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INTRODUCTION

- 1.1 Background
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- 1.4 Case studies
- 1.5 Stakeholder engagement overview





1.1 BACKGROUND

Greater Shepparton City Council is developing a parking strategy for the Shepparton CBD.

Overview

The Shepparton CBD Parking Strategy will be a document which will guide the long-term management of car parking in the CBD.

The Shepparton CBD Car Parking Strategy will:

- Identify current and future challenges facing the Shepparton CBD
- Articulate Council's and the community's vision for parking
- Explore and recommend potential options to manage car parking
- Develop four case studies to test the application of car parking management approaches
- Recommend the way forward for car parking in the Shepparton CBD

Draft consultation will occur with the Council Parking Reference Group before the study progresses to broader stakeholder engagement.

Following the completion and implementation of the significant tranche of strategic land use and transport planning that is currently well-underway, it is expected that a holistic Car Parking Strategy may then be undertaken for the entire CBD as a final stage of this work.

Background

The Shepparton Central Business District Parking Precinct Plan (2003) and the Shepparton CBD Strategy (2008) currently serve as guiding strategic documents for parking management in the Shepparton CBD.

The Shepparton CBD is undergoing a period of significant change, which requires a current and upto-date strategy to manage parking. A large amount of data and analysis has been undertaken to understand the current parking situation.

Stage 1: Car Parking Count and Questionnaire

- Completed by Matrix Traffic and Transport Data Pty Ltd.
- Established existing supply and demand for parking.
- Understand parking purpose and destinations.
- Questionnaire surveyed participants about parking location, duration, purpose of parking and parking initiatives.

Completed December 2018.

Stage 2: Data Analysis

 GTA Consultants Pty Ltd analysed and interpreted the raw car parking count and questionnaire data completed by Matrix Traffic and Transport Data Pty Ltd.

Completed July 2019.

Stage 3: Shepparton CBD Car Parking Strategy

- Currently being undertaken by GTA Consultants Ptv Ltd.
- Identifies current and future challenges facing the Shepparton CBD.
- Articulates Council's and the community's vision for car parking.
- Explores and recommends potential options to manage car parking using four case study scenarios to test parking management approaches.
- A draft study is expected in February 2020.
- Draft consultation will occur with the Council Parking Reference Group before the study progresses to broader stakeholder engagement.
- Following the completion and implementation of the significant tranche of strategic land use and transport planning that is currently wellunderway, it is expected that a holistic Car Parking Strategy may then be undertaken for the entire CBD as a final stage of this work.



1.2 METHODOLOGY AND SCOPE

A methodology was developed for the Shepparton CBD Car Parking Strategy, with a key focus on establishing the Vision and Objectives for car parking within the CBD, and how these could be achieved for specific case study areas using local and best practice approaches.

Overview

Shepparton currently has a number of strategic documents that provide a suite of objectives, ranging from car parking in activity centres, to economic development, and supporting sustainable and active transport modes.

A methodology was prepared for this strategy which focuses on developing and achieving the vision for Shepparton through a holistic and integrated approach to parking management and policy, which are proven to work through case studies.

Purpose of this report

The primary purpose of this document is to serve as a guide for use by Council and other stakeholders for decision making within the context of existing parking management approaches and the development of future strategic work.

It provides a wide ranging unconstrained review and exploration of matters around parking as means to ensure a robust considered future strategy.

Report Structure and Objectives

An outline of the report structure and objectives for each section of this report are shown in the adjacent table.

Report Section	Objective
Setting the Scene	From the outset, an understanding of the role of parking management in activity centres and other areas is required. This section will introduce the Parking Management Task and what must be considered in the broader local and state policy context of transport and land-use integration.
Car Parking in Shepparton CBD	Develop an understanding of the background and issues which exist for parking in the context of Shepparton CBD. This will set the basis by understanding how parking has been managed in the past and what can be done to achieve the community's vision.
Vision and Objectives	Taking into consideration previous strategies developed for Shepparton, as well as the Council Plan 2017-2021, outline Council and the community's vision, including how it relates to parking and the transport system as a whole. Having regard to this <i>vision</i> , establish a set of principles and objectives to guide the parking strategy.
Options Development	Using a wide range of tools, including existing and emerging best practice from local, national and international parking management strategies, establish approaches on how parking could be managed to respond to the objectives and vision for Shepparton.
Case Studies	Apply a range of tools to case study locations around the CBD, to understand their impacts and implications to the various stakeholders, and their alignment against the initial set of guiding principles.
Findings and recommendations	Summarise the key findings and identify further considerations and mitigations. Having regard to the case study outcomes outlined in the previous section, develop an action plan to implement the strategy.



1.3 STUDY AREA

Shepparton is the 4th largest regional city in Victoria with a population of 45,000 people, and is located 160km to the north-east of the Melbourne CBD. The Shepparton CBD provides access to essential goods and services for the local and surrounding rural areas.

Shepparton is a regional city with a population of 45,000 people^[1], located 160km to the north-east of the Melbourne CBD.

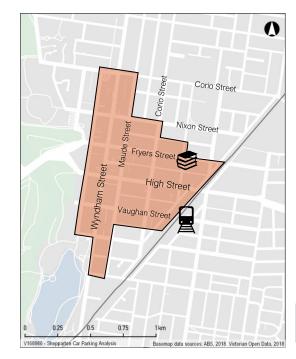
The Shepparton CBD provides access to essential goods and services, including shopping, entertainment, health and education to both the local population and surrounding rural areas.

The key activity and land uses in, and surrounding, the CBD area include:

- Goulburn Valley Health Hospital and medical precinct
- GOTAFE and La Trobe University
- State and Local Government offices
- Shepparton Railway Station
- Retail shopping centres and strip shopping and entertainment precincts

Wyndham Street (Goulburn Valley Highway) and High Street (Midland Highway) serve as the major arterial roads through the Shepparton CBD.

The study area includes the key commercial areas of the CBD only, and is detailed in the adjacent figure.





Regional context – connects surrounding rural areas to goods and services

[1] Estimated Resident Population 2018 – Shepparton – North & Shepparton – South (SA2) (ABS 2019)



1.4 CASE STUDIES

A case study approach was taken to <u>test</u> parking management tools within known issue locations within the Shepparton CBD.

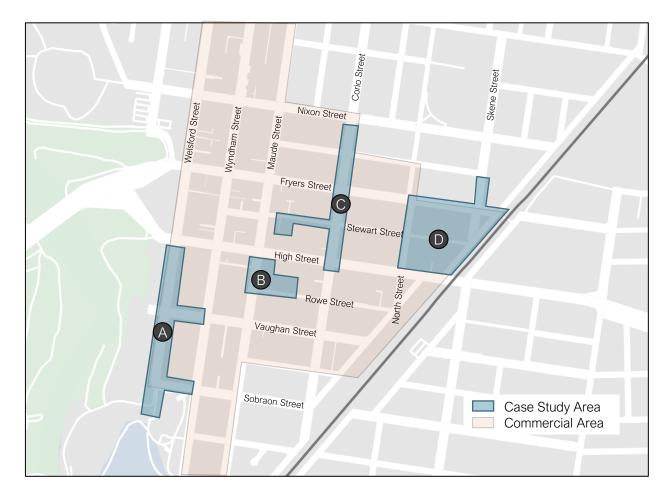
Case Study Approach

In order to test and develop the parking management approaches which will help achieve the CBD vision, a number of case studies were developed.

The areas chosen included locations which had known parking issues, such as over or under utilisation, and known future growth.

The case study areas are shown on the adjacent figure, and include:

- A. the southern end of Welsford Street including the car parks to rear of buildings on the western side of Welsford Street, parking on Sobraon Street and parking on Vaughan Street
- B. the area around Rowe Street / High Street car park including parking on Maude Street
- C. the area surrounding Corio Street and Stewart Street, including the multi-deck car park on Stewart Street.
- D. the area around the **tertiary education precinct**, including the **car parking on the rail reserve** on Railway Parade.





1.5 STAKEHOLDER ENGAGEMENT OVERVIEW

Two workshops were conducted in November 2019, with both internal and external stakeholders, to inform the development of a parking strategy for the Shepparton CBD.

Stakeholder engagement overview

In November 2019, two workshops were held with Council officers and stakeholders, and a community reference group. Through this process, an understanding was developed of the existing issues and opportunities for car parking within the local context of Shepparton.

Methodology

An alternative approach we used for engaging with stakeholders was to first confirm the objectives and then find out what could work (or not) and what would be accepted. This allows a strategy to be developed which focuses on the community's vision for the CBD being achieved, as well as addressing the issues and opportunities.

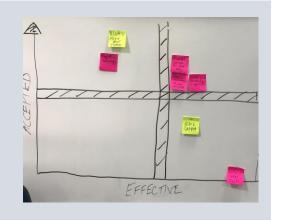
The outcomes and discussion on the workshop activities are presented within Section 3.5 – "Workshop Findings" of this report.

Workshop 1

This workshop was attended by officers from Council and the Department of Transport.

What did we hear?

There is long-standing culture of driving everywhere in Shepparton. The city is growing and so there is a need to consider how future employees, visitors and customers will travel. Signage and restrictions are not consistent, and safety is a major barrier to active travel and personal security also plays a key role in where people choose to park or not park.



Workshop 2

This workshop was attended by the Community Reference Group and included members from GoTAFE, Shepparton Chamber of Commerce, Shepparton Show Me Committee, and La Trobe University.

What did we hear?

There are no issues finding spaces, but it may not be in a convenient location. The perception is that people are being driven away from the CBD because of paid parking and a lack of positive user experience.

Opportunities exist to create a great experience for people to visit the CBD, including improvements to technology, streetscapes and changes to pricing / restriction elements.





CONTEXT

- 2.1 What is parking?
- 2.2 The parking management task
- 2.3 State policy context
- Community profile 2.4
- 2.5 Current travel behaviours
- 2.6 Looking to the future
- 2.7 What are other regional cities in Victoria doing?
- 2.8 Summary





2.1 WHAT IS PARKING?

Car parking provides a means of access to the places we live, work and play. It is an 'end of trip facility' required by private motor vehicles.

As a planning policy

Car parking is an 'end of trip facility' that is required by private motor vehicles. The location, quantity and type of car parking will impact the overall attractiveness, experience and performance of any place that people wish to visit, including Shepparton's CBD.

There are a range of factors that need to be considered when implementing car parking policies in Shepparton. These include:

- The economic role of car parking to support employment, retail and services.
- The existing expectations and behaviours of users
- The availability of viable alternative modes of travel

While private vehicles will remain a key transport mode for accessing places around Shepparton, it is important that car parking is managed to support the growth, vibrancy and prosperity of the CBD.

It is also important to recognise the role of roads and streets in terms of "place" in the CBD. This means creating an attractive space that people want to visit, whilst enabling movement to and from the CBD.

As a demand management tool

Car parking is a key demand management tool and has the potential to greatly influence urban form, transport patterns and investment.

The management of car parking can occur at many levels to ensure that car parking achieves its intended function and is available for its intended users. Depending on its purpose, it should consider:

- Key user groups
- Road safety
- Amenity, públic realm and 'place'
- Property access and servicing, including delivery and waste collection vehicles
- Desired modes of transport including car, walk, cycle and public transport.

Consequently, there are a variety of parking management methods to balance these factors such as:

- Uncontrolled or unrestricted parking
- Time restricted parking
- Allocated parking spaces using permit zone (or a permit holder exempt) schemes
- Access / security-controlled car parking areas
- Prohibited parking and no-stopping areas
- Paid parking

Different land uses have their own unique ways in which parking is, and should be, managed. As each land use brings a different type of user, the management of parking needs to be altered accordingly to ensure a suitable balance for all.





2.2 THE PARKING MANAGEMENT TASK

The challenge and opportunity to improve access, economic prosperity and liveability of places forms the basis of the Parking Management Task.

The Shepparton CBD is an important place where people shop, work, meet, relax and live. With the increasing population, size and density of activity centres, the management of space and competing transport demands become an important issue for both Council and the community.

Streets are for moving people

The primary role of streets is to move people, be it by car, bike, public transport or walking. The ability to 'park' is a secondary outcome and role for streets.

Parking is a finite resource

Car parking requires the specific allocation of valuable land to accommodate vehicles within our activity centres, and its supply and demand can be directly measured. While Councils can find ways to build more parking, it can also have negative urban design outcomes. It may also come at a great financial or social cost to the community.

Competing users have different needs

The kerbside parking hierarchy deals with how parking is managed and can vary from street to street depending on the surrounding land use. It generally acknowledges the fact that different user groups have differing priorities and needs from both a safety and amenity perspective.

An example of a commonly accepted and adopted kerbside user hierarchy for typical commercial centres / activity centre area is shown in the following figure.

Example Kerbside User Group Hierarchy					
1.	Road Safety				
2.	Sustainable Transport				
3.	Loading and Service Vehicles				
4.	People with Disabilities				
5.	Customers				
6.	Visitors				
7.	Residents				
8.	Employees				

Parking and travel demand

A known issue of kerbside parking within activity centres is motorists "cruising" for available parking near their destination. As such, this can contribute to as much as 30% of total traffic volumes when parking is at capacity, and therefore reducing the capacity of our road networks.

Congestion within activity centres increases the probability of conflict between cars and other modes of transport, including cycling and walking. To manage these impacts, studies show that a parking occupancy of 85% provides the best balance of managing demand for parking while improving the function of the road network.

As demand for parking increases, more sophisticated tools are required to manage demands within a finite resource.

The parking management task is a complex one, which requires an integrated and holistic response to access, economic prosperity and liveability objectives through well considered evidence-based parking policy.



2.3 STATE POLICY CONTEXT

A number of relevant state and local strategic documents have been reviewed, which are summarised below. The following outlines key outcomes that influence the strategic objectives for the parking strategy.

The following local and state strategic documents were reviewed and key points relevant to the Shepparton CBD Parking Strategy have been highlighted.

- Draft Shepparton & Mooroopna 2050 Regional City Growth Plan
- The Transport Integration Act 2010
- Movement and Place in Victoria 2019.

The visions and objectives for these three documents set the framework for planning policy on a local level.

The Draft Shepparton and Mooroopna 2050: Regional City Growth Plan is a high-level and broad strategy that guides the sustainable development of the urban area.

The **Transport Integration Act** is the overarching legislative policy for transport planning in Victoria and recognises that transport infrastructure and policy changes influence land use.

Movement and Place in Victoria recognises the diverse role 'places' play in planning which type of transport mode is most appropriate for any given street. It recognises that all streets are places in their own right, and that there are different modal priorities in a place at any given time.



Shepparton & Mooroopna 2050: Regional City Growth Plan (draft)

The draft Shepparton and Mooroopna 2050: Regional City Growth Plan (Growth Plan) guides the sustainable development of the Shepparton Mooroopna urban area to the year 2050.

The Shepparton and Mooroopna 2050: Growth Plan sets out the future vision for Shepparton and Mooroopna and makes recommendations on how to achieve it. It aims to guide and manage sustainable future growth and development over the next 30 years, while defining key projects/infrastructure to support growth and addressing key challenges for the region.

The Growth Plan contains 10 principles that underpin the vision, 6 outcomes and objectives, 28 strategies that set out how the outcomes will be achieved and 61 actions outlining how each strategy will be approached and delivered, including timing.



Transport Integration Act

The Transport Integration Act is Victoria's principal transport Act, bringing together the whole transport portfolio under one statute for the first time.

The Transport Integration Act combines Victoria's transport portfolio under one single legislative act. It serves as a strategic framework a for sustainable transport system. The legislation guides the main decision making process for other strategic transport planning documents within Victoria.

The Act also includes six legislated objectives - social and economic inclusion; economic prosperity; environmental sustainability; integration of transport and land use; efficiency, coordination and reliability; safety, health and wellbeing. These are also underpinned by eight principles that further guide this decision making.



Movement and Place in Victoria (2019)

This document provides an overview of movement and place thinking and steps through the four modules in the Movement and Place Framework.

The Movement and Place Framework takes a future-focused, multi-modal approach to network planning. It takes into consideration the diverse role places play in planning the types of transport modes appropriate to a local road or street. In this new language, roads and streets are defined by the context of a local place and assigned various 'movement' and 'place' classifications.

The Framework offers a common language for coordinated transport planning between transport and planning agencies and local governments. It also provides a consistent approach to assessing the performance of the road and transport network, identifying project requirements and assessing project solutions.



2.4 COMMUNITY PROFILE

Shepparton is a growing regional city, which will need to accommodate the needs of an ageing population and increased number of people living with disabilities.

Population and demographics

Greater Shepparton is anticipated to grow from its current population of 66,010 people to 77,700 by 2036.

An ageing community

The median age of people in Shepparton (State Suburbs) was 37 years. Children aged 0-14 years make up 20.2% of the population and people aged 65 years and over make up 17.4% of the population.

In line with current trends across the country, Shepparton will experience the impacts of an ageing population.

In 2036, the population of people living in Greater Shepparton aged over 65 years old is expected to increase to 22% of the population to 17,800 people.

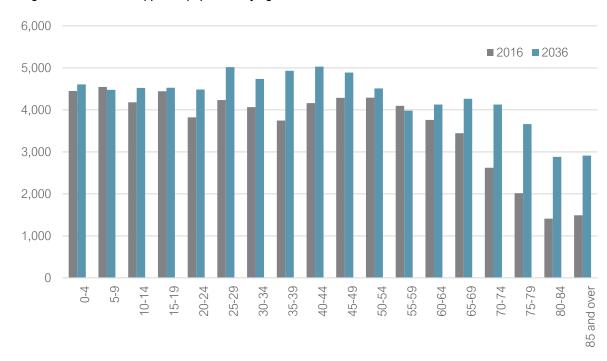
People with disabilities

6.0% of the population in Greater Shepparton reported needing help in their day-to-day lives due to disability.

Most people who live in Shepparton work in Shepparton

92% of all residents who live in Greater Shepparton also work in Shepparton. Residents also work in surrounding municipalities (5% in Moira and Campaspe)

Figure 2.1: Greater Shepparton population by age cohort 2016 - 2036



Source: Victoria in Future 2019

Source: ABS Census 2016, Victoria in Future 2019, Draft Shepparton-Mooroopna 2050 Regional Growth Plan



2.5 CURRENT TRAVEL BEHAVIOURS

The way people currently travel to and from the Shepparton CBD is characterised by its role as a city providing access to goods and services for people living in rural communities, and the lack of adequate public and active travel infrastructure.

Most people who live in Shepparton drive to work

According to ABS 2016 journey to work data, 94% of people who live in Greater Shepparton drive to work, with 5% travelling by active transport and 1% using public transport. For those living in the CBD itself, 64% drive to work, with the rest using active transport^[1].

Most people who visit Shepparton drive

An intercept survey that captured people visiting the CBD was conducted on Friday the 14th and Tuesday the 18th of September 2017. It showed that most visitors arrive by car, followed by walking then bus.

There is a high level of car dependency

The car ownership rate in the Shepparton CBD is 1.64 per household which is less than the ownership rate of 1.84 for the whole of Greater Shepparton.



Trips in Shepparton are longer and more frequent

Households from Shepparton and other regional centres were surveyed for the 2012-2013 Victorian Integrated Survey of Travel and Activity (VISTA).

In regional cities, the average person takes 3.3 trips per day, compared to 2.9 in metropolitan Melbourne. The average trip distance is greater (9.5 vs 8.9km), and average trip time shorter (17 vs 23 minutes).

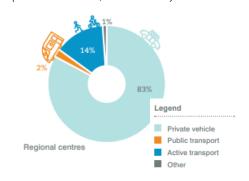
Public transport is limited and rarely used

The Shepparton train station is located on the Seymour line and connects Shepparton to Southern Cross Railway Station. Some services require changes between coaches and trains. There are 9 direct services in each direction throughout the day, including two arriving in Melbourne at 7:59am and 9:10am, and two leaving Melbourne at 4:31pm and 7:08pm.

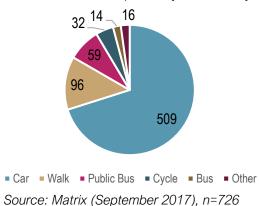
The bus network is also limited, with low frequencies (60min) in the area.

Based on ABS journey to work data, very few people use public transport to get to work (1% in Greater Shepparton, <1% in the CBD). However, the intercept survey, which captures all trip types (work, education, shopping etc.) shows a larger proportion of people who use active and public transport.

A key objective from the Greater Shepparton Movement and Place Strategy: Vision and Objectives is to make public transport a more viable mode of transport. Mode share in Victorian Regional Cities (Source: VISTA, 2012-2013)



Intercept Survey Results Which mode of transport did you use today?



[1] Source: ABS Census Data (2016). Note: small numbers may be impacted by rounding



2.6 LOOKING TO THE FUTURE

Shepparton is growing, with an expected population increase of 19% over 20 years (between 2016 and 2036) which will increase traffic volumes and parking demand. This has the potential to impact the economic growth and liveability of the Shepparton CBD

There will be an increase in population within and outside Shepparton

Greater Shepparton's population (LGA) is expected to grow to 77,700 by 2036, an increase of 19% (or 11,000 residents)^[1]. This growth will be focused around Shepparton CBD and surrounding PSPs including Shepparton North East and Shepparton South East which will accommodate up to 4,000 and 6,000 people respectively^[2].

This increase in population in and around Shepparton will increase the number of people travelling to, from and through the Shepparton CBD, due to the increased number of residents and visitors in the area.

There will be an increase in commercial and retail activities in Shepparton CBD

Commercial office and retail floor space in the Shepparton CBD is expected to grow by approximately 35,000-55,000sqm and 15,000-20,000sqm respectively, increasing the number of visitors and workers in Shepparton.

If nothing changes, there will be an increase in parking demand

This increase in travel to/from Shepparton must be accommodated by the appropriate transport infrastructure. If the current travel behaviour where most people drive to Shepparton continues, the amount of parking required may need to be managed, or risk limiting the economic growth of the Shepparton CBD.

Traffic volume and congestion will increase

With the increase in population, traffic volumes to, from and through Shepparton will increase, with Wyndham Street and High Street expected to experience the largest increase.

This increase in traffic volumes, along with motorists circulating around the activity centre to find kerbside parking will reduce the capacity of the road network.

This increased congestion will increase the probability of conflict between cars and other modes of transport, including cycling and walking.

It will also make the CBD a less safe and attractive place to visit.

Plan 9: Proposed transport projects. Source: Draft Shepparton Mooroopna 2050. Regional City Growth Plan (VPA 2019) (under investigation) 1

Stage 1 - Shepparton Bypass

^[2] Source: Victorian Planning Authority 2019



⁽under investigation) === Stage 2 - Shepporton Bypass (under investigation) ******* Stage 3 - Shepparton Bypass (under investigation)1 • • • • East West Link - Ford Road (under investigation) IIII East West Link - Wanganui Road (under investigation) Shepparton CBD inner eastern link road (interim name) +++ train station/line2 potential intersection upgrade funded roundabout proposed roundabout road and rail grade separation (under investigation) 1111111 O ... O SHEPPARTON MOORGOPNA

^[1] Source: Draft Shepparton & Mooroopna 2050 Regional City Growth Plan (VPA 2019)

2.7 WHAT ARE OTHER REGIONAL CITIES IN VICTORIA DOING?

An investigation into what other regional cities within Victoria are doing found that each of the regional cities researched had different issues and challenges, and therefore managed parking in different ways.

Regional cities in Victoria vary in the way they manage parking depending on their size, location and characteristics. The use of paid parking, time restrictions, different hourly and daily rates, technology and zoning systems varies depending on the challenges or opportunities which face each local community.

Paid parking in regional Victoria

Most regional cities in Victoria use paid parking in some form, particularly those with larger populations, such as Geelong, Ballarat, Bendigo and Warrnambool.

What are others doing?

- Ballarat's Smarter Parking Plan is currently being rolled out. It includes the designation of a 'CBD-wide zone' for parking, new parking meters that take coins and cards, a smartphone app, number plate recognition vehicles, and one-hour free per vehicle per day to incentivise visitation.
- Geelong has a shuttle bus between its free all-day car park at Hearne Parade and Central Geelong, operating every 10 minutes.





2.8 SUMMARY

Shepparton is a growing regional city, and the increasing focus on improved liveability and economic prosperity for people living, working and visiting the CBD poses a significant challenge and opportunity for transport and car parking in the present day and into the future.

What is parking?

Car parking provides a means of access to the places we live, work and play. It is an 'end of trip facility' required by private motor vehicles, especially in areas where there is a high level of car dependency such as Shepparton.

The parking management task

The challenge and opportunity to improve access, economic prosperity and liveability of places from a parking perspective forms the basis of the Parking Management Task.

Policy context

A number of relevant state-wide strategic documents are relevant to the Shepparton CBD parking strategy and will influence the strategic objectives for the parking plan. This includes the Shepparton & Mooroopna 2050: Regional City Growth Plan (draft), the Transport Integration Act and Movement and Place in Victoria (2019).

Community profile

Shepparton is growing, with an expected increase of 19% over 20 years (between 2016 and 2036). Shepparton will also experience the effects of an ageing population.

Current travel behaviours

Most people who live in and visit Shepparton choose to drive as there is a lack of adequate public and active travel infrastructure.

Looking to the future

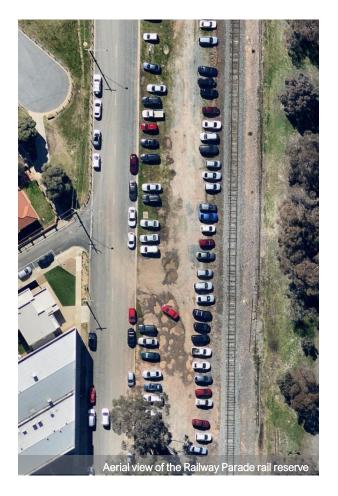
The increase in population accompanied with high car usage will increase traffic volumes and parking demand. An ageing population will have different mobility needs and may need to rely on alternative modes of transport as a result. Maintaining the status-quo has a potential to adversely impact the economic growth and liveability in the Shepparton CBD.

What are other regional cities doing?

Each regional city has its own approach to managing parking based on its needs and objectives. Most larger regional cities make use of paid parking to manage demand.

Shepparton CBD Car Parking Strategy

Shepparton's unique characteristics now and into the future must be considered to best manage parking and support strategic policies. This forms the basis for the development of the Shepparton CBD Car Parking Strategy.





CAR PARKING IN THE SHEPPARTON CBD

- 3.1 Overview
- (3.2 Infrastructure provisions)
 - 3.2.1 Supply and distribution
 - 3.2.2 Paid parking, technology and wayfinding
- (3.3 Operational characteristics)
 - 3.3.1 Data collection
 - 3.3.2 Demand for parking
 - 3.3.3 Turnover and compliance
- 3.4 Statutory parking provisions
- 3.5 Workshop findings
- 3.6 Key themes and issues





3.1 OVERVIEW

This section outlines the current situation of car parking, as well as identification of the key themes, issues and opportunities as they relate to the Shepparton CBD.

Introduction

A significant amount of data was collected by Council to inform the current situation of car parking within the Shepparton CBD. The data was analysed as part of the previous project (Movement & Place and Parking in Shepparton – The Current Situation, GTA 2019).

The data provides a number of insights for the way parking is currently managed in the CBD, and what challenges or opportunities may exist.

Structure of this section

This section provides a recap of the previous data analysis for the whole of the Shepparton CBD, including outcomes of the relevant workshop and site observations.

A number of key issues and themes are then established to inform the development of the relevant parking management approaches and options which will be tested in the case study areas.

Infrastructure provisions

Parking, including associated signage and technology can be considered an asset to Council, regardless if it is physical infrastructure or not. This sub-section considers car parking supply, wayfinding signage, and paid parking meters.

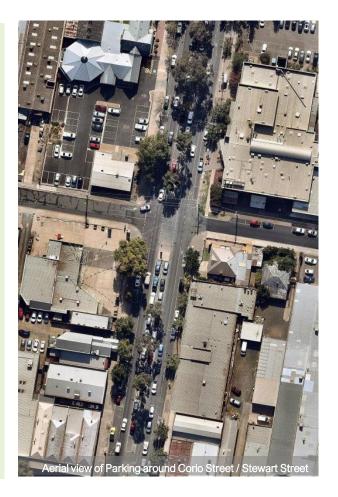
Operational characteristics

The way that car parking is utilised, including duration of stay and demand are considered as operational characteristics of the parking system. This sub-section considers the demand, turnover and compliance characteristics.

Limitations of the data

The data for this study was collected in September 2017, and as such it is over 2 years old at the time of this study. While there has been limited or no development in select areas, the overall population has increased, and new uses outside the CBD have commenced (e.g. shopping centres).

The survey area also excluded many private offstreet car parks including the private multi-deck car park, some on-street areas in the education precinct and the railway reserve. Supplementary data has been used from other sources, including visual observations of time and date stamped Nearmap aerial imagery to confirm any assumptions.





3.2.1 INFRASTRUCTURE PROVISIONS: SUPPLY AND DISTRIBUTION

There are a total of 2,830 parking spaces within the commercial area. The most prevalent type is short-term on-street parking (between 30 minutes and 2-hours) making up a total of 1,171 spaces or 41% of all publicly available parking in the CBD.

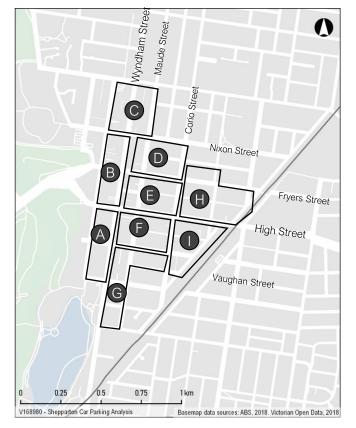
There is a large amount of on and off-street parking with different restrictions within the Shepparton commercial area.

Overall, short-term on-street parking makes up the greatest proportion of parking type (41%) followed by long term off-street parking (3hr+) which makes up 28% of publicly available parking in the CBD. All day parking makes up 12% of all spaces in the CBD.

Key findings

- There are 1,692 on-street car parking spaces and 1,138 off-street car parking spaces in the commercial centre
- The majority of on-street parking is short term (30min-2hr) and the majority of off-street parking provided is 3 hours or longer.
- All day (P or Unrestricted) makes up 12% of the total parking supply and is located in areas further from the centre (A, C, D, G, I).
- Outside the commercial centre, there is much more all-day parking with 2,949 spaces (out of 6,057) in the entire survey area

Figure 3.3: Commercial Area Zones



Zone	Total Parking No.	All Day No. (% total) ^[1]
А	118	67 (57%)
В	220	0 (0%)
С	180	32 (18%)
D	394	66 (17%)
Е	259	0 (0%)
F	324	0 (0%)
G	710	28 (4%)
Н	261	9 (3%)
1	364	125 (34%)
Total	2830	327 (12%)

[1] The above numbers relate to the defined precinct areas in the core commercial area only, and hence do not show all long-term parking within acceptable walking distance for employees



3.2.2 INFRASTRUCTURE PROVISIONS: PAID PARKING, TECHNOLOGY AND WAYFINDING

Parking in the Shepparton CBD is currently supported by a number of infrastructure provisions including paid parking, ticket machines, payby-phone apps and wayfinding signage.

Paid parking

There are approximately 1,100 ticketed on-street spaces, and 230 ticketed off-street spaces within the Shepparton CBD. Most of these spaces are supported by short term parking restrictions (e.g. 1, 2, or 3 hours) and located within the core commercial area.

A payment rate of \$1.50 per hour applies to all paid parking areas, regardless of being located on-street or off-street.

At the November 2019 Council meeting, Council moved a notice of motion to make all paid parking areas free for the holiday period during December 2019 and January 2020 inclusive.

Publicly accessible private off-street parking

Several large car parks are owned and operated by anchor retailers or small shopping centres. A number of these car parks are time restricted to discourage the use by local employees. In some cases, the car parks are managed by third-party operators, or parking management agreements are in place to allow Council to enforce the restrictions.

The exception to this is the multi-deck car park located in Stewart Street, which is available for a fee of \$1.50 per hour capped at \$4.50 per day.

Ticket machines and parking meters

A combination of ticket machines and multi-bay meters exist within the paid parking areas. Currently, the only way of purchasing parking in person is by using coins. There is no credit card facilities available.

Mobile phone app

The alternative to paying by cash in paid parking areas is to use the mobile phone app *PayStay*. The mobile phone app based system requires users to establish an account and enter their registration and the zone number identifier where they have parked.

A key feature and benefit of the app is that users can start-and-stop their session, which charges them for the exact time they have used and limits the both the risk of overstaying the purchased time (when compared to ticket machines or meters), or overpaying for parking.

Wayfinding signage

The current wayfinding systems for off-street parking is controlled by static signs on key access routes to the CBD (as shown below located on Goulburn Valley Highway), and at the entrances to car parks.

This system, whilst useful, only shows where parking is located, including the number of spaces and time limits, however it does not show how much of this parking is available at any given point in time.



Image: Wayfinding sign on Goulburn Valley Highway entrance to the Shepparton CBD

Source: http://greatershep parton.com.au/co uncil/parkingenforcement



3.3.1 OPERATIONAL CHARACTERISTICS: DATA COLLECTION

A significant amount of data and information on operational characteristics and user behaviours was collected to inform the development of the Shepparton CBD Parking Strategy.

The following table outlines the surveys and other information collection methods which were undertaken as part of the overall study. The extent of the surveys, including survey type is also shown on the adjacent figure.

Data / Information Type	Source	Date / Times
Car parking occupancy and duration surveys	Matrix Traffic and Transport	Tuesday 11th September & Friday 14th September 2018
Intercept Surveys	Data	between 7AM and 10PM
Site Inspections	GTA Consultants	Tuesday 29/10/2019 10am-12pm, Tuesday 12/11/2019 12pm-1pm

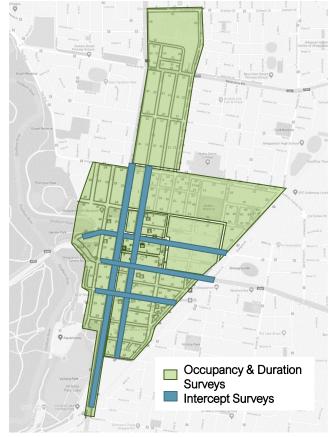


Figure: Parking Survey Area



3.3.2 OPERATIONAL CHARACTERISTICS: DEMAND FOR PARKING

The peak occupancy period of the survey period for all on-street and off-street parking combined was at 12pm on the Tuesday, where parking was 57% utilised.

The highest demand for parking exists from around 10am through to about 2pm each day, with the peak occurring at 12pm on the Tuesday survey day with an overall utilisation of 57% across the core commercial area (shown on the adjacent figure and chart).

This demand is spread out over the commercial area, with the highest demand occurring further from the main commercial area and underutilisation around High Street.

Key findings

- The utilisation is consistent across on-and offstreet parking (58% and 52%). Overall utilisation of on-street parking is higher than off-street.
- Area A, D and G are the most highly utilised (75%, 68% and 66%). However they still have some capacity.
- Some off-street parking lots have high capacities and are at capacity (97% occupied)
- The Friday demand profile is similar to the Tuesday profile; however parking demand is greater past 5pm, reflecting longer trading hours

Further data analysis and detailed assessments of parking demands were undertaken for the case study areas (shown in Section 6).

Figure: Utilisation @ 12 PM, Tuesday

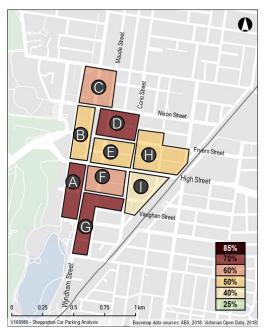
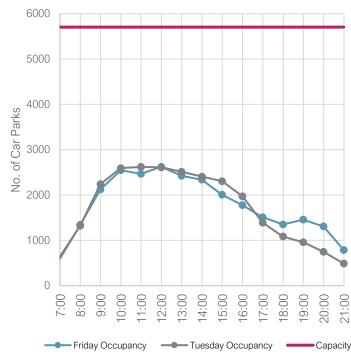


Figure: Parking Occupancy Profile - Entire survey area





3.3.3 OPERATIONAL CHARACTERISTICS: TURNOVER AND COMPLIANCE

Compliance with timed parking restrictions was 90% and there was a significant difference between paid and unpaid parking areas, with people more likely to comply with paid parking.

A review of the parking duration data showed that compliance was generally OK within the Shepparton CBD, noting the survey methodology results in there being an element of underestimation with the number of non-compliance events.

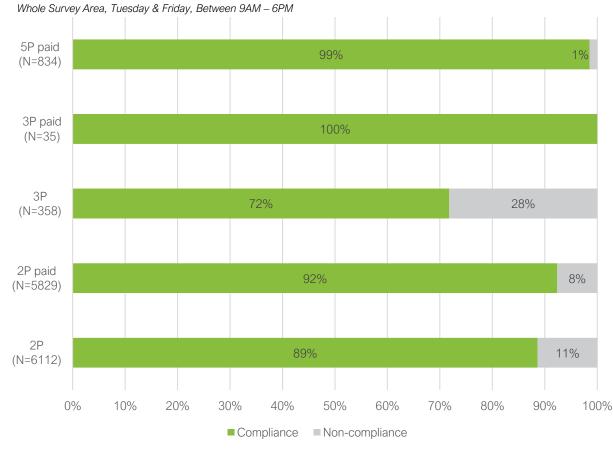
Notwithstanding this, compliance within timed parking is generally high overall (90%), and higher in paid parking spaces (93%) compared to unpaid (88%).

Due to the nature of surveys, the level of compliance with paid parking requirements (cannot be ascertained).

Key findings

- The compliance rate for 2-hour parking was higher for paid parking (92%) when compared to free areas (89%).
- The average duration of stay for 2-hour parking was higher for free parking (1:31hrs) when compared to paid parking (1:19hrs).
- The compliance rate for 3P unpaid parking is much lower, at 28% and with an average duration of stay of 2:48hrs.
- The compliance rate for 5P ticket parking is 99% with an average duration of stay of 1:39hrs, indicating that people do not require long term parking in these areas, but rather use it for convenience.







3.4 STATUTORY PLANNING PROVISIONS

A parking overlay applies to the Shepparton CBD which reduces the statutory parking provisions for new developments, and includes a 'cash-in-lieu' rate of \$6,005 per space (as of July 1, 2019).

Clause 52.06 – Car Parking

Clause 52.06 of the Victoria Planning Provisions sets out minimum parking provision requirements for new and altered developments (where an increase in development scale occurs). The default requirements are called "Column A". These requirements are also supplemented by a set of decision guidelines which facilitate the consideration of reductions to these minimum provisions.

These rates are the default rates that apply across Victoria, unless varied by Council by way of a Parking Overlay.

Clause 45.09 – Parking Overlay

The Greater Shepparton Planning Scheme contains a parking overlay for the Shepparton CBD area (as shown in the *Shepparton CBD Parking Precinct Plan*, 2006). The parking overlay specifies the use of a separate table of parking rates (instead of simply Column B).

The rates set out in the Parking Overlay for the Shepparton CBD, typically match, or are less than the Column B rates set out in Clause 52.06 of the Planning Scheme.

Financial contributions

A cash-in-lieu rates of \$6,005 per space^[1] is currently available to developers to offset the requirement to provide parking spaces on-site. Typically, these funds have been collected by Council since the incorporation of the overlay into the Planning Scheme and have been used to implement new on-street car parking spaces.

[1] Shepparton CBD Parking Overlay, from 1 July 2019

Table: Greater Shepparton Planning Scheme – Statutory Parking Rates (all rates 'spaces / 100m² unless otherwise stated in table)

Use	52.06 Statutor	Parking Overlay		
	Column A	Column B	(Schedule 1) [2]	
Office	3.5	3	3	
Place of Assembly	0.3 per patro	on permitted	3	
Restricted Retail Premises	3	2.5	2.5	
Shop (not including Convenience shop or supermarket)	4	3.5	3	
Food and drink premises	4	3.5	3	

Sources:



^[2] https://planning-schemes.delwp.vic.gov.au/schemes/vpps/52_06.pdf

^[3] https://planning-schemes.delwp.vic.gov.au/schemes/greatershepparton/ordinance/45_09s01_gshe.pdf

3.5 WORKSHOP FINDINGS

A wide range of views exist on the current and emerging operation of the CBD including the important role of car parking in a chieving the overarching principles and objectives of Council and the community.

At outlined in the previous sections of the report, there were two groups established in the workshop and engagement phase of the project:

- Project Working Group including Council officers and Department of Transport
- Community Reference Group including GOTAFE, Shepparton Chamber of Commerce, Shepparton Show me Committee, and La Trobe University

The word clouds **shown below** demonstrate the following key insights:

- The **project working group** were focused on the barriers to change to less reliance by the community on car use, including the lack of safe and reliable sustainable transport options.
- The community reference group had a clear focus on user experience and the perceived lack of adequate car parking for both short and longterm users.



Word cloud: **Project Working Group**



Word cloud: Community Reference Group



3.6 KEY THEMES, ISSUES AND OPPORTUNITIES

From the background material, stakeholder engagement and data analysis, the key themes and issues relating to car parking in the Shepparton CBD could be summarised as: user experience, perceived lack of parking and appropriateness of paid parking.

Oversupply of parking

The peak occupancy in the commercial areas is 57%, indicating that overall there is an oversupply of parking. A capacity of 85% provides the best balance of managing demand for parking while improving the function of the road network.

This unused capacity and space could be reallocated to improve the amenity of the CBD.

Hotspots and empty spots

Across the commercial area, some areas are at capacity (e.g. free parking lots along Nixon Street, Welsford Street & Sobraon Street) while others are underutilised (e.g. paid parking lots along Fryers Street). Notwithstanding the above, this does not suggest that capacity is located in the right or wrong place.

Mode of travel

Shepparton CBD is a car centric CBD, where most visitors arrive by car, followed by walking then bus. This creates the need for parking as an "end-of-trip" facility for people to visit to ensure that people can continue to access Shepparton.

High car dependency also increases the amount of circulation and traffic within the CBD that has a negative impact on place.

Location of parking

The supply of parking is centralised within the town centre, particularly around High Street. These areas experience increased demand due to convenience.

Attitudes to parking further away

Surveys showed that many people would accept parking further away if it was free, all day or secure. These measures could be used to encourage people to park further away from places that should be prioritised for people.

Compliance & Turnover

Compliance with timed parking is higher in paid areas when compared to free areas. If paid parking is removed in the Shepparton CBD, noncompliance could increase. Furthermore, turnover may decrease, reducing the number of people who can visit in areas which are already at or near capacity.

Recurring Parking Themes

Across all forms of information, there was a number of recurring themes which were evident through the investigation of parking issues and opportunities, and these are listed below.

- Underutilisation of fee-paying car parks and the perception that 'free' parking will fix the CBD
- Hotspots and empty spots in the CBD
- Technology trends in parking represent a major opportunity for change
- There is a perception that Council is focussed on enforcement of revenue collection, rather than education, and this has upset the community
- There are a lack of alternate travel options for people who would otherwise walk or cycle into the CBD
- Employee parking in high-activity / premium areas
- Importance of user experience and how parking currently enhances visitation
- Inconsistency of parking management approach across the CBD



VISION AND OBJECTIVES

- 4.1 The vision for Greater Shepparton
- 4.2 The role of parking in achieving the vision
- 4.3 A vision for car parking in the Shepparton CBD





4.1 THE VISION FOR GREATER SHEPPARTON

The *Greater Shepparton City Council: Council Plan for 2017-2021* sets out the community vision and objectives, including a number of key themes to achieve its strategic direction including: Leadership and Governance, Social, Economic, Built and Environment.

Greater Shepparton City Council: Council Plan 2017-2019

Greater Shepparton's *Council Plan: 2017-2021* sets out the key directions and objectives to achieve the vision as shown below.

Council's Vision:

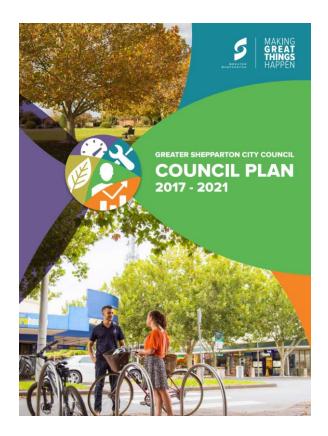
"Greater Shepparton, Greater Future.

A thriving economy in the foodbowl of Victoria with excellent lifestyles, innovative agriculture, a diverse community and abundant opportunities."

Strategic objectives

The following strategic objectives are of most relevance to the development of the Shepparton CBD Parking Strategy:

- Our community is supported to achieve and sustain physical, emotional and spiritual health and wellbeing.
- Public places, open space and community facilities are safe and accessible for all and presented to a high quality.
- Shepparton is a regional city centre supported by well-planned and designed existing and emerging commercial activity centres.
- Growth is planned and managed for the future.
- Reliable, safe, more frequent and connected local and broader transport system supporting the connection of people within, across and outside of Greater Shepparton.
- Active transport (cycling and walking) is encouraged through safe, connected and improved linkages.
- Council has positioned itself to be a leader in building Greater Shepparton's response to climate change issues, in partnership with key stakeholders.





4.2 THE ROLE OF PARKING IN ACHIEVING THE VISION

The Council Plan represents the key directions and objectives to achieve the municipality's vision. Car parking can play a role in achieving these visions when broadly assessed against the Plan's strategic objectives.

1. LEADERSHIP AND GOOD GOVERNANCE

Provide strong civic leadership, advocacy and good governance in the operation of Greater Shepparton City Council.

Decision making around car parking in activity centres must be justified with qualitative and quantitative analysis of data and other evidence sources against the community's vision and objectives. Parking issues are almost always exaggerated, and as such, the easy option is to give in to pressure created by a small number of community members, often at the detriment to the whole community.

2. SOCIAL

Develop resilient, inclusive, healthy communities that make Greater Shepparton a safe and harmonious place to live, work, learn, and play

Parking enables access to people who rely on private vehicles to access essential goods and services, either due to physical or geographical limitations and constraints.

In this regard, parking may always need to be provided in some form to support these communities.

3. ECONOMIC

Provide strong civic leadership, advocacy and good governance in the operation of Greater Shepparton City Council.

Both car parking contributions and the operation of paid parking enable Council to fund improvements to the CBD including improved community spaces and sustainable transport infrastructure.

As a demand management tool, paid parking complements these investments, while also establishing a 'user pays' model, so that people who do not drive, don't end up subsidising the real cost of parking in activity centres.

4. BUILT

Provide and support appealing relevant infrastructure that makes Greater Shepparton an attractive, liveable regional city.

Car parking can have an unwanted impact on urban design and land development outcomes. Ensuring parking is well designed and where possible, located away from high activity areas and can have a positive impact on the places we live, work and play.

5. ENVIRONMENT

Enhance and protect the clean, green environment that makes Greater Shepparton the unique place it is.

Car parking can be managed to reduce the impacts of private vehicle trips which contribute negatively to the environment in several ways such as the 'urban heat island' effect, carbon emissions and other amenity impacts (e.g. noise, heat, air quality).

Reducing the number of trips, congestion and location of parked vehicles can benefit the environment. Car share, electric vehicles and incentives to carpool are just a few ways which could also benefit the environment.



4.3 A VISION FOR CAR PARKING IN THE SHEPPARTON CBD

The Shepparton CBD Parking Strategy will become an important document to inform changes to public spaces and adjacent land uses in the future. A set of objectives and principles to guide the development of the strategy are presented below.

VISION

"An accessible CBD where parking is safe, equitable and supports the local economy."

(Parking will...)

1. Support the CBD

2. Be equitable and accessible

3. Be managed to improve place and liveability

4. Balance modal priorities

OBJECTIVES

Car parking can play a supporting role in the success and vibrancy of the local economy, in particular within activity centres.

On its own, parking management is not the answer, and should be considered as part of the broader economic, transport, and liveability objectives for Greater Shepparton.

The safety of all people on the road and abutting public spaces should be the highest priority when locating car parking.

The way parking is managed should be inclusive of people travelling by all modes, and in all places.

Activity centres play a vital role in achieving liveability objectives through providing community spaces and facilities, free from excessive environmental impacts created by freight and other vehicular traffic.

The overall benefits and impacts to the community, including traders and other road users should factor in to the decision making process around car parking.

Roads have a primary movement function, and onstreet car parking competes with this.

People move in different ways and by a variety of modes – including walking, cycling, public transport and car.



OPTIONS DEVELOPMENT

- 5.1 Parking management tools and approaches
- (5.2 Options development)
 - 5.2.1 Allocation
 - 5.2.2 Restrictions
 - 5.2.3 Pricing
 - 5.2.4 Technology
- 5.3 Other initiatives and strategies
- 5.4 Options to be tested





5.1 PARKING MANAGEMENT TOOLS AND APPROACHES

Car parking can be managed through a number of different approaches and mechanisms and the following section investigates a broad range of actions and how they could either support or conflict with the overarching parking strategy objectives for the Shepparton CBD.

Purpose of this section

The following section contains a toolkit of potential car parking management approaches, which respond to both the current issues and future situation and outline how they align with the Shepparton CBD Parking Strategy objectives.

The initiatives, policies and actions investigated in this section come from a number of different sources including (but not limited to):

- Opportunities and / or potential solutions raised in the stakeholder engagement workshop sessions.
- Other parking plans or strategies, both locally and internationally.
- Current practices and / or tools used by other regional cities within Victoria.

As discussed in earlier sections, this strategy will consider a wide range of options to be tested in the individual case study areas. While this 'toolkit' considers a number of 'best practice' parking management approaches, it must be stressed that what works well elsewhere might not always be the best solution for Shepparton. Thus, the case studies will further investigate what will work best for the individual areas and the CBD more broadly.



Assessment against the objectives

For each action or initiative, a qualitative assessment was undertaken to determine how it could respond, or indeed conflict, with the strategy objectives and Council's overarching vision for the Shepparton CBD.

Assessment levels and description

- ✓= Aligns and supports The policy or action aligns or satisfies the objectives either directly or indirectly, and have a positive benefit to that aspect of the overarching vision
- ?= Sometimes There is no clear opinion or evidence to suggest that the policy or action would satisfy the objective – or – it is dependant largely on the context and further investigation would be required
- X = Contradicts or conflicts The policy or action directly conflicts or contradicts the desired outcomes of the objective.

The outcomes of the following assessments do not exclude any action or initiative from being further investigated as part of the case study section of this report, but rather give an indication of how the car parking in the Shepparton CBD could potentially be managed.

5.2.1 OPTIONS DEVELOPMENT: ALLOCATION

Council controlled car parking can be allocated to a particular user through the use of zones, permits or other signage mechanisms allowed under the Road Rules.

Existing issues and opportunities

- A1. Parking is currently managed on an ad-hoc basis, depending on the needs of adjacent land uses with no framework to determine how kerbside space should be managed.
- A2. Parking in front of commercial properties should be for customers and short term uses.
- A3. Some off-street (timed) areas are currently underutilised.

Future Considerations

- A4. An ageing population will become more dependent on door-to-door mobility and the demand for parking for people with disabilities will increase.
- A5. Investment and new commercial developments are being encouraged in CBD which will generate new demands for car parking.
- A6. CBD revitalisation projects (e.g. pedestrianisation, bus interchange) may require the removal of on-street car parking.

Table: Parking allocation strategies and actions

l	Parking	Strategy	Objectives
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- 1. Support the CBD
- 3. Place and liveability
- 2. Equity and access
- 4. Balance modal priorities

Policy /	Description	Issue or	Alignment with objective				
Action	Description	opportunity	1	2	3	4	
1	Implement a kerbside user parking hierarchy	A1	?	✓	✓	✓	
2	Remove all long term on-street car parking from outside active commercial frontages	A2	√	✓	√	?	
3	Increase the provision of parking spaces for people with disabilities (above and beyond the relevant guidelines)	A4	√	√	√	X	
4	Provision of loading areas in side-streets or off-street areas for new developments, including consolidation or relocation of existing loading zones	A1,2,5,6	?	?	√	√	
5	Implement a business or trader permit scheme for underutilised off-street car parks	A3	√	?	?	X	
6	Build new Council owned public off-street car parks to offset loss of on-street parking allocated to other uses (e.g. streetscape improvements, bicycle lanes)	A6	?	√	?	?	
7	Utilise existing availability of car parking in surrounding areas to support losses elsewhere	A5,6	√	√	√	√	

Legend: ✓= Aligns and supports, ?= Sometimes, X = Contradicts or conflicts



5.2.2 OPTIONS DEVELOPMENT: RESTRICTIONS

Parking restrictions (e.g. time of day or week, number of hours) are required to ensure adequate turnover for the 'highest value' spaces, typically in areas of high demand or activity.

Existing issues and opportunities

- R1. 2-hour parking restrictions are common in the highest demand areas, limiting opportunities for increased turnover of a valuable resource.
- R2. Non-compliance with parking restrictions is high in some 2-hour and 3-hour areas, potentially recognising the need for longer term parking to support adjacent land-uses in these areas.
- R3. Very-short term parking (15 minutes and less) makes up just 2% (or 58 spaces) of parking in the core commercial areas.
- R4. Underutilised areas of parking with timed restrictions represent an opportunity to increase demand for a valuable resources which is used inefficiently.

Future Considerations

- R5. On-street parking is a finite resource, and as retail and office floor space increases in the CBD, so will the demand for on-street car parking in high-activity areas.
- R6. An ageing population will require better access to goods and services within the CBD, and suitably located on-street parking plays an important role for people with reduced mobility.

Table: Parking restriction strategies and actions

<u>Pa</u>	rking Strategy Objectives		
1.	Support the CBD	3.	Place and liveability
2.	Equity and access	4.	Balance modal priorities

Policy /	Description	Issue or opportunity	Alignment with objective				
Action	Description		1	2	3	4	
8	Convert 2-hour parking to 1-hour parking in high- activity areas to increase turnover, reducing congestion and increasing visitation	R1,5,6	✓	√	√	?	
9	Implement free 15-minute parking within each road section frontage (kerbside) to provide for short-term convenience needs	R1,3,5,6	√	√	√	?	
10	Increase time-limits where there is a demonstrated need from adjacent land uses – and – parking utilisation is low	R2,4	✓	√	X	X	
11	Expand time limits to reflect regular business hours on Saturdays to ensure adequate turnover (including Sundays where adjacent land use necessitates)	R5,6	√	✓	√	✓	
12	Remove time-limits (but not fees) in underutilised off- street areas	R4	?	√	√	?	

Legend: √= Aligns and supports, ?= Sometimes, X = Contradicts or conflicts



5.2.3 OPTIONS DEVELOPMENT: PRICING

A paid parking policy which is balanced, strategically justified and implemented consistently can have major benefits to accessibility, liveability and improve overall spending and visitation in the CBD.

Existing issues and opportunities

- P1. Fees are currently charged the same for both on-street and off-street areas which does not incentivise vehicles to park away from high activity areas.
- P2. Some paid parking areas are currently at capacity, which represents an opportunity to further use pricing as a demand management tool to increase turnover and availability.
- P3. There is limited availability of short-term free parking in high activity areas for very short-term visits, which makes paying for parking inconvenient.

Future Considerations

- P4. The demand for parking will increase with new developments within the CBD, and thus on-street parking will become an even more valuable resource.
- P5. The revitalisation of the CBD will be somewhat reliant on paid parking income to fund substantial streetscape and community infrastructure capital works.

Table: Parking pricing strategies and actions

Parking	Strategy	Objectives	
_			

- Support the CBD
- 3. Place and liveability
- 2. Equity and access
- 4. Balance modal priorities

Policy /	Description	Issue or	Alignment with objective				
Action	Description	opportunity	1	2	3	4	
13	Implement paid parking in timed areas where demand is consistently greater than 85% to increase turnover of parking spaces	P4,5	?	✓	✓	?	
14	Apply a demand sensitive parking policy where pricing is increased or decreased on the basis of achieving an ideal utilisation rate of 85% during the peak times	P1,2,4	✓	✓	✓	?	
15	Apply location based pricing variability whereby on- street spaces are charged more than off-street spaces, to encourage users to park off-street and further from their destination	P1,4	√	✓	✓	✓	
16	Apply a free parking period (15 or 30 minutes) for all timed <u>and</u> paid parking spaces in the CBD	Р3	✓	✓	X	X	

Legend: √= Aligns and supports, ?= Sometimes, X= Contradicts or conflicts



5.2.4 OPTIONS DEVELOPMENT: TECHNOLOGY

Smart parking and other supporting technologies represent significant opportunities to improve user experience and reduce congestion within the Shepparton CBD.

Existing issues and opportunities

- T1. Current parking meters do not accept credit card payments, limiting in-person payment to coins only.
- T2. There were concerns raised regarding the usability and functionality of the current parking app.
- T3. Existing wayfinding signage is static, and shows people where parking is, but not how much is available.
- T4. Current enforcement is done on-foot, which is inefficient when compared to new and emerging enhanced enforcement practices.

Future Considerations

T5. A growing activity centre and population requires the more efficient use of an existing and finite resources, which technology can help support.

Table: Parking technology strategies and actions

Parking	Strategy	Objectives
---------	----------	-------------------

- 1. Support the CBD
- 3. Place and liveability
- 2. Equity and access
- 4. Balance modal priorities

Policy /	Description	Issue or	Alignment with objective			
Action	Description	opportunity	1	2	3	4
17	Implement dynamic wayfinding signage, at key decision points, to direct motorists to available parking spaces	T3,5	√	√	✓	?
18	Implement parking detection technology (e.g. underground sensors, cameras) to enhance enforcement and support a 'smart parking' system	T4	√	√	√	?
19	Develop an 'all-in-one' parking phone-app which allows users to identify available spaces and pay for and reserve parking	T2	√	√	√	?
20	Implement Automatic Number Plate Recognition technology to enforce timed parking areas	T4	✓	✓	?	?
21	Upgrade existing parking meters to support credit card payment, and pay-by-plate technology	T1	✓	√	?	?

Legend: √= Aligns and supports, ?= Sometimes, X= Contradicts or conflicts



5.3 OTHER ACTIONS OR INITIATIVES

Parking management cannot be effective on its own, and requires a number of supporting strategies and initiatives to achieve the community's objectives and vision for the Shepparton CBD.

Parking management in activity centres must not be seen as the answer to addressing the existing issues within the activity centre, including concerns around the vibrancy or success of the CBD.

There are a number of other actions and initiatives which must be considered to enhance liveability and access, as well as achieving the objectives and vision for Shepparton.

A number of these are listed in the adjacent table, grouped into the following categories:

- · Public and active transport
- Inviting and inclusive public spaces
- Statutory parking provisions
- Investing in the activity centre
- User experience and economic development

Table: Other supporting initiatives and strategies for the Shepparton CBD

Category	Action or Initiative
Public and active transport	 Bus stop infrastructure including waiting areas Safe and efficient bicycle connections into the CBD Green Travel Plans for new developments Walkable streets and safe pedestrian crossing infrastructure
Inviting and inclusive public spaces	 Achieving compliance with Disability Discrimination Act (DDA) for all existing public spaces, including parking bays Applying CPTED principles for all new developments Ensuring all car parking areas and connections to commercial areas are safe and inclusive for all
Statutory parking provisions (discussed further later in this strategy report)	 Reviewing financial contributions for parking waivers Establishing suitable and evidence based statutory parking rates to the Shepparton CBD area (reviewing the existing parking overlay)
Investing in the activity centre	 Utilising paid parking income to make improvements to community infrastructure and public spaces in the CBD (including sustainable transport infrastructure)
User experience and economic development	 Establishing fair parking enforcement processes including setting and advertising warning protocols Streamlining parking operations for users



CASE STUDIES

- 6.1 Overview
- 6.2 Case Study 1: Southern End of Welsford Street
- 6.3 Case Study 2: High Street and Rowe Street Car Park
- 6.4 Case Study 3: Health Precinct and Multi-deck Car Park
- 6.5 Case Study 4: Education Precinct and Railway Parade
- 6.6 Shepparton CBD-wide approach





6.1 INTRODUCTION

Four locations with specific issues or concerns were selected to take a cross-sectional approach to developing an understanding of the issues with parking and how they can be resolved while also considering the overarching vision for the Shepparton CBD.

Overview

A number of case studies have been prepared to test and develop the parking management approaches to achieve the CBD vision. This section contains the investigations and recommendations for each case study area, including common approaches or actions which could be implemented to achieve the CBD parking vision.



Case Study	Situation and problem	Options considered
1.Southern End of Welsford Street	Most of the area consists of long- term parking, and there is high demand for it, particularly from employees. There is insufficient short-term parking for people visiting the surrounding land uses and the lake.	 Implement a kerbside user parking hierarchy Remove long term on-street car parking from outside active commercial frontages Implement paid parking in timed areas of high demand Apply a demand sensitive parking policy Identify existing off-street parking lots that can be used for employees
2.High Street and Rowe Street Car Park	These off-street car parks are currently underutilised, especially when compared to other off-street car parks in the area.	 Apply location based pricing variability (i.e off-street free, on-street charged more) Convert parking spaces to be all-day paid parking Reduce time restrictions and implement a business or trader permit scheme for some spaces Improve wayfinding signage Develop an 'all-in-one' parking phone-app Utilise the capacity to off-set loss of parking to streetscape works / initiatives Improve pedestrian connectivity
3.Health precinct and multi- deck car park	The existing health precinct is growing, with the addition of other government buildings. There is a need to consider how best to use on-street car parking to support the growing precinct while also identifying opportunities for employee parking.	 Increase the provision of parking spaces for people with disabilities above guideline rates Reduce time restrictions (2P to 1P) to encourage turnover in Fryers Street (west of Corio street) Reduce time restrictions of long term parking to 2P or 3P in off-street parking lots to encourage turnover Implement paid parking in timed areas where demand is consistently greater than 85% Introduce free parking for the first 30 minutes and convert 1/4 P and 1/2 P parking to 2P parking Rely on multideck car park to accommodate demands
4.Education precinct and railway Parade	There is a car park on the railway land which accommodates a level of demand from the nearby education precinct. This case study will assess the impacts of removing the car park.	 Utilise existing availability of car parking in surrounding areas to support losses if the Railway Reserve parking was removed Collect data (occupancy and turnover) for the railway reserve Convert short term parking to long-term parking to support losses Improve enforcement in 3P areas closest to the university to improve turnover



REV

The situation and problem

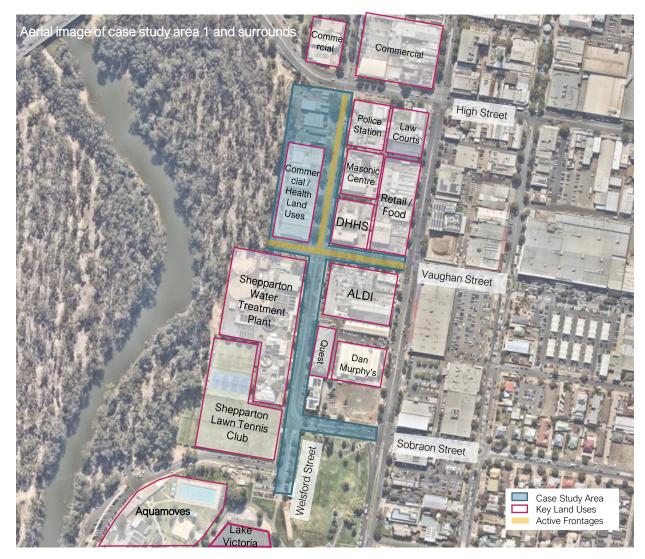
Along the southern end of Welsford Street and surrounding streets, there is a large amount of all-day (P, unrestricted) on-street parking and few short-term parking spaces. There is no short-term parking south of Vaughan Street.

It is understood that these long-term spaces are primarily being utilised by employees of the nearby land uses (including employees of the Department of Health and Human Services (DHHS)).

The surrounding area also generates demand for short-term parking including shops, health services, restaurants, the tennis club and Lake Victoria. This demand is likely to increase in the future with growth in population, tourism, commercial and retail developments (within the study area).

Anecdotal evidence also indicates that current short-term demands are not able to be met, and this pushes people to park within privately owned and managed car parks (e.g. the ALDI car park at the corner of Welsford Street and Vaughan Street).

When these long-term parking spaces are occupied throughout the day, it limits access for short-term users of the surrounding land uses.





The data showed that parking within the study area is over its effective capacity (85%+) with a peak demand of 94% occurring at 11am on the survey date (Tuesday 18 September 2018).

Supply

Within the study area, there are 215 on-street parking spaces (all free) consisting of:

- 44 short-term parking spaces (1/4P, 2P) located north of Vaughan Street, and some on Vaughan Street, west of Welsford Street
- 171 long-term (P, Unrestricted)

Demand

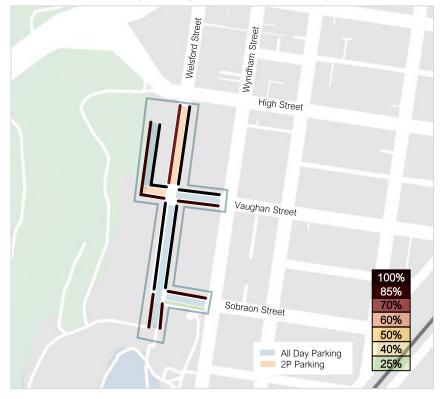
The peak surveyed demand was 94%, which occurred at 11am on the surveyed Tuesday (18 September 2018). Both short and long-term parking experience high peak demands (89% and 95% respectively).

When parking is in high demand or at capacity, vehicle circulation can increase to find available parking spaces, and this may lead to congestion issues.

Additionally, some visitors may be pushed into surrounding parking areas (e.g. Aldi car park) given that the area is at capacity.

This high demand is likely to impact short stay visitors who must search for conveniently located parking and this may become more difficult into the future.

Utilisation @ 11 AM (Tuesday 18 September 2018)



Excluding 1/4P parking



The majority of all-day parking on the survey date was utilised for 8 or more hours (approx. 55%). From this analysis it could be estimated that there are in the order of 120-150 employees parking on-street within the study area on a typical weekday.

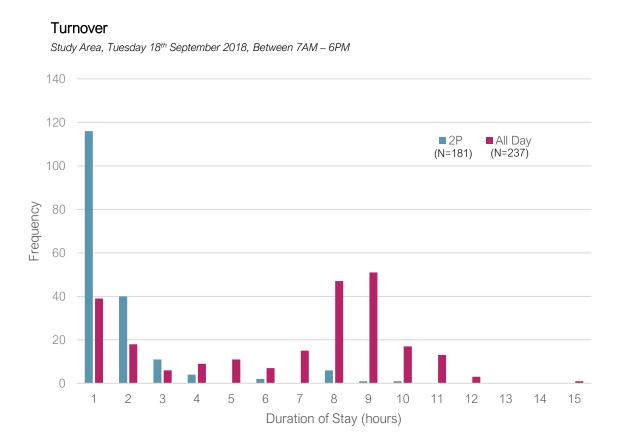
Turnover

The adjacent figure presents the distribution of duration of stays for those parking in 2P and all-day parking spaces within the case study area.

An analysis of the data indicates that the majority of all-day parking is used for 8 or more hours (total of 132 events).

Most of these long-term parking users also arrive between 7am and 9am (106 events). This indicates that it is likely used by employees of surrounding businesses who arrive at their place of employment at this time.

Users are generally compliant in the study area, with approximately 14% of vehicles parked in the 2P areas staying longer than the time limit.





A parking management approach which balances the needs of both long and short term users is required, and this should also consider how travel demand management might play a part in achieving the overall vision for Shepparton CBD.

Considerations

Based on the data and discussion in the previous sections, the options to test to achieve Shepparton's objectives should:

- Address the high demands for both short and long-term parking in the area
- Consider that short-term visitors are less likely to want to park further away from their destination and may be deterred from the area if other places are more convenient to visit
- Consider that those who wish to park for longer (i.e. employees) are typically willing to park further away as they "must" visit their destination, and typically spend longer at their destination
- Acknowledge that High Street and Goulburn Valley Highway are major barriers to pedestrian movements between parking spaces and destinations, particularly for short term users
- Consider where long term parking could be reallocated if removed
- Ensure that short-term visitors can access the surrounding uses now and into the future

A recommended approach to parking management within the case study area, including the justifications are presented and discussed further in the adjacent table.

Option	Action / strategy to test	Justification
1.1	Develop and implement a kerbside user parking hierarchy	To ensure that short term users (customers and visitors to the lake) should be prioritised over employees, and can access their destination now and into the future
1.2	Convert long term on-street car parking to short-term parking outside active commercial frontages and near the lake	To ensure that short term users (2-hours or less) have access to parking within a reasonable distance of their destination
1.3	Implement paid parking in timed areas where demand is consistently greater than 70%	To reduce demand and make sure that users (short term in particular) can access their destinations without needing to circulate to find a space
1.4	Apply a demand sensitive parking pricing policy	To reduce demand and achieve the ideal utilisation rate of 85% to make sure that users (short term in particular) can access their destinations without needing to circulate to find a space
1.5	Identify off-street parking lots for employees and apply location based pricing variability whereby on-street spaces are charged more than off- street spaces	To accommodate local employees who may be displaced by other policies and encourage employees to park off-street, potentially further from their destination (but within a 5-10 minute walk)



These options will impact how people park in the area and may have flow on effects to long-term parking users, who will need to park elsewhere.

1.1 Develop and implement a kerbside user parking hierarchy

A kerbside user parking hierarchy helps make decisions about how on-street parking and kerbside space is organised, based on which user groups should have highest priority in different areas.

While a hierarchy does not currently exist for Shepparton, it typically would prioritise short-term uses including visitors, customers and users of the lake, over employees in on-street areas where active frontages to commercial or retail areas exist.

In addition to surrounding land uses, both the role and function of the street through a movement and place lens plays a vital role in allocating car parking. Other considerations include the provision for disabled parking, on-street loading and public transport access.

1.2 Convert long term on-street car parking to short-term parking outside active commercial frontages and the lake

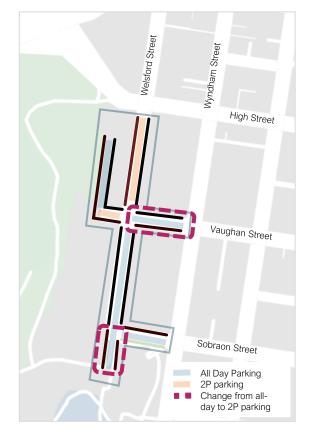
Generally in accordance with the above approach, the all-day parking along Vaughan Street, west of Welsford Street (37 P spaces) should be converted to 2P or 2P ticket parking to ensure it is available for customers. This area is marked on the adjacent map.

Similarly, the parking on Welsford Street south of Sobraon Street (27 spaces) should be converted to short-term parking for visitors.

This will result in the loss of car parking for 'employees' (64 long-term spaces), and consideration must be given to the impact of this.

In the future, the entire length of Welsford Street could be converted to short-term parking if there are new developments or changes in land use that require short term parking.

Potential areas to convert to 2P





These options will impact how people park in the area and may have flow on effects to long-term parking users, who will need to park elsewhere.

1.3 Implement paid parking in areas where demand is consistently greater than 70%

The peak demand for parking within the study area (only) exceeds the theoretical capacity of 85% utilisation and consistently exceeds 70% throughout the day.

Implementing paid parking across the whole study area (including both short and long term spaces) will improve turnover, reduce demand and fairly compensate Council and other users for onstreet car parking provided within high-demand areas.

The extent however should cover built-up areas, with a focus on streets with active frontages and not extend into the lake area. Further restrictions may be required to limit the overspill of employee parking into lesser used unrestricted parking which is utilised by short-stay users.

1.4 Apply a demand sensitive parking pricing policy

A demand sensitive parking pricing policy involves re-assessing the impact of paid parking and making changes to ensure that the optimum utilisation and desired outcomes are achieved.

When the paid parking is implemented, the demand in the area should be regularly monitored to ensure that the area is at the ideal utilisation of 85%, so that parking spaces are available for users now and in the future.

1.5 Identify off-street parking lots for employees and apply location based pricing variability whereby onstreet spaces are charged more than off-street spaces

Other off-street parking lots could be used for employee parking that may be displaced as a result of the proposed options. The currently identified area (Vaughan Street east of Welsford Street and Welsford Street, south of Sobraon) includes **64 long-term** parking spaces that would be lost to be converted to 2P.

A new site may also need to be considered.

Any parking should be located within approximately 400m from a user's destination to be convenient. The adjacent map shows the location of off-street parking lots in the vicinity and the 400m radius from where 2P parking is converted to all day parking.

If a new site is considered, it should also be located within this area.

The lots within 400m (approximate 5min walk) of Vaughan Street include:

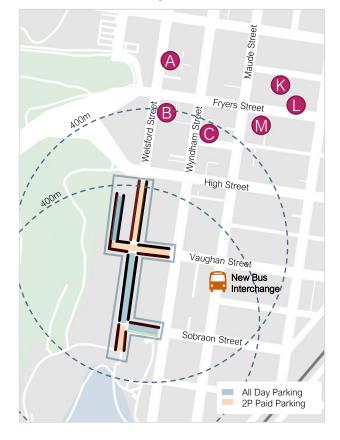
- Area B (25 2P ticket spaces, but at capacity)
- Area C (26 2P ticket spaces, 0%)

Other lots within a 10 minutes walk include:

- Area A (82 2P spaces, 89%)
- Area M (24 5P ticket spaces but at capacity)
- Area K (38 5P ticket spaces, 82%)
- Area L (34 5P ticket spaces, 68%)

Consideration would however be required of parking restriction lengths in order for these areas to support long stay parking. This may include permit parking implemented for employees at a capped rate (or free) to encourage use

Potential off-street parking lots for employee use and new bus interchange



These options will impact how people park in the area and may have flow on effects to long-term parking users, who will need to park elsewhere.

1.6 Encourage mode shift to other modes of transport

Promoting sustainable transport options can reduce the demand for car parking. This could be achieved through the use of green travel plans for employers to encourage active/sustainable travel.

New infrastructure such as the new nearby bus interchange on Maude Street, south of Vaughan Street and improvements to services will also make public transport a more viable alternative for employees.

1.7 Consider impact of proposed parking changes on surrounding land uses

The removal of all day parking may also cause further spill over into surrounding areas. In particular, people who previously parked on Welsford Street south of Sobraon Street may use the parking further south intended for the Aquamoves, which is primarily unrestricted and within 400m from the existing parking changes.

The introduction of time restrictions should be considered for the parking at the Aquamoves to ensure that spaces are available for users of the Aquamoves.

Findings and Recommendations

Based on the options tested, it is recommended that:

- The long-term on-street parking on Vaughan Street and Welsford Street, south of Sobraon Street be converted to 2P parking
 - The whole of Welsford Street may be converted in the future if there are changes to land use that require more short-term parking spaces
- The displaced long-term parking spaces be accommodated within existing off-street parking lots OR with the development of a new parking site
- The rest of the long-term parking spaces that are displaced can be accommodated in surrounding areas and through shifts to other modes of transport (cycling, walking and PT with the new upgrade to the bus interchange)
- Paid parking be implemented in the existing and new 2P parking spaces, and also for the all-day parking along Welsford Street
- The parking occupancy is reviewed to see the effectiveness of the paid parking areas, and potentially adjusted to achieve the ideal 85% parking rate
- Time restrictions are implemented at the Aquamoves





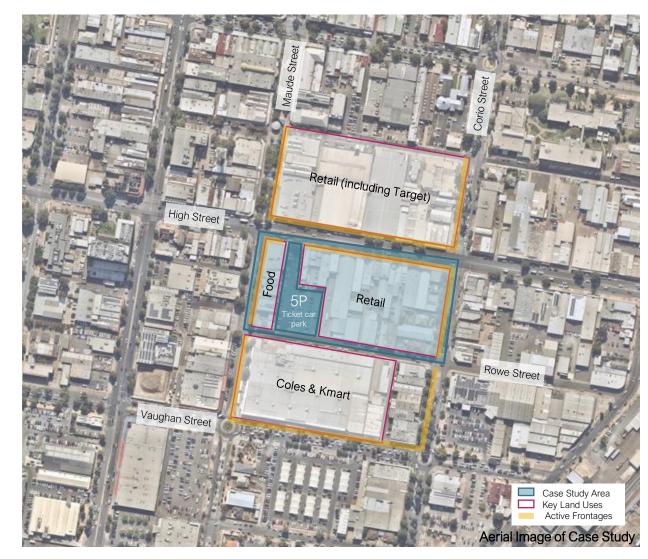
Situation and problem

The off-street car parks located between High Street and Rowe Street are underutilised, despite being closely situated to major retail hubs (Coles, Kmart and Target).

This is in contrast to other free off-street car parks south of Vaughan Street which are located more proximate to the entries of Coles and Kmart, and are at effective capacity.

The underutilisation could be caused by multiple reasons:

- people may be deterred by having to pay for parking where free parking is available nearby in more convenient locations
- people, especially those unfamiliar with the CBD, may have trouble finding it due to poor wayfinding
- its location away from the main Coles and Kmart entrance and other active frontages makes it less convenient to use
- its secluded nature (away from active frontages) may make it feel unsafe for some users





The car park is underutilised with a peak occupancy of 25%, while areas south of the car park are at effective capacity.

Supply

- In the parking lot: 120 spaces (57 and 63 in west and east sections respectively), all 5P ticket
- In the surrounding on-street parking block: 119 spaces (mostly '2P ticket', 41 '2P' (Rowe Street (S) and Maude Street (W) and 5 1/4P)

Demand

The car park reached a peak occupancy of 25% on the surveyed Friday (14 September 2018).

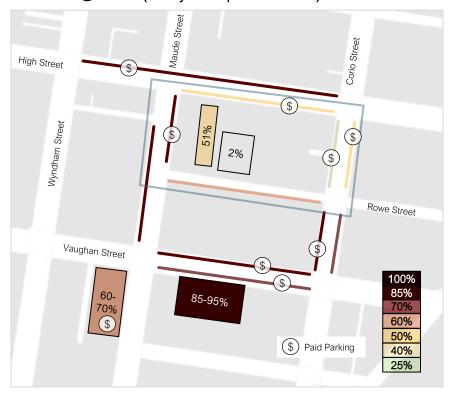
The western car park is more utilised, reaching a peak occupancy of 51%. However the eastern car park is virtually unused throughout the day, reaching a maximum surveyed occupancy of 5% (at 11pm on the surveyed Friday or 12pm on the Tuesday).

The on-street parking within the study area is not fully utilised, particularly on Rowe Street, the southern side of High Street and Corio Street which has occupancies ranging between 25-60% on each segment. This is in contrast to the on-street parking south of Rowe Street which has occupancies at or above effective capacity (85%)

The car parks south of Vaughan Street, to the west and east of Maude Street experience higher peak occupancies of 60-70% and 85-95% respectively (3P ticket and 3P), based on a review of aerial photography¹. It should be noted that the car park to the west of Maude Street is privately owned and operated and charges \$1 per hour, meaning that it cannot be changed.

This difference in demand between the car park and surrounding area compared to other areas south of Rowe Street, indicates that there is a general lack of demand for parking in the study area.

Utilisation @ 12 PM (Friday 14 September 2018)



Excluding 1/4P parking

¹Source: Nearmap (2019). Weekdays between 11:30am-12:30pm



Despite the long-term time restriction, most people use the off-street car parking for short term visits.

Turnover

The adjacent figure presents the duration of stay in the High Street and Rowe Street car park.

The off-street parking lots are used for short term stays despite its 5P restriction, with 151 people parking for 1-2 hours.

Within the two lots, there is an average duration of stay of 1 hour 14 minutes and the rate of noncompliance with time restrictions is 8%.

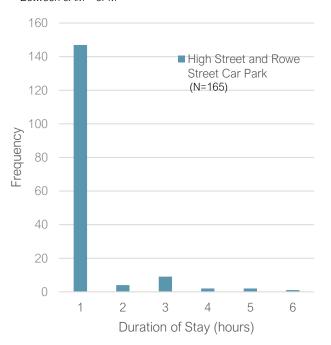
This indicates that there is little demand for longterm parking in this area.

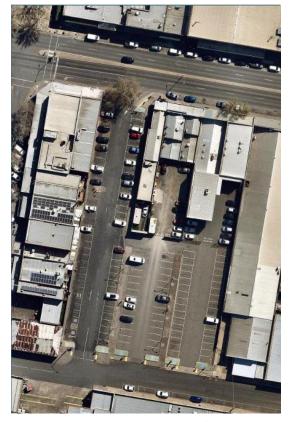
Much of the demand is for short-term parking which can be accommodated in the existing onstreet parking areas.

Given that these surrounding on-street parking areas have short-term time restrictions (and some unpaid), there is little incentive to use these car parks if they are located further away from the user's destinations.

Turnover

High Street and Rowe Street Car Park, Friday 18th September, Between 9AM – 6PM





Source: Nearmap (2019). Wednesday 26th September 2018



50

A parking management approach which improves utilisation of the car park through multiple actions is required through the use of pricing, technology and allocation, which will also help achieve the overall vision for the Shepparton CBD.

Considerations

Based on the data and discussion in the previous sections, the options to test to achieve Shepparton's objectives should:

- Improve utilisation of the off-street car park
- Consider whether the car parking spaces are necessary or could be better utilised for other uses
- Consider that surrounding on-street parking is able to accommodate parking needs.
- Improve wayfinding and connections to the car park
- Consider broader impacts where increasing parking supply for long-term users may shift demand from other car parks and help accommodate displaced demand from Case Study 1

The options chosen for testing and their rationale are presented in the following table.

Option	Action / strategy to test	Justification
2.1	Apply location based pricing variability where the fee for off-street parking is cheaper than on-street spaces	To encourage users currently parking in on-street paid areas to park in the off-street car park
2.2	Convert parking spaces to be all-day paid parking	To attract more long-term users to the car park who require more than 5 hours of parking
2.3	Reduce time restrictions and implement a business or trader permit scheme for some spaces	To encourage local employees from other parts of the CBD to park in the off-street car park
2.4	Improve static and implement dynamic wayfinding signage	The current wayfinding signage to the car park is poor and easily missed by drivers who are unfamiliar with the area. Improving wayfinding will help ensure that it is more highly used
2.5	Develop an 'all-in-one' parking phone- app which allows users to identify available spaces and pay for and reserve parking.	The development of an app will help ensure that drivers to the area will be aware of the car park. Additionally, it will help to increase its utilisation as people will be aware of any real-time availability.
2.6	Utilise the existing capacity to off-set loss of parking to streetscape works / initiatives	To improve the 'place' aspect of Shepparton CBD and make use of underutilised space
2.7	Improve pedestrian connectivity	To improve user experience by better connecting the car park to each users final destination



These options should help increase utilisation in the car park for visitors who are unfamiliar with the area and regular users such as businesses and traders.

2.1 Apply location based pricing variability (i.e. make the off-street car park cheaper than on-street parking)

Applying location based pricing variability and making the off-street car park free or cheaper relative to on-street parking will encourage users to park there.

It will encourage users to park further from their destination, and make sure that the on-street parking has enough turnover to serve short-term visitors who are willing to pay for the convenience.

2.2 Convert parking spaces to be all-day paid parking

Converting part of the parking to be all-day and paid could attract new demand.

The car park is currently 5P and the data indicates that most people use the car park for only 1-2 hours. Therefore, there is potential to attract demand for long-term users such as employees who would park for the whole day.

2.3 Reduce time restrictions and implement a business / trader permit scheme for some spaces

Another way to improve utilisation of the car park is to increase demand from businesses and traders in the area.

This could be done by implementing permit schemes for employees in the area. This would encourage more regular users of the car park, while keeping some short-term spaces available for short-term visitors.

2.4 Improve wayfinding signage, at key decision points, to direct motorists to available parking spaces

Wayfinding is currently poor with:

- Confusing signage from the eastbound approach of the High Street / Maude Street intersection
 - It indicates that parking is available for those continuing to travel eastbound along High Street, however the entry from High Street is left-in left-out only
- No view of the car park and no signage from Maude Street

Better wayfinding signage could be implemented:

- Removing the eastbound arrow on the sign at the High Street / Maude Street intersection, or showing a U-turn diagram on how to access the car park
- Adding signage for the Rowe Street entrance from Maude Street – both at the entrance and before
- Dynamic wayfinding signage could also be implemented to show parking availability in the car park



High Street / Maude Street intersection, eastbound approach



High Street entrance and median, westbound



Street View (April 2018) Rowe Street entrance, from Maude Street



These options should help increase utilisation in the car park for visitors who are unfamiliar with the area and regular users such as businesses and traders.

2.5 Develop an 'all-in-one' parking phone-app which allows users to identify available spaces, and pay for and reserve parking

An 'all-in-one' parking phone-app will be linked to all the parking spaces in Shepparton CBD.

It would provide real-time information on which parking spaces are available, and allow people to reserve and pay for parking in advance.

This would enable those new to the area to be aware of the car park and also encourage the use of parking areas that are underutilised.

It could be rolled out to include off-street parking spaces initially before adding on-street parking. However, not all users would be aware of the app and so it should be used in addition to wayfinding signage.

2.6 Utilise the capacity to off-set loss of parking to streetscape works / initiatives

The on-street parking in the surround areas could be removed to make way for widened footpaths, outdoor dining areas, seating or sustainable transport infrastructure such as bike lanes or sheltered bus stops.

This would help improve the 'place' aspect of Shepparton CBD and help to increase the number of visitors and tourists to the CBD, supporting economic activity.

Additionally, investing in sustainable transport infrastructure will help to reduce parking demand and achieve modal balance in the Shepparton CBD.

2.7 Improve pedestrian connectivity

A key component of one's parking experience is the pedestrian journey between the parking location and the final destination.

In this regard, options should be investigated as to how the pedestrian environment can be improved to better connect the car park to the High Street and Maude Street pedestrian networks.



These options should help increase utilisation in the car park for visitors who are unfamiliar with the area and regular users such as businesses and traders.

Findings and Recommendations

Based on the options tested, it is recommended that:

- Wayfinding signage be improved and dynamic signage implemented
- Pedestrian connectivity between the car park to High Street and Maude Street pedestrian networks be improved
- An 'all-in-one' parking phone-app be developed
- Location based pricing variability be implemented by making the surrounding onstreet parking spaces paid and more expensive than the off-street parking
- The parking spaces within the western portion of the off-street car park are converted to shortterm free parking
- The parking spaces within the eastern portion of the off-street car park are converted to be allday paid parking





The situation and problem

The Shepparton CBD Health & Tertiary Education Precincts Action Plan (2020) sets out the plan to grow Shepparton as a health and tertiary education destination.

There are two main clusters – the CBD Hub and the Graham Street Precinct. The CBD Hub is located along Corio Street and includes GOTAFE, La Trobe University, Goulburn Valley Health and other emerging health facilities including the Genesis Care Radiation Therapy Centre.

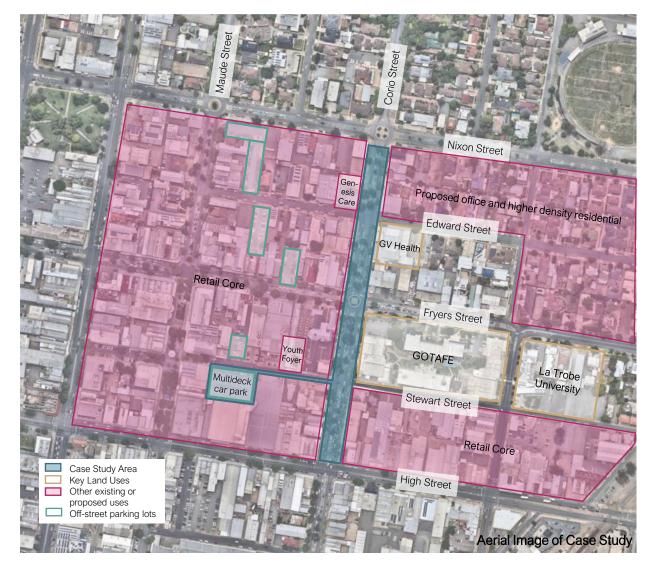
A mixture of paid and free short term restricted (typically 2-hour) parking is provided on-street within the study area and adjacent streets.

The Stewart Street multi deck car park, and a number of smaller off-street car parks also provide car parking for the area. This accommodates the different users of the surrounding land uses.

However when the precinct is built out, the demand for short term parking will likely increase, and new developments will be required to ensure that both existing and new demands can be accommodated.

Given the nature of the sites, longer-term parking may be required for visitors to the health and education precinct.

Anecdotal evidence from multiple sources indicates that the utilisation of the multi-deck car park, which has 335 spaces, generally varies between 20% and 50% on most days.





The multideck car park has capacity and most on-street short term parking is well utilised

Supply

Within the study area:

- Stewart Street multideck car park: 335 all day paid parking spaces
- Along Corio Street: 118 spaces (2P: 61, 2P paid: 50, 3P ticket: 7)

In the surrounding area:

- · Off-street parking lots
 - Opposite the multideck car park: 24 5P ticket parking
 - Corner of Maude St and Nixon St: 29 P
 - North of Edward Street: 37 P
 - South of Edward Street: 38 5P ticket
 - North of Fryers Streets: 34 P ticket (5 hours)
- All surrounding on-street parking: 411 spaces (2P ticket: 179, 2P: 72, 1/4P: 18, 3P: 55, 3P ticket: 7, 5P ticket: 55, 1/2P: 1)

Demand

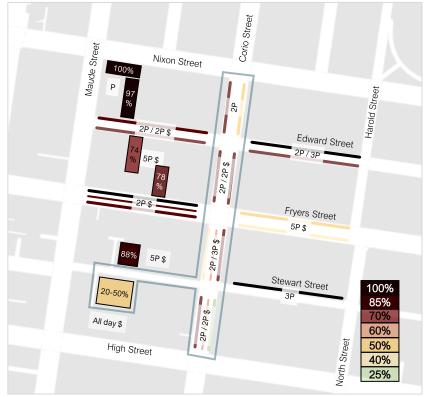
The study area (Corio Street) reaches a peak occupancy of 59% at 12pm on a Friday (14th September 2018) and the occupancy of the multi-deck varies between 20%-50% on most days (anecdotally).

The average occupancy for the on-street parking in both the study area and surrounding on-street parking on side streets is 68%.

All of the long-term parking (all day & 5P ticket parking) is focussed around the multi-deck car park and Fryers Street, between Corio Street and North Street.

Both the multi-deck car park and Fryers Street long term parking is underutilised, at 50% and 38% (out of 55 spaces) at the survey time.

Utilisation @ 12 PM (Friday 14th September 2018)



Excluding 1/4P and 1/2P parking



There is a high demand for short term parking with most users staying for 1-2 hours in both short and long term parking spaces

Turnover

The adjacent figure presents the duration of stays for the surveyed areas on the peak day (Friday 14th September).

The majority of both on and off-street parking is used for short term stays.

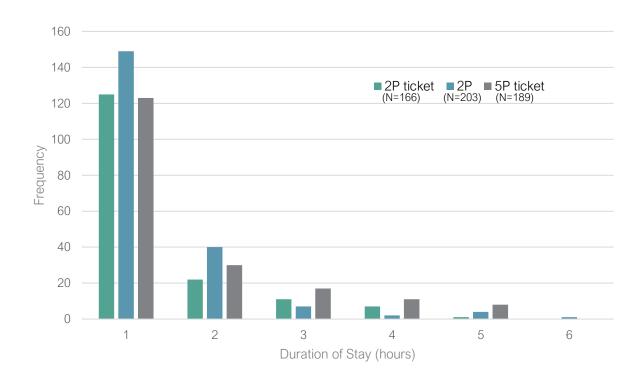
The on-street parking (2P paid and unpaid) along Corio Street has an average duration of stay of 1 hour 24 minutes and the non-compliance rate is 7% and 11% respectively in this area. There is also a similar rate of turnover for both paid and unpaid 2P parking spaces at 3.3 parking events per space, per day.

The 7 3P ticket parking spaces have an average duration of stay of 1 hour 36 minutes and full compliance.

The parking lot opposite the Stewart Street multideck car park and on-street parking on Fryers Street (5P ticket) has an average duration of stay of 1 hour 40 minutes and full compliance on the survey day. Short term parking (1-2 hours), made up 153 of the 189 parking events on the survey day.

Turnover

Study Area, Friday 14th September, Between 9AM – 6PM





A parking management approach which improves access to the precinct for all users has been selected and will also help achieve the overall vision for the Shepparton CBD.

Discussion

Based on the data and discussion in the previous sections, the options to test to achieve Shepparton's objectives should:

- Cater for the needs of visitors who may be older or have disabilities
- Improve turnover in areas above capacity so that spaces are available in the future
- Aim to accommodate future demands in the existing parking supply
- Consider broader impacts, including the ability for displaced demand resulting from changes to the parking lot opposite the multideck car park to be accommodated in the underutilised car park from Case Study 2

The options chosen for testing and their rationale are presented in the following table.

Option	Action / strategy to test	Justification
3.1	Increase the provision of parking spaces for people with disabilities (above and beyond the relevant guidelines)	To ensure that those who are elderly or have disabilities (and are more likely to require health services) can easily access their destination.
3.2	Reduce time restrictions (2P to 1P) to encourage turnover in Fryers Street (west of Corio street)	Reducing time restrictions will help to encourage turnover in Fryers Street which is currently above effective capacity and help ensure that spaces are available for those that want to park closer to their destinations. It may also help to increase the usage of the 5P parking on the east of Corio Street.
3.3	Reduce time restrictions of long term parking to 2P or 3P in off-street parking lots to encourage turnover	The parking lot opposite the multi deck and further north on Nixon Street, Edward Street and Fryers Street are above or near effective capacity. Reducing time restrictions of the long-term parking will assist to make these parking spaces available for more users in the future.
3.4	Implement paid parking in timed areas where demand is consistently greater than 85% to increase turnover of parking spaces	While not currently an issue, implementing paid parking in the future can help increase turnover of parking spaces as demand increases with the buildout of the health precinct and surrounding developments.
3.5	Introduce free parking for the first 30 minutes and convert 1/4 P and 1/2 P parking to 2P parking	This will help to increase turnover of existing spaces and also increase the number of spaces that can be potentially used for 2P parking (15 spaces).
3.6	Rely on multideck car park to accommodate future demands	Based on the data, there are limited opportunities to cater for future demand on-street. However there is capacity in the multi-deck car park and Fryer street to help accommodate the demand.



The options to test can help ensure that access to the precinct is maintained into the future through allocation of parking spaces for people with disabilities, increased time limits and implementation of paid parking to improve turnover and manage demand

3.1 Increase the provision of parking spaces for people with disabilities (above and beyond the relevant guidelines)

The health precinct will be visited by those with disabilities and the elderly who may visit the hospital and other emerging health facilities in the precinct.

Therefore, it is important that there is parking available to those who may not be able to walk long distances their destination.

Increasing the provision of parking spaces for people with disabilities above the relevant guidelines will help to ensure that their access is prioritised within the precinct as it is developed.

3.2 Reduce time restrictions (2P to 1P) to encourage turnover in Fryers Street (west of Corio street)

The section of Fryers Street west of Corio Street is above effective capacity.

Reducing time restrictions will help to encourage turnover in Fryers Street and lower demand so that it is only available for those who want to park for shorter times.

This will help ensure that spaces are available for those that want to park closer to their destinations now and in the future.

3.3 Reduce time restrictions of long term parking to 2P or 3P in off-street parking lots to encourage turnover

The parking lots opposite the multi deck and further north on Nixon Street, Edward Street and Fryers Street are above or near effective capacity.

Reducing the time restrictions will help to increase turnover and assist to make these parking spaces available for more users in the future. It may also help spread long stay demands into the multi deck car park.

Consideration could also be given to providing these as free parking areas to encourage drivers to find parking within an off-street parking space more quickly rather than circulating in search of an onstreet parking space. This approach can also assist to highlight the greater level of convenience of onstreet parking and its need to turnover to provide opportunities for access by more users.

Such an approach to alter payment for parking along with altering time restriction should however be carefully monitored and adjusted based on supply and demand principles.

3.4 Implement paid parking in timed areas where demand is consistently greater than 85% to increase turnover of parking spaces

Approximately half of the spaces along Corio Street are unpaid parking, and there is opportunity to convert them into paid parking spaces.

While there were no major differences recorded between paid and unpaid parking on the peak survey day, paid parking can generally help to improve turnover and compliance.

3.5 Rely on existing multideck car park to accommodate future demands

The on-street parking on Corio Street and surrounding areas reaches a peak of 59 and 68% respectively. As a result, there are limited opportunities to cater for future demand on-street.

However there is capacity in the multi-deck car park (50% full out of 335 spaces) to help accommodate future demands. This is however complicated by the ownership structure of the car park.

3.6 Introduce free parking for the first 30 minutes

Free very short term parking can be introduced for all 2P spaces. All 1/4 and 1/2 P parking can also be converted to 2P.

This will help to increase turnover of existing spaces and also increase the number of spaces that can be potentially used for 2P parking (15 spaces).

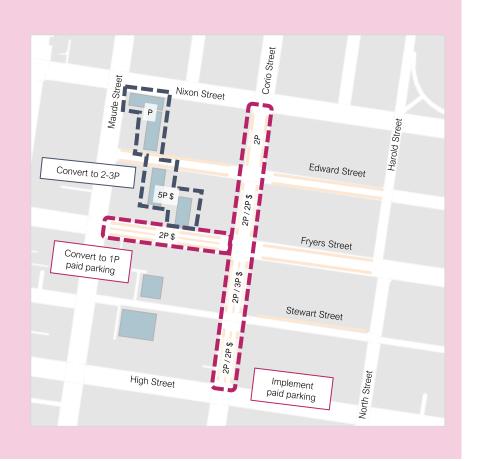


The options to test can help ensure that access to the precinct is maintained into the future through allocation of parking spaces for people with disabilities, increased time limits and implementation of paid parking to improve turnover and manage demand

Findings and Recommendations

Based on the options tested, it is recommended that:

- Fryers Street, west of Corio Street be converted from 2P to 1P parking
- The parking lots opposite the multi-deck car park and further north on Nixon Street, Edward Street and Fryers Street be converted from long stay and 5P ticket parking to shorter term parking 2P - 3P.
- · Paid parking be implemented along Corio Street
- Future demands are accommodated through the existing multideck car park
- Parking spaces for people with disabilities are provided above and beyond the relevant guidelines





Situation and problem

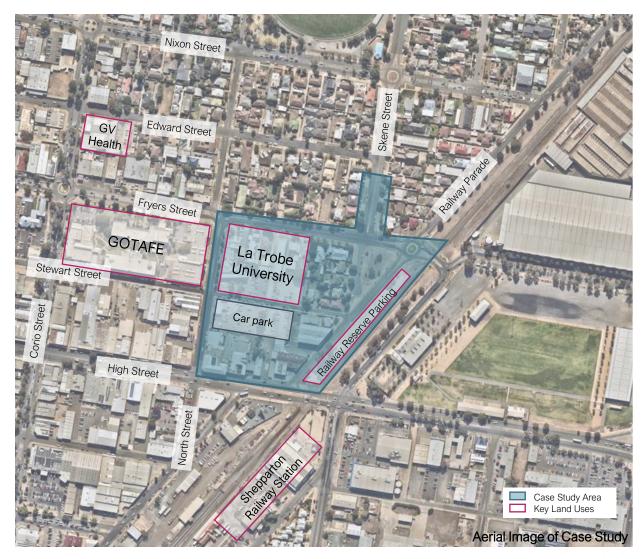
The education precinct incorporating both La Trobe University (LTU) and Goulburn Ovens TAFE (GOTAFE) campuses, generate demand for parking for staff and students and further growth is expected, particularly with the expansion of La Trobe University.

Within the precinct, there is a lack of car parking facilities resulting in parking in the railway reserve. The railway reserve is currently unsealed and generally only used when the university parking is fully utilised.

There are aspirations to formalise the parking at the Railway Parade to be a sealed car park with pedestrian connections, as part of the *Shepparton Railway Precinct Master Plan* (Spiire, 2017)

There is also a proposal to expand the La Trobe University campus and include additional car parking, with a 3-level multideck car park for use by LTU and GOTAFE.

If this does not occur or the railway reserve is removed, then parking may need to be established elsewhere to accommodate current demands and future growth.





When the car parking in the Education Precinct is fully utilised, demand spills over into surrounding streets and the railway reserve

Supply

- 120 spaces : 1/2P: 3, 1/4P: 3, 2P: 31, 3P: 40, Unrestricted: 43 (located on Skene Street, north of Fryers Street and on Railway Parade)
- On the rail reserve on Railway Parade: approx. 90-100 spaces (no formal parking)
- La Trobe University 14 spaces provided for students
- GOTAFE parking at the corner of Fryers and Corio Street (approx. 25 spaces)

Current Demand

The surveyed study area (excluding the rail reserve and university/TAFE parking) reaches a peak occupancy of 46% at 9am and 4pm on a Tuesday. At the 9am peak, there are 61 vacancies (2P or longer), including 24 unrestricted spaces.

A review of aerial photography indicates that the rail reserve on Railway Parade ranges between occupancies of 10% to peak demands of 60%-80%¹ (60-80 spaces) around midday.

This demand in the rail reserve occurs when the parking at La Trobe University is at effective capacity, indicating that the rail reserve is likely accommodating for overflow parking from the university.

¹Source: Nearmap (2019).



Future Demands

With the expansion of La Trobe University, 14 car park spaces are required for Stage 1, which is currently provided.

An additional 58 spaces will be required for Phase 1 of Stage 2 and 80 spaces are required for Phase 2 of Stage 2^2 .

With the development of the new car parks and upgrade to existing car parks, there will be a total of 98 spaces (84 spaces new), which will accommodate the future demands from LTU.

This does not include future growth in demands from GOTAFE, however there is currently no planned investment for the site.

Therefore, based on the current plans for investment in the precinct, future demands will be accommodated.

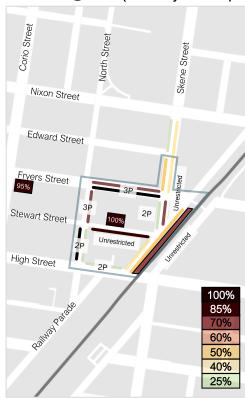
Demand by time restriction

At the peak, the 3P parking experiences the greatest demand at 78% occupancy. This is followed by unrestricted (47%) and 2P (29%). This may be due to the location of the 3P parking nearest to the university or the need for students / other users to require medium/long term parking.

(calculated using usable floor area divided by 3)

² Source: Greater Shepparton Council

Utilisation @ 9AM (Tuesday 18th September 2018)



Excluding 1/4P and 1/2P parking. Stewart St (S) and Railway Parade (E) estimated from aerial photography (not captured in survey)

There is a demand for medium and long term parking in the on-street parking nearest to the university, with some users exceeding their stay in the 3P parking

Turnover & Compliance

The adjacent figures presents the duration of stays for the surveyed study area on the day where the peak occurred and the level of compliance for the same study area (Tuesday 18th September 2018). It does not include the university car parks or the railway reserve. The compliance chart also includes the level of compliance for the whole surveyed CBD.

The 3P parking has a compliance rate of 73% with 20 out of 75 parking events staying for 4 or more hours and exceeding the time restrictions. The average duration of stay was recorded to be 2 hours and 26 minutes.

The 2P parking has a compliance rate of 81% which is lower than the CBD compliance rate of 89%. The average duration of stay was recorded to be 1 hour and 55 minutes.

Most of the unrestricted parking was used for short term stays (41 out of 53 parking events) however this only includes the on-street parking along Skene Street and none of the off-street parking locations due to limitations in data collection.

Nevertheless, there is likely to be a demand for more medium-term/more parking with the 3P parking having the highest occupancy and lower compliance rate

Turnover Study Area, Tuesday 18th September, Between 9AM – 6PM 35 30 ■ 3P ■ 2P ■ Unrestricted (N=75) (N=52) (N=53)Frequency 15 10 2 3 6 8 9 Duration of Stay (hours) Compliance Study Area & CBD, Tuesday 18th September, Between 9AM – 6PM Study Area 73% 27% (N=75)CBD 72% 28% (N=358)Study Area 81% 19% (N=52)CBD 89% 11%

■ Compliance ■ Non-compliance



100%

(N=6112)

0%

10%

20%

A parking management approach has been selected that relies on making the best use of the surrounding parking supply. However more collection of data is required to support any actions

Discussion

Based on the data and discussion in the previous sections, the options to test to achieve Shepparton's objectives should:

- Consider the scenario where the parking on Railway Parade is formalised or removed
- Consider what additional data is be required to be collected
- Consider how any displaced demand could be accommodated in the existing parking supply
- Manage demand in areas closest to the university

The options chosen for testing and their rationale are presented in the following table.

Option	Action / strategy to test	Justification
4.1	Utilise existing availability of car parking in surrounding areas to support losses if the parking on the Railway Reserve was removed	To make use of existing parking supply and not overprovide parking infrastructure
4.2	Collect data (occupancy and turnover) for the railway reserve	No parking data was collected for this area. Occupancy and turnover data should be collected to understand how many and what type of users may be displaced if it is removed
4.3	Convert short term parking to long- term parking to support losses	The railway reserve parking is unrestricted and can be used for long term parking. To ensure that these demands are accommodated if the parking is removed, some short-term parking should be converted to long term parking (5P or all day)
4.4	Improve enforcement in the 3P areas closest to the university to improve turnover	The 3P parking is almost at effective capacity near the university. Improving enforcement will help ensure these spaces can turnover for other students.



These options will help ensure that the existing parking supply will accommodate any displaced demand if the railway reserve parking is removed.

4.1 Utilise existing availability of car parking in surrounding areas to support losses if the parking on the railway reserve was removed

A review of aerial photography indicates that the rail reserve on Railway Parade ranges between occupancies of 10% to peak demands of 60%-80%¹ (60-80 spaces) around midday.

The surveyed study area has:

- 54 vacancies (2P or longer), including 24 unrestricted spaces at the surveyed peak time (9am)
- 59 vacancies, (2P or longer), including 23 unrestricted spaces at 12pm.

However, it should be noted that Stewart Street (S) and Railway Parade (E) were not captured in the survey and would provide additional spaces.

On this basis, if the parking along Railway Parade was removed, the existing parking demand is likely to be accommodated in the surrounding areas, assuming that there is a mix of long- and short-term parking demands.

Any other demand should be accommodated in parking spaces outside the study area or result in changes in mode shift.

4.2 Collect parking data for the railway reserve parking

There was no occupancy or turnover data collected for this area.

If the railway reserve is removed, it should be obtained to understand the full impacts including how many users will be displaced and whether they are likely to be long or short term users.

4.3 Convert short term parking to long-term parking to support losses

The railway reserve parking is unrestricted and may be used for long term parking (though data should be collected to confirm this).

If the parking is removed, some short-term parking may need to converted to long term parking (5P or all day) to ensure that these demands are accommodated.

4.4 Improve enforcement in the 3P areas closest to the university to improve turnover

The 3P parking is almost at effective capacity near the university and has a compliance rate of 73%.

Improving enforcement will help ensure these spaces can turnover for other students and visitors. without converting the spaces to be paid. Those who require longer stays can be accommodated in the surrounding unrestricted parking areas.



These options will help ensure that the existing parking supply will accommodate any displaced demand if the railway reserve parking is removed.

Findings and Recommendations

Based on the options tested, it is recommended that:

- Occupancy and turnover data is collected for the railway reserve parking
- Options 4.1 and 4.3 are reviewed following collection of additional data to understand the type of parking currently being accommodated within the railway reserve
- Improve enforcement in the 3P areas closest to the university to improve turnover





6.6 SHEPPARTON CBD-WIDE APPROACHES

Some strategies should be applied across Shepparton CBD to achieve its objectives

Implement a kerbside user hierarchy

Why?

Parking is currently managed on an ad-hoc basis, depending on the needs of adjacent land uses. There is no framework to determine how kerbside space should be managed.

Impact

It will help in planning how parking and kerbside space is managed across the CBD. It will make areas more inviting and inclusive by prioritising the different modes and users in a way that best supports Shepparton CBD's visions.

It will also help support the Movement and Place aspirations for Shepparton CBD.

Improve wayfinding signage and implement dynamic signage

Why?

Existing wayfinding signage is static, and shows people where parking is, but not how much is available. Some existing static wayfinding signage is also poor (e.g. Case Study 2).

Impact

This will result in improved user experience, reduced vehicle circulation, and attract demand into underutilised parking areas, thereby making Shepparton CBD a better place to visit.

A key to reducing driver frustrations is to provide clear information to enable drivers to make informed decisions as early as possible.

Develop an 'all-in-one' parking phone-app which allows users to identify available spaces and pay for and reserve parking

Why?

There were concerns raised regarding the usability and functionality of the current parking app.

This 'all-in-one' parking phone-app can be linked and provide information on all the parking spaces in Shepparton CBD.

Impact

As with improved wayfinding signage, this will result in improved user experience, reduced vehicle circulation, and attract demand into underutilised parking areas, thereby making Shepparton CBD a better place to visit.

Recommendation

- Prepare a Movement and Place Strategy for Shepparton CBD
- Prepare Kerbside user hierarchy

Recommendation

- Prepare a Wayfinding Strategy for Shepparton CBD
- Improve existing static signage initially
- · Implement dynamic signage

Recommendation

- Upgrade existing app or develop new app
- It could be rolled out to include off-street parking spaces initially before adding on-street parking



6.6 SHEPPARTON CBD-WIDE APPROACHES

Some strategies should be applied across the Shepparton CBD to achieve its objectives

Introduce smart parking technologies

Why?

A growing activity centre and population requires the more efficient use of an existing and finite resources, which technology can help support.

Shepparton also needs to keep up with changes in technology – for example, current parking meters do not accept credit card payment.

Parking detection technology will also be required to implement dynamic signage and an "all-in-one" parking phone-app across the Shepparton CBD.

Impact

Implementing smart parking technologies can help to improve enforcement and improve user experience across the Shepparton CBD.

Recommendation

- Upgrade existing parking meters to support credit card payment, and pay-by-plate technology
- Implement parking detection technology
- Implement automatic number plate recognition

Increase parking for people with disabilities

Why?

Shepparton's ageing population will become more dependent on door-to-door mobility and the demand for parking for people with disabilities will increase.

Impact

This will help ensure that more people living in or visiting Shepparton will be able to access the CBD in the future.

Review pricing structure

Why?

There are a number of existing issues with pricing structures. Fees are currently charged the same for both on and off-street areas, and some paid parking areas are at capacity.

In the future, the demand for parking will continue to increase. Income from paid parking can also be used to help support revitalisation of the CBD.

Impact

This will help to improve turnover and manage demand to ensure that the ideal utilisation rate can be achieved. This will improve accessibility, liveability, visitation and spending in the CBD.

Recommendation

- Review current provision of accessible parking and access from car parks
- Consider changes to statutory parking provisions for accessible parking

Recommendation

 Further discussion and recommendations on paid parking can be found in Section 6.7 - Paid parking in Shepparton CBD



6.6 SHEPPARTON CBD-WIDE APPROACHES

Some strategies should be applied across Shepparton CBD to achieve its objectives

Investigate a Park and ride / Shuttle bus service

Why?

There are destinations in Shepparton with high demand which do not have land for additional parking, or where more car parking would reduce the amenity of the space.

This includes the education precinct, which could benefit from a park and ride system where a shuttle bus connects off-site parking (e.g. Shepparton Showgrounds) to the La Trobe University and GOTAFE campuses. It could also run through the CBD with multiple stops connecting the precincts.

Impact

This will allow parking to be located off-site, which can improve amenity and allow existing on-street parking to be reallocated for other uses and CBD revitalisation projects.

Recommendation

• Investigate options to provide a park and ride / shuttle bus service through Shepparton CBD.

Identify long-term opportunity for increased parking provision (separate study which may require additional and current day surveys)

Why?

Demands for car parking will continue to increase in Shepparton CBD with increased development, population and tourism.

Impact

It is difficult to understand the exact amount of parking that will be required in the future, however estimating the planned development demands and identifying potential locations for parking will help ensure that Shepparton CBD is able to support its own growth.

Recommendation

 Conduct a separate study on future parking demands and provision which may require additional and current day surveys



6.7 PAID PARKING IN SHEPPARTON CBD

Paid parking is an important tool to ensure the community's vision for the Shepparton CBD is achieved. A way forward for paid parking has been recommended which balances the complex situation for access, liveability and economic prosperity of the Shepparton CBD.

What is the current situation with paid parking?

In November 2019, Council resolved to trial free parking during December 2019 and January 2020. There is a push to continue the trial over a longer period, to fully understand the benefits of paid parking.

What was the outcome of the initial 2-month free parking trial in the Shepparton CBD?

The Shepparton CBD is naturally busier around Christmas time and the school holiday period due to a number of factors including weather, Christmas shopping, and increased tourism visitation.

A survey was undertaken by Council during the trial period to gauge people's opinions on the free parking trial. The analysis of these results is currently underway however it is understood that details are unlikely to be available until April.

While results are unavailable it is expected that the removal of paid parking will always have support from the community, however rarely in these situation are the impacts truly understood by the community.

How to approach paid parking, including the free trial moving forward in the Shepparton CBD:

Establish a policy whereby the level of income from paid parking is transparent and allocated to future capital works to improve the CBD

- Develop a capital works program for spending paid parking revenue on sustainable transport, user experience, wayfinding, and public realm / place improvements
- Identify immediate safety and access issues in consultation with the community and prioritise these for inclusion within future year capital or renewal works programs.

Adopt a variable pricing structure

 Fees should be periodically reviewed and adjusted to respond to achieving optimal levels of demand

Apply a location specific paid parking policy

- Fees are lower in off-street car parks (Reduce to \$1 per hour)
- Increase on-street areas in high demand areas to \$2 per hour

Resolve any issues with the parking app as a priority

- Liaise with the supplier to rectify issues raised by stakeholders and the community to improve overall user experience
- Reduce the number of parking 'zones' to improve consistency in parking across the CBD.

Implement credit card payment technology into all parking ticket machines

 Investigate if current machines can be retrofitted with this technology, or if new machines are required

Continue free parking trial during December each year (between 1-31 December only) to support increased trade and public perception of parking and the CBD during Christmas

 Subject to the outcomes of the recent trial, if on the justification that there is a clear economic benefit for the Shepparton CBD during this time, noting the large financial impact to Council revenue.



FINDINGS AND NEXT STEPS

- 7.1 Summary of findings
- 7.2 Recommendations and next steps





7.1 FINDINGS

Shepparton CBD is growing and the way parking is managed can support Shepparton CBD in achieving its vision. A range of parking management tools and approaches have been developed for the CBD as a whole and to address specific case studies

Shepparton is a growing regional city with a focus on improving liveability and economic prosperity for people living, working and visiting the CBD.

This poses a significant challenge and opportunity for transport and car parking in the present day and into the future.

A background review, stakeholder engagement and data analysis identified key themes, issues and opportunities relating to car parking in Shepparton CBD, including:

- Underutilisation of fee-paying car parks and the perception that 'free' parking will fix the CBD
- Hotspots and empty spots in the CBD
- Technology trends in parking represent a major opportunity for change
- There is a perception that Council is focussed on enforcement of revenue collection, rather than education, and this has upset the community
- There are a lack of alternate travel options for people who would otherwise walk or cycle into the CBD
- Employee parking in high-activity / premium areas
- Importance of user experience and how parking currently enhances visitation
- Inconsistency of parking management approach across the CBD

Shepparton CBD's vision for car parking is to be:

"An accessible CBD where parking is safe, equitable and supports the local economy."

The objectives are for car parking to:

- · Support the CBD
- · Be equitable and accessible
- Be managed to improve place and liveability
- Balance modal priorities

A range of parking management tools and approaches have been developed to support Shepparton CBD in achieving its vision. These are related to the allocation, restrictions, pricing and technology of car parking.

These options have been applied to four case studies across the CBD, with recommendations made for these locations and across the CBD as a whole.

Implementing these recommendations will help to support Shepparton CBD in achieving its car parking vision and overarching visions for the city.



7.2 RECOMMENDATIONS AND NEXT STEPS

A range of parking management tools and approaches have been developed for the CBD as a whole and to address specific case studies.

A summary of recommendations and next steps for each case study is presented below.

Case Study 1

- The long-term on-street parking on Vaughan Street and Welsford Street, south of Sobraon Street be converted to 2P parking
 - The whole of Welsford Street may be converted in the future if there are changes to land use that require more short-term parking spaces
- The displaced long-term parking spaces be accommodated within existing off-street parking lots OR with the development of a new parking site
- The rest of the long-term parking spaces that are displaced can be accommodated in surrounding areas and through shifts to other modes of transport (cycling, walking and PT with the new upgrade to the bus interchange)
- Paid parking be implemented in the existing and new 2P parking spaces, and also for the all-day parking along Welsford Street
- The parking occupancy is reviewed to see the effectiveness of the paid parking areas, and potentially adjusted to achieve the ideal 85% parking rate
- Time restrictions are implemented at the Aguamoves

Case Study 2

- Wayfinding signage be improved and dynamic signage implemented
- Pedestrian connectivity between the car park to High Street and Maude Street pedestrian networks be improved
- An 'all-in-one' parking phone-app be developed
- Location based pricing variability be implemented by making the surrounding onstreet parking spaces paid and more expensive than the off-street parking
- The parking spaces within the western portion of the off-street car park are converted to shortterm free parking
- The parking spaces within the eastern portion of the off-street car park are converted to be allday paid parking

Case Study 3

- Fryers Street, west of Corio street is converted from 2P to 1P parking
- The parking lots opposite the multi-deck car park and further north on Nixon Street, Edward Street and Fryers Street be converted from long stay and 5P ticket parking to shorter term parking 2P - 3P.
- Paid parking be implemented along Corio Street
- Future demands are accommodated through the existing multideck car park
- Parking spaces for people with disabilities are provided above and beyond the relevant quidelines

Case Study 4

- Occupancy and turnover data is collected for the railway reserve parking
- Options 4.1 and 4.3 are reviewed following collection of additional data to understand the type of parking currently being accommodated within the railway reserve
- Improve enforcement in the 3P areas closest to the university to improve turnover



7.2 RECOMMENDATIONS AND NEXT STEPS

A range of parking management tools and approaches have been developed for the CBD as a whole and to address specific case studies.

Shepparton CBD-wide approaches

- Implement a kerbside user hierarchy
- Improve wayfinding signage and implement dynamic signage
- Develop an 'all-in-one' parking phone-app which allows users to identify available spaces and pay for and reserve parking
- Introduce smart parking technologies
- Increase parking for people with disabilities
- Review pricing structures within both on-street and off-street parking
- Investigate a Park and ride / Shuttle bus service
- Identify long-term opportunity for increased parking provision (separate study which may require additional and current day surveys)

- Maintain paid parking and adopt a variable parking structure which will enable any changes to be made to paid parking and reviewed
 - Apply a location specific paid parking policy
- Establish a policy whereby the level of income from paid parking is transparent and allocated to future capital works to improve the CBD
- Resolve any issues with the parking app as a priority
- Implement credit card payment technology into all parking ticket machines
- Continue free parking trial during December each year (between 1-31 December only) to support increased trade and public perception of parking and the CBD during Christmas (Subject to the outcomes of the recent trial)



QUALITY RECORD

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
А	08/04/2020	Shepparton CBD: Car Parking Strategy (Draft)	Hui-Lin Tan	Chris Coath	Chris Coath	

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VIC NSW QLD SA WA

Level 25, 55 Collins Street Melbourne

www.gta.com.au +61 3 9851 9600

ABN 34 137 610 381

