Centre Precinct Plan as requiring a future Development Guide Plan (DGP) which includes the provision of car parking. City Centre Precinct Plan requires that development of car parking be sleeved by a mix of retail, shopping, office, business, entertainment and community/cultural uses. Interface with future town square will also need to be considered. 	
Development Opportunities	 Development opportunities on public car park area exist for creating a 'heart' for the city centre through development for civic, community, retail, office, entertainment and possible residential uses. 	
Surrounding Development	 Surrounding landholdings are subject to development opportunities through the Mandurah City Centre Precinct Plan. Higher density mixed- use development on surrounding land would warrant public car parking at this location. 	
Duration of Stay	 Site is conducive towards short-stay customer and business related parking needs. 	
User Pays	✓ Considered appropriate for development as a user-pays parking facility.	



Location Description

The location currently exists as at-grade parking on Council-owned land between Sholl Street and Sutton Street, and also shares a relationship to the car park in front of the Woolworths supermarket. This parking location is a highly popular and a well-utilised car parking location within the City Centre.

The Mewburn Centre location is unique within Mandurah as an opportunity to develop a focal point for the revitalisation of the City Centre. The development of the location would capitalise on its context within the City Centre and its proximity to the Estuary, while its distance from the waterway will ensure development does not detract from the amenity of Mandurah Terrace and the eastern foreshore. The site is positioned adjacent to Sholl Street and the Smart Street Mall, poised to become a prominent retail strip, and enjoys an address to Sutton Street, which will be developed over time as a future north-south ribbon of high-density business development and employment.

The vision for Sholl Street is a retail driven, pedestrian friendly slow-speed environment, with the ability to strengthen an activity node at the eastern end of the Smart Street Mall. The opportunities along Sholl Street and Smart Street Mall give merit to a mixed-use, higher intensity redevelopment of the location. Parking should largely address short-stay parking demand having regard to shoppers and those undertaking business within the city centre. The adoption of best-practice design principles should ensure that any mixed-use redevelopment is in harmony with the goals for a people-friendly City Centre, where car traffic and inappropriate expanses of car parking do not dominate the environment.

Any redevelopment of the location should integrate any public car parking within the overall built form to ensure a strong urban design outcome is achieved. The location should not be considered for a stand-alone decked car parking facility, as this would be detrimental to the revitalisation of the surrounding area.

Significant redevelopment should address Sutton Street and the future Town Square, with car park ingress/egress being designed to use Sutton Street, rather than Sholl Street. This is conducive towards promoting Sholl Street as a slow-speed, pedestrian friendly streetscape environment, where Sutton Street is capable of accommodating higher volumes of through-traffic.

2. **Sutton / Hackett Street**

Site Details	
Address	Lot 94, 95, 111, 112 and 113 Sutton / Hackett Street
Site Area	5160 square metres (combined)
Current Land Use	Lots 94 and 95 : Public at-grade car park Lots 112 and 113 : Vacant land Lot 111 : Residential dwelling and associated outbuildings
Scheme 3 Zoning	City Centre Development
Strategic Plan Applicable	Mandurah Central Revitalisation Strategy
Strategic Plan Designation	Sholl Street precinct: high-quality residential, mixed-uses compatible with residential

City Centre Car Parking Location Criterion		
Ownership	\checkmark All lots are owned by the City of Mandurah.	
Sustainability	Development of location will have negligible impact on environmental characteristics of the site. Social and community values would not be affected by development. Economic feasibility would need to be determined.	
Accessibility	 Access via Hackett Street to the eastern foreshore and civic & cultural precinct. Access south along Sutton Street to the city centre, however the distance to these destinations may not be conducive to attracting short-stay visitors or tourists. Site is well located to provide long stay parking for employment sector. 	
Walking Catchment	 Pedestrian links via Hackett Street to the eastern foreshore and Civic & Cultural precinct. Medium walking distance to Mandurah Ocean Marina and City Centre destinations. 	
Size of Structure	 The site is a suitably sized landholding for development into an integrated multi-level parking structure, sleeved by development. 	
Capability	✓ The site has the potential to be low-lying with moderate to low risk of Acid Sulfate Soils.	
Proposed Land Uses and Setting	 ✓ Final land-uses for site not identified through a precinct plan at this stage. Development and land-uses as per Scheme 3. 	
Development Opportunities	 Public and private investment could be secured to develop a decked parking facility sleeved with development for tenancy rentals or purchases. 	
Surrounding Development	 Single and double storey residential dwellings to north and south will need to be considered in the final design of any built form over the subject sites. 	
Duration of Stay	 Greater opportunity for a commuter parking location, given its distance to the city centre, civic & cultural precinct and other destinations. Can be supported through improved public transport and walking/cycling along Sutton Street. 	
User Pays	✓ Considered appropriate for long term paid parking opportunities.	

Location Plan



Location Description

The site has three street frontage (Sutton, Hackett and Sholl), however it is expected that that primary access to the site would be from either Sutton Street or via Hackett Street, which may ensure that additional traffic congestion is not created on Sutton Street by vehicles entering / leaving the facility, particularly during peak hours.

The Sutton / Hackett Street site is intended to provide the primary long term parking location for the City's employment sector. The 'Retail / Main Street' and 'Central Employment' sub-precincts are within a 5 to 15 minute walk of the site, whilst Mandurah Terrace and the Civic and Cultural Precinct are located approximately 5 to 10 minutes walk of the site.

Single and double storey residences are located north of the site and directly adjacent on the southern side of Hackett Street. The future design of a decked car parking facility at this site will need to consider design features which minimise potential light, air and noise impacts on surrounding residences.

3. Civic Precinct

Site Details		
Address	Civic Precinct (Ormsby Tce / Peel Street)	
Site Area	N/A	
Current Land Use	Cultural and Entertainment Centre, Senior Citizens Centre	
Scheme 3 Zoning	City Centre Development Zone	
Precinct Plan Applicable	Civic and Cultural Precinct Plan	
Precinct Plan Designation	Community centre, all-ages facility, art space, apartments, car parking	

City Centre Car Parking Site Criteria		
Ownership	 Vested management to the City of Mandurah. As the location is Crown Land, the Minister for Lands would be involved with the resolution of leasing arrangements. 	
Sustainability	 Development of site will have negligible impact on environmental characteristics of the site. Social and community values would not be affected by development. Economic feasibility would need to be determined. 	
Accessibility	Accessibility for vehicles limited via Ormsby Terrace and Peel Street. Pedestrian and cyclist accessibility is greater, with non- vehicular pathway linkages through to Mandurah Ocean Marina and eastern foreshore towards city centre.	
Walking Catchment	 Short walking distance to entertainment and cultural facilities, thereby demand for parking in the area would be moderate to high. Medium walking distance for the eastern foreshore and Mandurah Ocean Marina, with the City Centre being approximately 10 minutes walk within a high amenity pedestrian environment. 	
Size of Structure	 Land area is conducive to a large parking structure. Any parking structure capacity would need to be assessed on its impact for traffic volumes along Ormsby Terrace, which is the sole access road to the South Harbour of the Mandurah Ocean Marina. 	
Capability	 Road network capability and the outcome of the finalised Civic and Cultural Precinct Plan will determine the size of the structure. Site capability is sufficient for a parking structure integrated with community, cultural and entertainment-related development and land-uses. High to Moderate risk of Acid Sulfate Soils. 	
Proposed Land Uses and Setting	 Existing entertainment and cultural activities within close proximity of the location. Such land-uses are proposed to continue in this area. Several new land-uses will increase car parking demand within this location, together with an increasing requirement for alternative modes of transport. 	
Development Opportunities	 Civic and Cultural Precinct Plan identifies opportunities for greater use of land and facilities within this location. Through public works and beautification of the area, substantial works involving demolition of existing development and relocation of community services will be undertaken. 	
Surrounding Development	 Sleeving a car parking facility with community uses will generate a suitable active interface with surrounding uses and public spaces. 	
Duration of Stay	 Considered appropriate for long-term parking as entertainment and activities within the precinct would be several hours in duration. 	
User Pays	 Identified for paid parking opportunities. Anticipated demand from residents and users or visitors of the entertainment and cultural facilities within the precinct. As such, areas of the parking facility may be appropriate for paid parking. 	

Location Plan



Location Description

The Civic and Cultural precinct is an area of segregated development with large expanses of car parking and underutilised public land. Through the draft Civic and Cultural Precincts vision of 'water, walking and wonder', there is an emphasis on greater mixed-use development, a reinvention of the public realm and a greater celebration of the area's key assets: its waterbodies, large public landholdings, the entertainment and cultural institutions and burgeoning cafés and restaurants.

The live/work opportunities and tourism influences within this area provide good opportunities for alternative transport options such as walking, cycling and public transport. The provision of car parking for residents, mixed-use development and the general public would be necessary to service this precinct in a manner that does not affect the pedestrian accessibility to the area nor its natural and landscaped amenity.

The provision of a decked parking facility within this location should be linked to the development program inherent within the Civic and Cultural Precinct Plan.

The location is an important component for the successful development and reinvention of the Civic and Cultural precinct. It is anticipated that political and community support would be for the area to provide some role as a supplier of parking, and this location is therefore considered suitable for consideration.

4. Western Foreshore

Site Details	
Address	Western Foreshore
Site Area	N/A
Current Land Use	Recreational purposes, at-grade car parking
Scheme 3 Zoning	Regional Open Space
ODP Applicable	N/A
ODP Designation	N/A

City Centre Car Parking Location Criterion				
Ownership	 Crown Land however management of the land is by the City of Mandurah. Potential requirement to create a new lot to facilitate development of a multi-decked parking structure in this location. 			
Sustainability	Development of the location will have negligible impact on environmental characteristics of the site. Social and community values would not be affected by development. Economic feasibility would need to be determined.			
Accessibility	 City centre accessible via Mandurah Traffic Bridge. Short-term access to the City Centre would be hampered through future replacement and construction of new Mandurah Traffic Bridge. Long-term benefits with the future replacement of the bridge would incorporate improved walking and cycling infrastructure incorporated into the bridge structure. 			
Walking Catchment	 Location is within 10 minutes walking distance to traffic generating uses along Mandurah Tce, Sholl and Sutton Streets. 			
Size of Structure	The size of the land area allows for flexibility in the design and development of a decked public car parking facility or at-grade parking.			
Capability	 High to Moderate risk of Acid Sulfate Soils at this location. Consideration of climate change and its effects on the viability of the location may warrant detailed investigation. 			
Proposed Land Uses and Setting	Detailed design for the future Mandurah Traffic Bridge should be reasonably finalised and a Masterplan prepared over the Western Foreshore to ensure appropriate land is protected for future decked or at- grade parking facilities. A landmark building may be deemed appropriate to facilitate a good urban form outcome for this strategic waterfront location.			
Development Opportunities	 Public and private investment could be secured to develop a decked parking facility sleeved with development for tenancies. 			
Surrounding Development	 Potential interface considerations may be required to existing residential dwellings (dependent upon location and type of facility proposed), and to surrounding recreational playing fields and verge landscaping treatments. 			
Duration of Stay	✓ Greater opportunity for long term commuter parking location, given its distance to the City Centre precinct, Hall Park and other destinations.			
User Pays	✓ Considered appropriate for development as a long term user-pay parking facility.			

Location Plan



Location Description

The Mandurah City Centre Precinct Plan considers the Western Foreshore as a key car parking location.

The site is within 5 to 10 minutes walking distance of Mandurah Tce and Sutton Street. It is highly desirable to encourage people to park at this location and walk into the City Centre in order to reduce traffic flow over the bridge and within the City Centre. In order to do this, the pedestrian and cycle links across the bridge need to be promoted as an enjoyable and safe route that contributes to the Mandurah experience, consistent with the *Mandurah Foreshore Focus 2020 Vision Master Plan*.

A pedestrian shelter will be important to promoting this route as well as protecting pedestrians from sea-spray, sun and rain. Consideration of cross-walk infrastructure will be necessary as part of the bridge design to ensure a safe and legible path network is provided from the car park to the City Centre and vice versa.

Whilst the site potentially provides for a future decked car parking facility, it may be deemed more suitable for at-grade parking. The outcome of the type of car parking facility most appropriate for the site is likely to be dependent upon the outcome of the future Masterplan which is to be undertaken for the Western Foreshore, the availability of land for car parking; the most appropriate location to support City Centre users and the western foreshore facilities / activities.

The location is supplemented with existing at grade car parks at Hall Park (south of King Carnival and south of the War Memorial). These three car parking stations serve different users (users of Hall Park and King Carnival, and events associated with the War Memorial), however they can be considered as a broader car parking network that in busy periods could be serviced with connecting shuttle services to improve the convenience of users wanting to access the City Centre.

City Centre Car Parking Strategy

Appendix 2: Existing Parking Supply

MANDURAH

Table 11 Existing Car Parking Bays by Sub-Precinct

	On Site / On Street	Private / Public	Total Bays
Mandurah Terrace Sub-Precinct			
Lot 1 Mandurah Terrace	On-site	Private	5
Lot 100 Mandurah Terrace	On-site	Private	109
Lot 32 Mandurah Terrace	On-site	Private	28
Lot 1 Ormsby Terrace (Atrium Hotel)	On-site	Private	132
Lot 2 Ormsby Terrace	On-site	Private	35
Lot 504 Mandurah Terrace	On-site	Private	27
Lot 503 Mandurah Terrace	On-site	Private	11
Lot 501 Mandurah Terrace	On-site	Private	2
Lot 31 Mandurah Terrace	On-site	Private	22
Peel Street	On-street	Private	7
Sub-Total			376

Mandurah Ocean Marina Sub-Precinct			
Town Beach Public Car Park	On-Site	Public	49
Lot 1 Dolphin Drive (Seashells Resort)	On-Site	Private	60
Breakwater Parade	On-Street	Public	79
Spinnaker Quays	On-Street	Public	42
Dolphin Drive	On-Street	Public	20
Lot 4740 Dolphin Drive	On-Site	Public	159
Fathom Turn	On-Street	Public	30
Outrigger Way	On-Street	Public	13
Lot 5054 The Lido (Keith Holmes Reserve)	On-Site	Public	47
The Lido	On-Street	Public	60
The Palladio	On-Street	Public	40
Lot 312 The Lido (Chalet Park)	On-site	Private	3
Cannaregio Square	On-Street	Public	13
Marco Polo Drive	On-Street	Public	10
Vivaldi Drive	On-Street	Public	52
Treviso Mews	On-Street	Public	9
The Point Car Park Lot 2 Marco Polo Drive (The Point)	On-Site	Public	191
Regatta Turn	On-Street	Public	22
Bowsprit Way	On-Street	Public	7
Sub-Total			909

	On Site / On Street	Private / Public	Total Bays
Civic and Cultural Precinct			
City Administration Office	On-Site	Public	76
City Administration Office (Informal)	On-Site	Public	42
City Administration Office (Works and Services Office)	On-Site	Public	61
Mandurah Terrace	On-street	Public	13
Parking Station 9 Lot 300 Mandurah Terrace	On-Site	Public	32
Parking Station 8 Lot 4667 Mandurah Terrace	On-Site	Public	65
Reading Cinema – Ac-cent Centre	On-Site	Public	197
Ormsby Terrace	On-street	Public	40
Mandurah Performing Arts Centre	On-Site	Public	89
Australian Sailing Museum	On-Site	Private	2
Sub-Total ^			617

City Centre Precinct			
Nellie Regan Memorial Hall		Public	13
Forrest Street (Between Peel and Hackett Street)	On-street	Public	13
Hackett Street (Between Sutton and Forrest Street)	On-street	Public	23
Hackett Street Informal Overflow	On-site	Public	40
Lot 94 Sholl Street	On-site	Public	32
Hackett Street (Between Sholl and Sutton Street)	On-street	Public	29
Hackett Street (Between Mandurah Tce and Sholl St)	On-street	Public	31
Lot 53 Mandurah Terrace	On-site	Public	17
Lots 11 and 12 Mandurah Terrace	On-site	Private	28
Lot 46 Mandurah Terrace	On-site	Private	14
Lot 502 Sutton Street	On-street	Public	2
Lot 8 Hackett Street	On-site	Private	20
Lot 39 Mandurah Terrace / Lots 66 & 67 Sholl Street	On-site	Private	21
Lot 38 Mandurah Terrace	On-site	Private	23
Cooper Street (Between Mandurah Tce and Sholl St)	On-street	Public	13
Lot 30 Mandurah Terrace	On-site	Private	6
Lot 29 Mandurah Terrace	On-site	Private	12
Lot 345 Mandurah Terrace	On-site	Private	22
Lot 11 Mandurah Terrace	On-site	Private	29
Lot 10 Gibson Street	On-site	Private	22
Lot 77 Sholl Street	On-site	Private	15
Lots 126-130 Sutton Street		Public	57

	On Site / On Street	Private / Public	Total Bays
Lot 267 Cooper Street	On-site	Private	16
Corner Tuckey Street and Forrest Street	On-street	Public	3
Lot 601 Gibson Street	On-site	Private	14
Lot 2160 Tuckey Street	On-site	Private	32
Lot 214 Tuckey Street	On-site	Private	9
Lot 213 Tuckey Street	On-site	Private	14
Tuckey Street (Between Sutton and George Street)	On-street	Public	4
Lot 50 Corner Gibson and Sholl Street	On-site	Private	10
Lot 501 Tuckey Street	On-site	Private	47
Lot 24 Sutton Street	On-site	Private	14
Sutton Street (Between Gibson and Peel Street)	On-street	Public	29
Sutton Street (Between Gibson and Tuckey Street)	On-street	Public	5
Lot 1 Sholl Street	On-site	Private	39
Lot 132 Sholl Street	On-site	Private	0
Lot 133 Sholl Street	On-site	Private	13
Lot 136 Sholl Street	On-site	Private	8
Lot 50 Sholl Street	On-site	Private	98
Lot 400 Mandurah Terrace	On-site	Private	33
Lot 21 Mandurah Terrace	On-site	Private	24
Lot 22 Mandurah Terrace	On-site	Private	25
Gibson Street (Between Mandurah Tce and Sholl St)	On-street	Public	12
Gibson Street (Between Sholl and Sutton Street)	On-street	Public	9
Tuckey Street (Between Mandurah Tce and Sholl St)	On-street	Public	12
Tuckey Street	On-street	Public	11
(Between Sholl and Sutton Street) Sholl Street	On-street	Public	14
(Between Tuckey and Gibson Street) Lot 504 Davey Street	On-site	Private	12
Lot 165 Davey Street	On-site	Private	11
Lot 166 Davey Street	On-site	Private	6
Lot 167 Davey Street	On-site	Private	11
Lot 600 Pinjarra Road	On-site	Private	28
Lot 156 Pinjarra Road	On-site	Private	5
Lot 157 Pinjarra Road	On-site	Private	13
Lot 20 Pinjarra Road	On-site	Private	25
Lot 301 Pinjarra Road	On-site	Private	15
Lot 170 Davey Street	On-site	Private	9

	On Site / On Street	Private / Public	Total Bays
Lot 500 Davey Street	On-site	Private	22
Lot 4 Davey Street	On-site	Private	21
Lots 147 & 148 Pinjarra Road	On-site	Private	0
Lot 100 Pinjarra Road	On-site	Private	0
Lot 101 Pinjarra Road	On-site	Private	7
Lot 149 Pinjarra Road	On-site	Private	16
Lots 150 & 151 Pinjarra Road	On-site	Private	25
Lot 3 Pinjarra Road	On-site	Private	8
Lot 2 Pinjarra Road	On-site	Private	17
Davey Street (Between Sutton and George Street)	On-street	Public	14
Lot 185 Davey Street	On-site	Private	11
Lot 181 Davey Street	On-site	Private	10
Lot 180 Davey Street	On-street	Public	2
Lot 179 Davey Street	On-site	Private	17
Lot 3 Pinjarra Road	On-site	Private	25
Lot 4 Pinjarra Road	On-site	Private	10
Lot 16 Pinjarra Road	On-site	Private	10
Lot 143 Sutton Street	On-site	Private	12
Lot 142 Sutton Street	On-site	Private	13
Parking Station 1 Sholl Street Car Park	On-site	Public	170
Lot 500 Sutton Street	On-site	Private	17
Sutton Street (Between Pinjarra Rd and Tuckey St)	On-street	Public	9
Parking Station 7 Lot 52 Smart Street	On-site	Private	81
Lot 51 Mandurah Terrace	On-site	Private	8
Lot 13 Mandurah Terrace	On-site	Private	8
Lot 571 Mandurah Terrace	On-site	Private	11
Sholl Street (Between Tuckey St and Pinjarra Rd)	On-street	Public	43
Lot 13 Sholl Street	On-site	Private	3
Lot 17 Smart Street	On-site	Private	16
Lot 4 Smart Street	On-site	Private	5
Lot 500 Smart Street	On-site	Private	10
Lot 117 Smart Street	On-site	Private	19
Lot 300 Mandurah Terrace	On-site	Private	30
Lot 500 Mandurah Terrace	On-street	Public	0
Lot 17 Pinjarra Road	On-site	Private	7
Lots 11 & 12 Pinjarra Road	On-site	Private	7

	On Site / On Street	Private / Public	Total Bays
Lot 1 Pinjarra Road	On-site	Private	8
Lot 700 Pinjarra Road	On-site	Private	14
Parking Station 2 Lot 1743 Mandurah Terrace	On-site	Public	21
Mandurah Terrace (Between Pinjarra Rd and Tuckey St)	On-street	Public	48
Parking Station 3 Lot 0 Mandurah Terrace	On-site	Public	46
Mandurah Terrace (Between Gibson and Tuckey St)	On-street	Public	12
Mandurah Terrace Between Tuckey and Hackett Street	On-street	Public	61
Lot 68 Pinjarra Road	On-site	Private	8
Lots 200 & 201 Pinjarra Road	On-site	Private	24
Lot 72 Stevenson Street	On-site	Private	15
Lots 64 & 65 Pinjarra Road	On-site	Private	47
Lot 63 Pinjarra Road	On-site	Private	20
Lots 9, 10 & 62 Pinjarra Road	On-site	Private	23
Lot 100 Pinjarra Road	On-site	Private	35
Lot 58 Pinjarra Road	On-site	Private	18
Lot 56 Pinjarra Road	On-site	Private	23
Lot 10 Pinjarra Road	On-site	Private	18
Lot 54 Pinjarra Road	On-site	Private	19
Lot 11 Leslie Street	On-site	Private	10
Lot 53 Leslie St and Lot 71 Creery St	On-site	Public	150
Lot 23 Pinjarra Road	On-site	Private	58
Lot 21 Pinjarra Road	On-site	Private	25
Lot 22 Pinjarra Road	On-site	Private	46
Lot 956 Pinjarra Road	On-site	Public	5
Lot 955 Pinjarra Road	On-site	Public	9
Sub Total [^]			2703

Western Foreshore / Hall Park			
Mary Street / Old Bridge	On-Site	Public	80
Hall Park	On-Site	Public	45
War Memorial / Kings Carnival	On-Site	Public	93
Sub Total			218
TOTAL			4825