ARDEN PRECINCT PARKING PLAN

Client: Victorian Planning Authority

Version D – Final
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PURPOSE OF THIS REPORT

The purpose of this study is to assess the objectives and strategies set out in the draft Arden Structure Plan against key movement and parking principles to inform preparation of the final Arden Structure Plan. This report is intended to fulfil the analysis and justification required to support a Schedule to the Parking Overlay and should be read as a Precinct Parking Plan as noted in Planning Practice Note No. 57

This report sets out a car parking strategy to best manage future car parking within the Arden Structure Plan area. The recommended strategies include a mix of the implementation techniques which will be examined in this report.

A parking plan is defined in PN57 as follows:

"*Before a Parking Overlay is drafted, it will generally be necessary to prepare a car parking plan that identifies car parking needs and issues, relates these to broader social, economic and environmental considerations and sets out what car parking objectives a council wishes to achieve and how it will do this. … Once prepared, a car parking plan can provide the basis for, and be implemented by, a Parking Overlay...*"

PN57 identifies that a Parking Plan must include the following:

- the objectives of the plan
- the area to which the plan applies
- findings from research and surveys that provide factual material to support the plan
- an assessment of car parking demand and supply
- car parking strategies proposed to facilitate the plan's objectives
- any locational, financial, design or other actions necessary to implement the objectives and strategies.

This report is split into two parts:

Part A | Arden Precinct Parking Plan – provides supporting justification and analysis for the Arden Precinct Parking Overlay.

Part B | Arden Movement and Parking Study – provides a complete review of all modes of movement for the overall Arden Precinct, together with a review of emerging transport best practices and the opportunities, benefits, management, supporting evidence base and implementation of consolidated parking. This is a separate background document.

Arden Transport Connections – Movement Network Plan

Source: Draft Arden Structure Plan 2020

CONTENTS & STRUCTURE OF PART A

Part A – Arden Precinct Parking Plan

01 Introduction	Introduces the Arden Precinct
02 Car Parking Issues and Objectives	Provides an overview of how parking is perceived and used in everyday life, and how a Precinct Parking Plan can result in better outcomes through policy and on-the-ground management.
03 Implementing the Precinct Parking Plan	There is a link between car parking and car use, so minimising car parking is crucial to the delivery of a low car use precinct. A comprehensive overview of the on and off-street parking strategy for Arden is set out in this section – from projected park demands through to the implementation strategy, supported in planning policy through the Parking Overlay.

INTRODUCTION

Part A
01
Arden Precinct Parking Plan

1.1 INTRODUCTION TO THE ARDEN PRECINCT

'Arden's strategic proximity to the CBD and Parkville will enable Arden to support Melbourne's growth as a city that attracts investment, supports innovation and creates jobs.' **(pg. 16, Arden Vision, Direction 1: Transforming Arden)**

The Arden Renewal Precinct (Arden) is located in the heart of North Melbourne and is just 2km north-west of the Central Business District (CBD) and 1.5km east of the Parkville National Employment and Innovation Cluster (NEIC). The CBD is a major part of Victoria's ability to attract investment, create innovation and generate jobs. Growth in the CBD will ultimately enable Victoria to continue to be a global city region of opportunity and choice. Arden's inner-city location makes it ideal to support the future success of Melbourne's CBD.

Plan Melbourne identifies Arden as a Major Urban Renewal Precinct. The Plan states that Major Urban Renewal Precincts will play an important role in accommodating future housing and employment growth and making better use of existing infrastructure.

Plan Melbourne identifies Arden as a Priority Precinct. The Plan specifically states that '*The timing of land release in these precincts needs to be in sync with policy drivers, market demand and the delivery of infrastructure and services*.'

The major uplift in transport infrastructure servicing Arden will be delivered in 2025 through the Metro Tunnel Project. The new station will be located on the southwest corner of Arden Street and Laurens Street.

Arden has a strong aboriginal and post-settlement cultural significance. It is also the home to the North Melbourne Football Club.

North Melbourne, like most inner-city suburbs, was traditionally working class. To address the 'slum-like' conditions that were prevalent within the area, large government housing development projects were completed in the 1960s, many of which still stand today. The streets in the area are generally wide and have not changed significantly (apart from more line markings) since the 1960's.

Curzon Street east between Molesworth and Arden Streets, North Melbourne, Vic. 1964

Source: State Library of Victoria

Arden's strategic location and the investment in infrastructure has meant that it has been recognised by the State Government as a major urban renewal opportunity. If successful, this will make Arden a highly sought-after place to work, live, visit and spend time.

In July 2018, the VPA and the City of Melbourne released the Arden Vision document. This document states the following vision,

"Arden will be a new destination for Melbourne, setting the standard for urban renewal. It will contribute to a future Melbourne that is not only the world's most liveable city, but also one of the most forward- looking."

The Arden Vision sets out a 20+ year timeline for development, responding to the delivery of a new Arden Station in Arden.

In June 2020, the VPA and the City of Melbourne subsequently released the Draft Arden Structure Plan. The Plan builds upon the Arden Vision document and states the following objective,

"Arden will be an exemplar mixed-use urban renewal precinct at the forefront of sustainable and inclusive development with quality urban realm, a thriving network of open spaces and community facilities."

The Draft Arden Structure Plan sets out a plan for a 30-year timeline for development and a goal to accommodate approximately 34,000 jobs and around 15,000 residents by 2051.

This vision is to be supported by a transit-oriented travel network that will see 90% of journeys undertaken by public transport or active travel modes, with 10% by private vehicle.

1.2 PRIORITISING SUSTAINABLE TRANSPORT OBJECTIVES

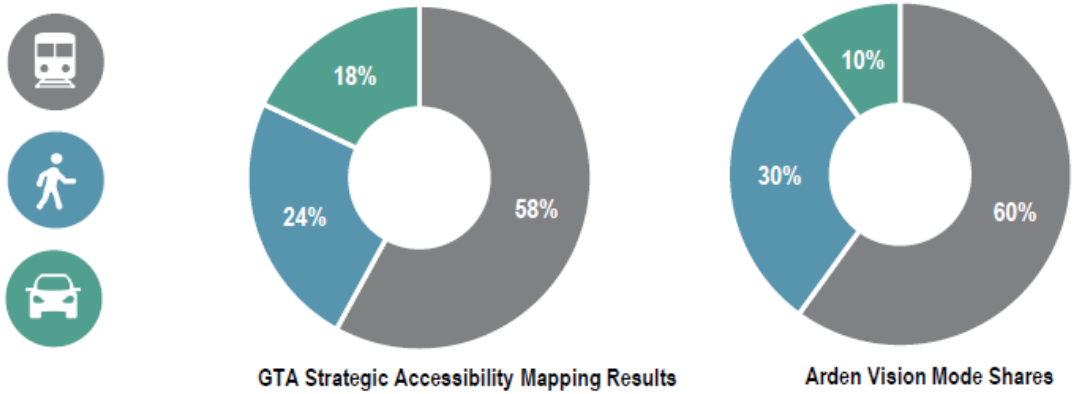
Arden will be an exemplar of best-practice sustainability, where at least 60 per cent of trips are made by public transport; 30 per cent by walking and cycling; and no more than 10 per cent by private vehicle.

The central location of Arden makes it a highly attractive place for future residents and workers. However, the congested surrounding road network presents major challenges and questions as to whether this level of development is able to be successfully supported if a 'Business as Usual' approach to transport is adopted.

The Arden Transport Capacity Assessment (GTA 2018) provides an evidence base that supports the precinct ambition of a 60:30:10 mode share target for the precinct. GTA (2018) found that under a business-as-usual approach to vehicle movements with no transport infrastructure interventions, congestion and catchment opportunities to the precinct will limit overall private vehicle trips to the precinct to 18 per cent. This presents a gap of 8 per cent between business as usual and the adopted mode share targets.

To close this 8 per cent gap and achieve the mode share targets, GTA (2018) recommended that in conjunction with ongoing investment in public transport and active transport, car parking management at a precinct level will play a key role in influencing mode shift in the longer term, to create a vibrant and attractive public realm with differing street types.

Figure 1.1: Strategic accessibility compared to Arden Vision Targets



1.3 PRINCIPLES FOR MOVEMENT & PARKING

Planning for Arden must address principles for movement & parking to support the precinct aspiration as a transport-oriented development that leverages its position on the Melbourne public transport network to deliver a low-car use precinct

1. Design a movement network to prioritise active transport over private vehicle movements

- Create a pedestrian-oriented public realm around Arden station in the heart of Arden Central, maximising patronage from the Metro Tunnel project.
- Facilitate more walking from the existing stations at Macaulay and North Melbourne into Arden.
- Ensure the transport network in the precinct maximises place outcomes, resulting in high levels of amenity and liveability.
- Promote cycling in Arden by connecting to regional cycle paths and trail networks and providing a safe network that encourages cyclists of all ages and abilities.
- Reduce rat-running through the precinct and mitigate increases in traffic volumes arising from the West Gate Tunnel.
- Manage vehicle circulation, calm local traffic speeds and control supply and location of car parking within the three sub-precincts.
- Maximise connectivity between Arden, West Melbourne, North Melbourne, Parkville, the Melbourne CBD and Kensington, prioritising accessibility for local trips by walking, cycling and public transport.

2. Minimise the impact of car parking and associated vehicular movements in Arden

- Manage the limited amount of on street parking as a shared resource, focussing on short term users
- Minimise and consolidate off-street parking to selected site locations to create a market with limited supply
- Minimise overall car parking in Arden to reduce private vehicle travel
- Vehicle access to car parks should not undermine the pedestrian priority street network
- Car parking stations must be located with direct access to the main vehicle routes passing through Arden as shown in Arden's proposed movement network in the Arden Structure Plan.

3. Use car and bicycle parking to rebalance modal priorities in favour of active travel

- Provide bicycle parking in excess of statutory minimums and industry standards
- Provide high-quality end-of-journey facilities
- Require all developments to have a green travel plan for residents and employees
- Exclude on-street parking from pedestrian priority zones
- Encourage car share services

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4. People using cars should pay for parking	5. Prioritise the parking needs of different land uses	6. Protecting amenity and the environment	7. Support the Arden economy	8. Plan for the future
• Expose the direct cost of parking to the user • Separate the cost of car parking space from the land use cost • Charge for on-street parking, but make exceptions for loading vehicles and people with disabilities	• Establish a parking user hierarchy for land uses in the precinct that has a full appreciation of how expectations and tolerances differ when it comes why and where people park. • Reflect this hierarchy in the parking rates proposed for the precinct • Identify methods for sharing of off-street parking spaces between different land uses	• Protect streets around the precinct from parking overspill • Minimise on-street parking to reduce its impact on the streetscape • Minimise driveway access points to parking stations to reduce conflict with pedestrians and other users	• Encourage low-impact last-kilometre servicing • Enable close-proximity access for vulnerable user groups • Provide for loading zones and identify appropriate principles for the management of commercial deliveries, both spatially and temporally	• Support a transition to electric vehicles • Plan for parking structures to be converted into other more productive land uses over time

1.4 WHAT IS A PRECINCT PARKING PLAN?

A precinct parking plan is required to set strategies in alignment with the principles for movement and parking to inform the management of parking at precinct level. A coordinated precinct plan contributes to additional, precinct-wide benefits.

The Purpose of Precinct Parking Plan

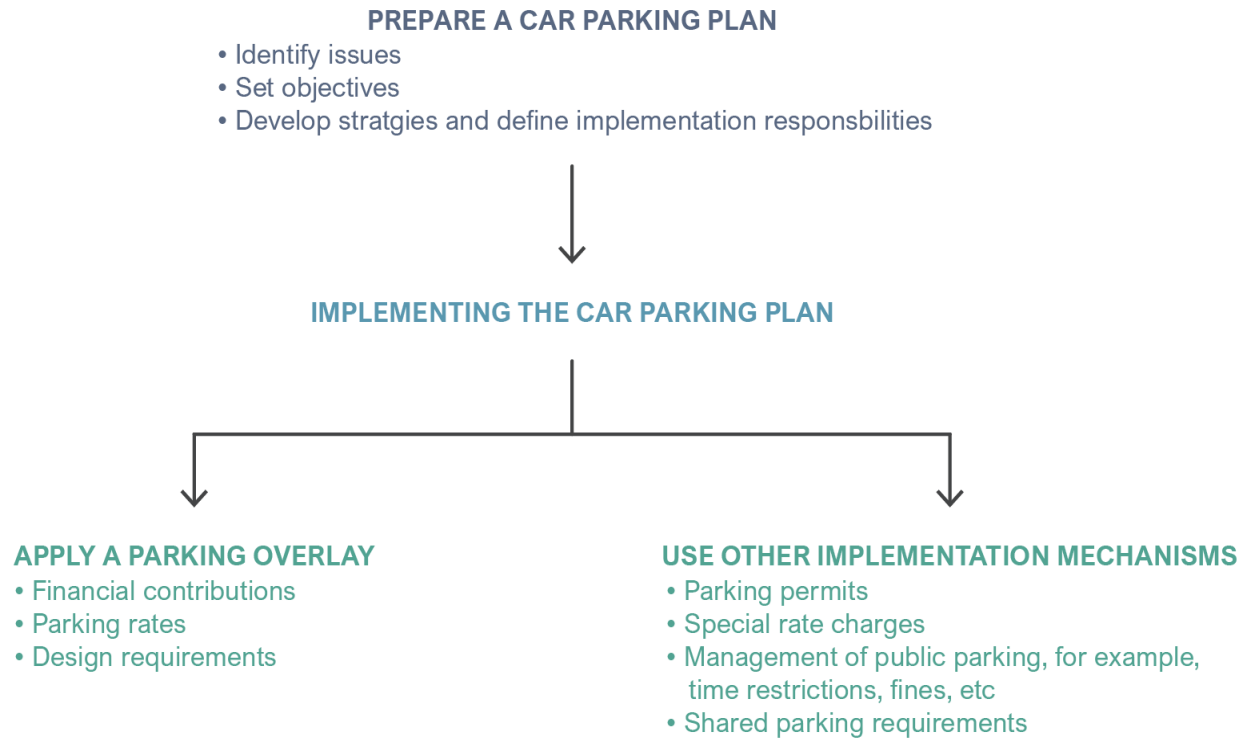
In activity centres like Arden, land uses generate and attract patrons, customers, staff and / or residents resulting in economic activity. A by-product of access to these land uses is, in its simplest form, a 'trip'. Trips can be made by a variety of methods including (but not limited to) walking, cycling, public transport and / or the private motor vehicle.

A Precinct Parking Plan sets out how parking should be provided and managed at a precinct level. This contrasts with a system in which any new parking is provided on a site-by-site basis.

This report sets out a precinct parking plan to best minimise the impact of car parking and associated vehicular 'trips' in Arden.

The Victorian Planning Practice Note – The Parking Overlay (PN57) identifies that the outcomes of a car parking plan or strategy are likely to be implemented either through:

- a Parking Overlay (at Clause 45.09 of the Planning Scheme) or
- other mechanism (as shown in the flowchart opposite) to be implemented on-the-ground to support the policy objectives of the municipality.



CAR PARKING ISSUES AND OBJECTIVES

Part A

02

Arden Precinct Parking Plan

2.1 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. Innovative, precinct-wide planning tools are required to manage demands within a finite resource.

Activity centres, like Arden, are important places where people shop, work, meet, relax and often live. With the increasing population, size and density of activity centres, the management of space and competing transport demands becomes an important issue for both Council and the community.

Streets serve both a movement and place function

Streets perform multiple functions as links not only move people from A to B, they also serve as key places and destinations in their own right. The ability to 'park' is a secondary outcome for streets.

There is no such thing as 'free' parking

"Just because a driver doesn't pay for parking doesn't mean the cost goes away," – Donald Shoup[1]

Free parking simply means higher costs for everything else - goods, services and housing for example. It is important to recognise that the provision of car parking always comes at a cost. If it is not paid directly by the users themselves (through paid parking), then it is borne by developers, Council, landowners or businesses, who ultimately pass these costs onto all users of an activity centre through increased rents, costs of goods, and council rates[2]. Beyond the cost of construction, car parking spaces require maintenance, management, and enforcement.

There is also an inherent opportunity cost in dedicating land to car parking. In the case of on-street car parking, the space could be used for wider footpaths, safer cycling infrastructure, open space/public realm, parklets / dining, bus lanes, or greater traffic capacity. In off-street locations car parking consumes space that might have been used for housing, shops, cafés, restaurants, offices, parks, playgrounds, or any number of other uses.

Furthermore, dedicating too much space to car parking often means that distances between all other land uses are increased, impacting everyone who does not travel there by private vehicle.

This is not to detract from the functional role of car parking, but highlights that overprovision of parking can be detrimental to affordability, amenity, sustainability and vibrancy of an activity centre.

In this context, it is therefore important that parking be managed to:

- Recognise that a parking space doesn't attract people; it's the destination that attracts people, parking facilitates it.
- Enhance and not detract from Arden as an attractive destination.
- Encourage economic activity while advancing liveability and sustainability.
- Ensure that Arden is not placed at a competitive disadvantage relative to other centres due to its car parking provisions.

Competing users have different needs

A 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.

Perceptions of parking

Parking can be a highly emotive and a sensitive issue for the community. Resident, visitor and traders' perceptions of parking are typically worse than what is happening in reality.

For example, parking can often be perceived to be at capacity, when in reality there is lots available. In such instances, it could be lack of signage or a parking layout that is not legible. These issues can be readily addressed with improved signage and wayfinding.

Parking and travel demand

A known issue of kerbside parking within activity centres is vehicles "cruising" for available parking near their destination. Studies have found that this can contribute as much as 30 of total traffic volumes when parking is at capacity [2]..

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 on street parking availability of 15% provides the best balance of parking availability while minimising vehicle cruising for available parking.

Constructing more parking is not regarded as a solution to address a parking "shortfall" as it can induce more demand. It can have negative urban design outcomes and often comes at a large financial and social cost to the community.

[1] Donald Shoup, FAICP, Distinguished Research Professor, Urban Planning, University of California, Los Angeles, USA

[2] Shoup, Donald. (1997). The High Cost of Free Parking. Journal of Planning Education and Research. 17. 3-20.

2.2 PARKING AS A PLANNING TOOL

Progressive parking policies are an effective planning and travel demand management tool, reducing car use while promoting uptake of sustainable travel alternatives.

Parking as a planning tool

Car parking is an 'end of trip facility'. Car parking policies will affect overall attractiveness and performance of Arden. There are a range of attributes within a place that affect how they respond to car parking policy. These include:

- The availability of viable alternative modes of travel and following from this, the ability to use car parking as an effective travel demand management tool.
- The economic role of car parking to support employment, retail and services.
- The diversity of land uses in the precinct, and the ability to share car parking resources between uses.
- The trade-off between other priorities affected in the precinct by parking policy, for example in Arden high quality public realm and sustainability targets

While private vehicles will remain a necessary transport mode for accessing places around Arden in the future, the negative aspects of car use need to be addressed to support the growth, vibrancy and prosperity of the precinct.

The demand and role of parking will also vary between commercial and residential streets with different outcomes being sought in each case.

As part of this, car parking management will play a key role towards mode shift in the longer term. This will also be in conjunction with ongoing investment in public transport and active travel, along with creating a vibrant and attractive public realm for differing street types.

Parking as a demand management tool

Car parking is a transport demand management tool and influences urban form, transport patterns and Plan Melbourne outcomes.

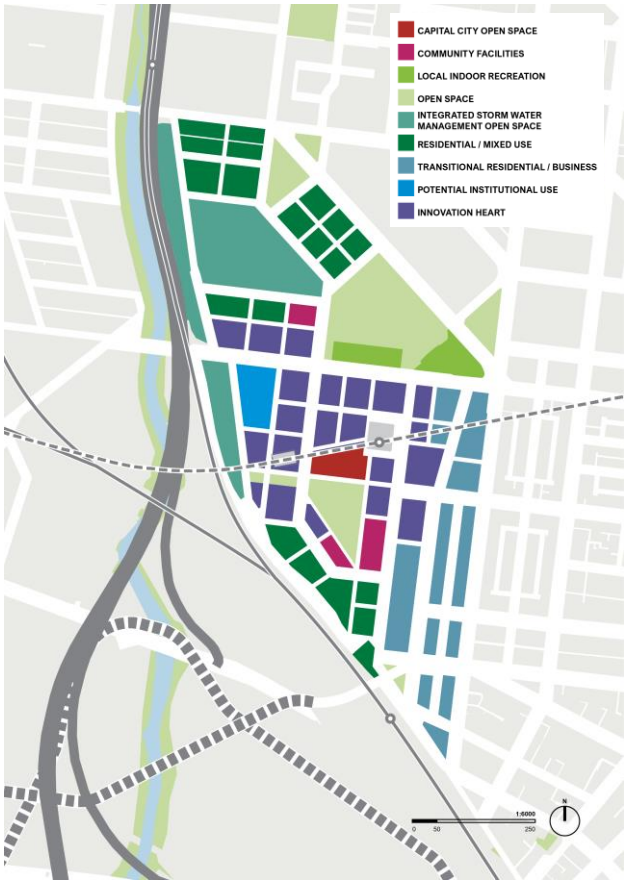
The management of car parking can occur at many levels to ensure car parking is allocated to its intended users. It should consider and balance a variety of factors which influence the demand for parking including:

- key user groups
- road safety
- amenity and public realm
- property access and servicing, including delivery and waste collection vehicles
- desired modes of transport including car, walk, cycle and public transport.

There are a variety of general parking management methods to balance these factors such as:

- uncontrolled (unrestricted) parking
- time restricted parking
- allocated parking spaces using a permit zone (or a permit holder exempt) scheme
- access / security-controlled off-street car parking areas
- prohibited parking and paid parking.

Different land uses and place functions each 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 users.



Source: Draft Arden Structure Plan, June 2020

2.3 PARKING ISSUES AND OPPORTUNITIES

There is an inherent opportunity cost in dedicating land to car parking. The reallocation of existing on-street parking to sustainable transport infrastructure improvements will require future municipal parking management measures.

Off-Street Parking

Efforts to minimise parking will lead to reduced vehicle activity to, from and within the Arden Precinct, contributing to realising the Arden Vision.

Acknowledging that parking provides an end of trip facility for cars, means recognising that more parking is tied to more vehicle trips.

Parking spaces have been historically over suppled in the City of Melbourne and dwelling vacancy rates lead to many unused car parking spaces in residential buildings. These are predictable factors.

Parking spaces are expensive. At $30,000 to $40,000 a space in an above-ground parking structure in Melbourne[1], a parking space is often more expensive than the car parked in it. Basement parking is more expensive per space. More parking spaces results in increased costs for everything else.

Opportunities lie in the efficiency gains of unbundling parking from the land use – a "user pays" approach – and consolidating an overall smaller number of parking spaces into centralised parking stations.

If this parking is made publicly available (with relevant security measures put in place) it can provide parking more efficiently and for surrounding land uses, eliminating the need for parking in individual buildings.

As well as reducing the overall number of parking spaces, fewer car parking structures will mean fewer vehicle crossovers and reduced conflict with walking and cycling, leading to a safer and more amenable street environment for these target user groups.

On-Street Parking

On-street parking has a role to play in Arden. It can help to support the Arden economy by providing shared space for loading and delivery activities, as well as pick-up and drop-off of visitors. It can also serve to provide close-proximity access for vulnerable users, such as elderly people or people with disabilities.

Significant amounts of new on-street parking are not proposed as there is a preference to design streets for people and place the majority of parking in consolidated hubs. If anything, the streetscape works associated with the sustainable travel infrastructure improvements will reallocate the amount of space provided for on-street parking across the precinct to other road users.

Existing On-Street Parking

Existing on-street parking within the three sub-precincts is:

- **Arden Central**: 93 spaces
- **Arden North**: 176 spaces
- **Laurens Street**: 288 spaces

Road projects to accommodate tram services and increased provision for active travel, will result in a loss of parking on several roads within the precinct:

- **Arden Central**: no significant on-street parking change
- **Arden North**: reduction of 50% on-street parking
- **Laurens Street**: reduction of 50% on-street parking

Reduction of on-street parking in Arden Central and Arden North is unlikely to be problematic, as they are to be entirely redeveloped.

However, land uses in the Laurens Street sub-precinct will likely rely on the current parking levels for a longer period. The road improvements within the sub-precinct could result in the loss of half the on-street parking (150 parking spaces).

Management measures should be introduced to accommodated existing uses within a changed parking system as the precinct develops.

On-Street Parking Management in Neighbouring Areas

Fewer parking spaces within Arden relative to the increased populations could result in parking impacts on streets in neighbouring areas. This can be readily controlled with municipal parking management measures.

Addressing Issues and Realising Benefits

Recommendations to capture the benefits and address issues raised are set out in Section 3 of this report.

[1] RLB Intelligence Construction Cost Indicator (link) accessed by GTA in October 2020.

2.4 PARKING USER GROUPS

There is a variety of other precinct user groups that need to be accommodated to contribute to the success of Arden. Parking can be used to facilitate their travel needs.

Parking for People with Disabilities

Around 1 in 6 people in Australia have a disability[1]. These users are often unable to avoid the use of the private motor vehicle and have the need to park closer to their destination. The allocation of parking should be prioritised so these users have adequately numbered and located car parking spaces.

Train Station Car Parking

Parking for train stations can consist of staff, park and ride, public pick-up and drop-off and ride hailing services, such as taxi's. Arden station is not planned to support park and ride and staff parking is expected to take place in off-street locations, if needed. Therefore, the focus of parking needs will be on street-level private car and ride hailing pick-up and drop-off.

Bicycle Parking

The aspiration to realise 90% of all journeys being undertaken by sustainable or active travel requires maximising opportunities or removing barriers to the uptake of non-car travel.

The City of Melbourne and the Department of Transport continue to invest in upgrades to the bicycle network. The desired effect of this investment should be enabled by an exemplary level of bicycle parking at journey start and end points.

Motorcycle Parking

Victorian road rules allow motorcycle parking on footways. This leads to street clutter, reduces walking widths and encourages motorcyclists to ride on the footway – a safety concern, particularly in busy locations.

Motorcycles are a more space-efficient means of travel than private car; however they are still considered as part of the private vehicle mode share generation. Providing a suitable amount of motorcycle parking will contribute to their use in line with targets.

These issues can be resolved, and the objectives met by providing safe and secure motorcycle parking in off-street locations, in suitable quantities.

Electric Vehicles

There are many factors that will lead to increased use of electric vehicles in the coming 5 to 10 years and further beyond:

- Many major economies (countries and cities) banning sales of internal combustion engine (ICE) cars, mainly by 2035[2].
- EVs / ICE vehicle cost parity is expected by 2025/26,
- Existing technology can charge a car in as little as 5 minutes.
- Prevailing political sentiment, international pressure and changing public attitudes to environmental issues.

There are also infrastructure factors to consider, such as uncertainty around adoption of technology and infrastructure.

These factors and more make it difficult to reliably plan for technological change. A resilient system that does not lock-in outcomes is the preferred solution.

Car Share

Car share refers to the car sharing services offered by individual companies such as GoGet and CarNextDoor where cars are available to rent by the hour by members and as such are available on demand.

Research in Australia indicates each car share vehicle reduces the number of cars owned across car share members by 7 to 10 cars[3].

Car share has the potential to reduce the amount of public space dedicated to parking as well as reduce the demand for allocated off-street parking.

There is a significant opportunity to realise the benefits of greater uptake of car share programs in the City of Melbourne

Loading Vehicles

Where adequate loading and service vehicle facilities cannot be located off-street within development sites, allocation for these users is generally required in kerbside areas. This can reduce the amenity and supply of car parking within activity centres and commercial / industrial areas. Kerbside parking impacts the ability for larger vehicles to access their destination and prohibitive restrictions (e.g. No Stopping) often result.

[1] People with disability in Australia, Australian Institute of Health & Welfare, Oct 2020 [Link]

[2] Survey of Global Activity to Phase Out Internal Combustion Engine Vehicles, The Climate Center, March 2020 [Link]

[3] Shaheen, S.A. & Cohen, A.P. (2013): Carsharing and Personal Vehicle Services: Worldwide Market Developments and Emerging Trends, International Journal of Sustainable Transportation, 7:1, 5-34

2.4 PARKING USER GROUPS

There is a variety of other precinct user groups that need to be accommodated to contribute to the success of Arden. Parking can be used to facilitate their travel needs.

Ride Hailing Services

The City of Melbourne Transport Strategy 2030 has identified that uptake of app-based taxi and other commercial passenger vehicle (CPV) travel is expected to increase. The strategy also highlights that app-based CPV journeys have been found to replace journeys that would otherwise have been made on public transport.

It is reasonable to plan for increased use of this type of travel, particular in low-car ownership areas, which is a planned outcome for Arden, as people who don't own cars will need to make a car journey from time-to-time. Kerb space should be allocated to these ride hailing services without dominating the streetscape.

2.5 PARKING SUPPLY & MANAGEMENT

Private sector management of parking covers a range of operational models. Public sector management, in the Arden context, is likely to be limited to provision and operation of public parking stations – lending itself to driving a shared parking approach.

Parking Supply Outcomes

The amount of parking required for Arden depends on

- **Ownership**:
  - Allocated (bundled or unbundled)
  - Unallocated (unbundled)
- **Location**:
  - Individual buildings
  - Consolidated facilities
- **Construction**:
  - Above-ground parking (surface or multi-level)
  - Basement parking
- **Management**:
  - Private sector (parking operator, body corporate)
  - Public sector (public parking stations)

Of these factors, location and management factors have some influence on supply, but their influence is borne out of a broader choice to implement precinct-level parking and the degree to which parking can be shared in the precinct.

The construction of either above ground or basement car parks, merits further investigation beyond this study.

Effect of Unbundling Car Parking and Land Use

Without breaking the link between allocated individual residential parking spaces and employee pooled parking, there cannot be an efficiency gain beyond simply reducing the car parking supply to match the mode share target.

Possible car parking supply outcomes having regard for whether parking is bundle or unbundled from the land use are:

- **Fully allocated (bundled):** 4,550 car spaces
- **Unallocated (unbundled)**: 3,515 car space

Unallocated parking could **save approximately 1,000 car spaces** across Arden. A combined scenario would deliver between the above noted levels of parking supply.

Benefits of Consolidating Parking

Consolidated car parking helps to mitigate the public realm impact of car parking by:

a) providing a more efficient car parking strategy that reduces the total number of car parking spaces and floor area used for car parking

b) consolidating the negative impacts of car parking structures (seen throughout areas like Docklands and Southbank) into fewer, concentrated locations as opposed the distributed effects of a larger number of smaller on-site car parks

c) futureproofing the network to be able to change as demand for car parking reduces and the use of streets by pedestrians and other users requiring protection from cars increases. For this reason, the Design and Development Overlay (DDO) interacts with the car parking strategy.

2.5 PARKING SUPPLY & MANAGEMENT

Private sector management of parking covers a range of operational models. Public sector management, in the Arden context, is likely to be limited to provision and operation of public parking stations – lending itself to driving a shared parking approach.

Management

Private Sector

Car parks that are managed by the private sector can be broadly classified into two forms:

- **Open to the public**, such as a city centre parking station, operated by a specialist car parking management company
- **Fully private**, such as an apartment building or office car park – managed by a body corporate or building management company.

Public Sector

Car parks operated by the public sector, as applicable to Arden, are typically consolidated parking stations, providing public parking for an activity centre along with allocated parking for businesses and residents.

It is noted that while a fully direct cost-recovery model is unlikely, it can extract wider benefit for a precinct, such as:

- urban realm improvement; or
- use of land that is less attractive to private development

Which option is better suited to Arden?

It is possible for either the private sector or public sector to manage a consolidated parking facility. Public sector involvement lends itself to driving a shared approach to parking as typically public sector managed car parks are central parking facilities

In addition to public sector management of parking, the parking strategy for Arden, implemented within a Schedule to the Parking Overlay, allows flexibility for private operators to provide shared parking for the benefit of the precinct as well as allow the private sector to build and operate consolidated parking facilities.

Possible scenarios for either public or private sector management are discussed in further detail in Part B: Evidence base, Section 6.

2.6 OTHER PARKING MANAGEMENT MEASURES

Further precinct parking management techniques can be used to control the use of parking in Arden, beyond determining the number of parking spaces to provide and consolidating the off-street parking supply.

Time Restricted

This is the first step in managing parking and places time limits on parking spaces to induce turnover and increasing availability and total visitation through the parking system. Time limits provide the first level of prioritisation of parking to specific typical user groups according to the length stay they typically require.

Time limits, including days of week, may be adjusted to improve efficiency. Off-street parking will support longer term stays where available.

Consistent with City of Melbourne Transport policy, time limits will be replaced with price signals in Arden.

Allocated

Parking Zones allocate parking spaces by way of parking restriction signage. An example of this would be a 'Permit Zone', a 'Loading Zone', or similar, and provides exclusive access to that user group to access the parking spaces.

Permit Schemes

Permit schemes can create a permit holder exemption, whereby a particular user group, usually residents, have access to permits which exempt them from timed parking restrictions. This system provides residents with an advantage, but not a guarantee, to find a parking space near their property.

Unrestricted Parking

The use of unrestricted parking is only relevant where demand does not exceed supply and where it relates to a single user group and prioritisation and turnover of spaces are not required. Given Arden's planned density and land uses, this is unlikely to be appropriate in the long term.

Paid Parking

Paid parking provides another level of parking management introducing a cost to parking beyond the desired length of stay to prioritise parking allocations and act as a demand management tool. Charging for parking can be a highly effective tool in managing both on and off-street parking, particularly where demand outstrips supply.

Wayfinding Signage

Providing legible and informative signage can work alongside the paid parking system (or timed restrictions) to enable more efficient use of the parking supply – doing more with less.

Reduced parking search time reduces on-street congestion and improves use of off-street car parking.

Overall, this leads to improved pedestrian amenity in streets and reduced driver frustration.

Smart Parking and Technologies

Smart parking technologies and systems improve efficiency and functionality of transport within activity centres. These systems have the ability to improve amenity, liveability and safety of road users and the community in a number of different ways.

Some examples of these technologies include:

- Underground parking sensors, or Parking Overstay Detection Systems (PODS)
- Pole mounted parking monitoring cameras
- Electronic permits and ticketless parking
- Pay-by-phone and phone-based parking guidance systems
- Dynamic wayfinding signage systems

Enforcement

Enforcement is important to ensure a parking system operates as designed. In general terms, without effective enforcement, drivers will become aware of the low probability of consequences and not seek to adhere to the system.

Enforcement as it relates to Arden is expected to take three forms:

- drivers who have not paid for parking
- drivers who have overstayed the posted time period.
- overspill into surrounding neighbourhoods

Enforcement has negative connotations with the public; however, the outcomes are positive if the system is viewed as fair overall.

While parking enforcement can be a frustration to drivers who try to park for free, it reduces the frustrations of those who adhere to the system.

Achieving an effective enforcement system is contingent on the clarity of the message and commitment to the enforcement task. To achieve this, clarity of the system (signage, advertising and education), desired outcomes (compliance and turnover of parking) and non-compliance outcomes (fine value) must be clearly communicated to all involved.

In-ground PODS create greater certainty and efficiency of enforcement. Technologies such as this and other further technology enhancements in coming years will continue to enable an effective enforcement which is less resource intensive.

Overall, enforcement can ultimately increase compliance, ensuring the parking system works as intended with fewer fines being issued – resulting, on the whole, in a parking system with less frustrations and a greater desire to spend time in the precinct.

2.7 PRECINCT PARKING OBJECTIVES

Progressive parking policies are an effective planning and travel demand management tool, reducing car use while promoting uptake of sustainable travel alternatives.

Precinct Objectives and Sustainable Travel Goals

The Arden Vision is for the redevelopment of the Arden urban renewal area into a place to live and work that is built on a foundation of sustainability.

The Arden Precinct aspires to accommodate 34,000 jobs and around 15,000 residents by 2051.

Aspirational mode share targets have been set to meet the objective of low car use within the precinct from the outset.

The precinct will be extremely well served by public transport, as good as or better than parts of the Melbourne CBD currently. For this reason, public transport will be mode of travel for the majority of travel to and from Arden, supported by an active travel network comprising excellent walking and cycling routes. The result will be a precinct that has a car mode share (driver and passenger) of 10%; the majority (90%) will travel sustainably, meeting the Arden Vision.

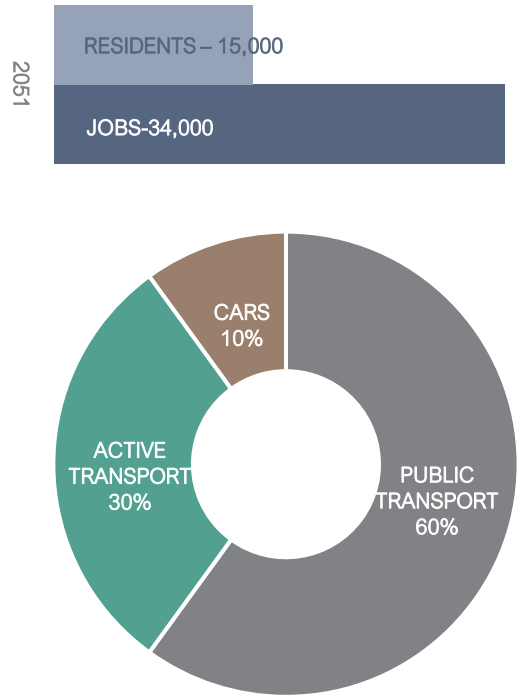
Parking Objectives

The objectives of this study have been prepared in view of the Arden Vision mode-share target for 10 per cent for private vehicles and the 8 Movement and Parking Principles provided in Part A: Arden Precinct Parking Plan, Section 1.3 of this report.

The objectives are:

- To discourage the provision of on-site car parking on a site-by-site basis and encourage consolidated, publicly available carparks.
- To encourage a travel mode shift toward 90 per cent of all trips to the precinct being by sustainable transport options.
- To identify preferred car parking rates for various uses.
- To minimise the impacts of car parking areas on the public realm.
- To provide for the future adaptation of car parking areas to other uses and innovations in transport technology and practice.

Figure 2.1: Arden Vision Targets



IMPLEMENTATION

Part A

03

Arden Precinct Parking Plan

3.1 IMPLEMENTING THE PRECINCT PARKING PLAN

A Precinct Parking Plan can be implemented via a statutory Schedule to the Parking Overlay within Clause 45.09 of the Melbourne Planning Scheme or via other non-statutory on-the-ground management and enforcement mechanisms

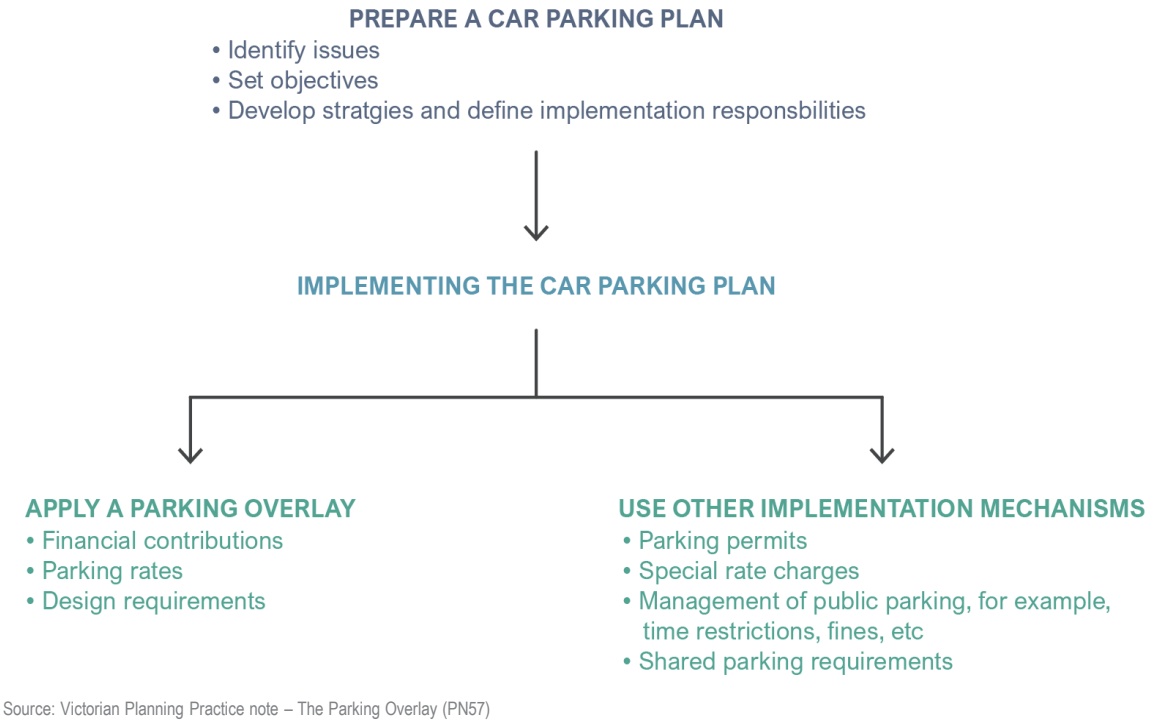
The Purpose of Precinct Parking Plan

The Parking Precinct Plan has been prepared for Arden to establish how parking should be provided and managed at a precinct level.

Implementation of the Arden Parking Precinct Plan may be achieved by:

1. **Statutory implementation:** Inclusion of the Precinct in a Parking Overlay (at Clause 45.09 of the Planning Scheme). This is consistent with Planning Practice Note 57 – The Parking Overlay (PN57).
2. **Other implementation mechanisms:** In addition, there are other mechanisms to manage car parking (as shown in the flowchart opposite) to be implemented on-the-ground to support the policy objectives of the municipality, including parking permits, signage/wayfinding, paid parking and enforcement.

Figure 3.1: The relationship between a Precinct Parking Plan, the Parking Overlay and other implementation mechanisms



Source: Victorian Planning Practice note – The Parking Overlay (PN57)

3.2 STATUTORY IMPLEMENTATION – SCHEDULE TO THE PARKING OVERLAY

Planning Practice Note 57 identifies a range of criteria to support application of a Parking Overlay (PO) in Arden. The PO is considered the appropriate tool to achieve the Arden Vision and precinct wide based parking objectives

Planning Practice Note 57 - The Parking Overlay (PN57)

PN57 requires consideration of a precinct based context in the preparation of a Precinct Parking Plan, including:

- Is a Parking Overlay an appropriate tool to introduce specific parking rates for the Arden Precinct?
- What area should the Parking Overlay be applied to?
- What are the proposed car parking characteristics of the site, and how do these support the Arden Vision?
- What is the scale of development and how could this impact car parking in the surrounds should the Overlay be introduced?
- Does the Overlay represent an appropriate strategy for meeting the parking objectives and managing car parking ?

These questions are further considered in the following sections.

Appropriateness of Parking Overlay as a Planning Tool

The Parking Overlay (PO) provides a tool to specify, amongst other things, specific car parking quantum requirements that should apply to a defined precinct.

In this respect, PN57 identifies:

"Local variations to Clause 52.06 can only be introduced using the Parking Overlay and accompanying schedule. A local policy cannot be used to apply variations."

While local car parking rates in the past have been applied through a number of planning mechanisms PN57 is clear that a PO represents the only appropriate tool by which to introduce local parking rates.

The PO provides opportunity to realign the expectations of Council, developers and the community in respect of car parking requirements. This is important for Arden where it is likely that parking reductions (including to zero) would be likely to be justified (and permission granted by Council) for small and medium sized future uses / tenancies within the precinct if assessed on an individual basis.

The PO is the appropriate planning tool to introduce local parking rates to support the Arden Vision mode-share targets, provide appropriate certainty to the future development of the Arden Precinct and the manner in which car parking will be considered and assessed when permits are sought for individual site components.

Area to which the Parking Overlay Applies

PN57 states:

"*The Parking Overlay's primary function is to manage car parking in a precinct, rather than on a site-by-site basis.*

The Parking Overlay can be used for any precinct where local parking issues can be identified, and a common strategy can be adopted to respond to them. This might include a new car parking rate or design requirement that applies to the entire municipality, but is more likely to apply to a smaller area, such as an activity or employment area within the municipality."

The Arden Precinct will have unique and specific characteristics when compared with the surrounding area including:

- The site will include a mixture of individual land uses, each joining to provide a singular precinct outcome, and
- There is an objective to limit the ability to provide on-site parking but rather consolidate parking in shared facilities.

On this basis, it is considered appropriate for the PO to be applied to the Arden Precinct, as defined on maps accompanying each Schedule, and is consistent with the intent identified within PN57.

3.2 STATUTORY IMPLEMENTATION – SCHEDULE TO THE PARKING OVERLAY

The primacy of parking consolidation is preserved through a sequential test that makes this objective the primary decision-making factor. The nexus between a car park and land developed in the wider precinct can be fairly measured using a 250m walk distance.

Scale and Nature of the Development

A key component of low car parking provision in a precinct setting is the ability to share parking among many land uses. This creates efficiencies, not only from shared parking, but also by enabling parking to be unbundled from the sale or lease of the land use (both residential and commercial).

Consolidated car parks are a critical component of realising low car use and are therefore key to the delivery of the Arden Vision.

The delivery of consolidated car parking cannot be mandated within a planning scheme, as to do so potentially undermines the ability to develop the precinct in the short term. However, consolidated car parking should be given clear primacy over on-site parking in the planning permit decision-making process.

The Arden parking overlay deals with this issue by encouraging developers to either create a pool of on-site parking that can be shared, or to put any parking that think they need, into a consolidated off-site car park nearby.

The way the parking overlay protects the primacy of consolidate parking in set out Figure 3.2.

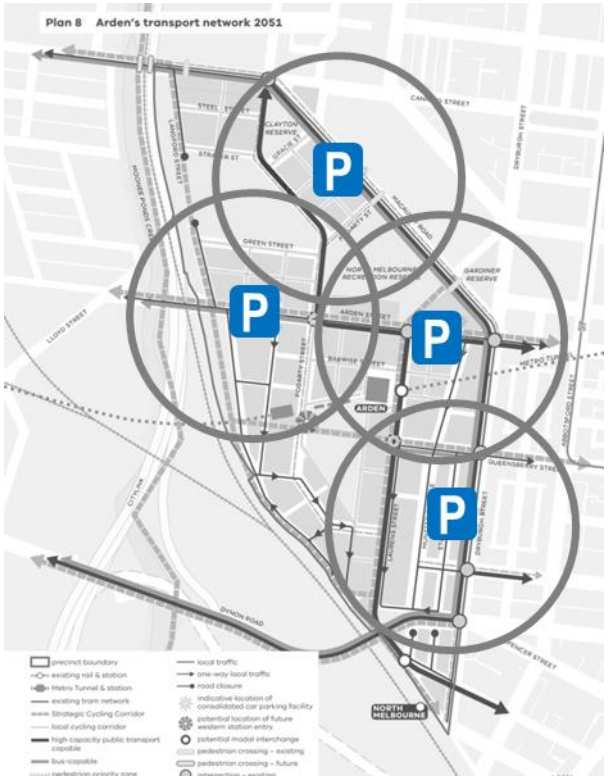
Conceptual consolidated parking and walk distances

Approximate conceptual locations of 4 consolidated car parks are shown in Figure 3.3, indicating the entire precinct is easily covered within 250m (straight line) of one of the car parks. This is considered an appropriate distance to draw nexus between land that is subject to a permit application for parking and the availability of publicly accessible parking.

Figure 3.2: Protecting the Primacy of Consolidated Parking

- Not permitting car parking provision as standard in the precinct.
- Where parking is proposed, support parking as a consolidated parking facility.
- Requiring any applications that include new parking to show this parking is the minimum viable amount.
- Setting a decision making sequential test to show that the parking has to be provided on-site
- Setting maximum rates for on-site parking
- Extracting precinct benefit from on-site parking.
- Ensuring the parking can be changed into building floor area.

Figure 3.3: Conceptual consolidated car parking coverage at 250m walk distance



3.2 STATUTORY IMPLEMENTATION – SCHEDULE TO THE PARKING OVERLAY

PN57 has specific controls that can be included in a Schedule to the Parking Overlay. Those relevant to Arden are explored here.

Parking objectives

The targets of 10% car and 90% sustainable transport, are realistic but policy needs to be aligned to ensure that sustainable transport investments, which runs to hundreds of millions of dollars, are not undermined by a business as usual approach to parking.

The objectives of this study outlined in Part A: Arden Precinct Parking Plan, Section 2.7 have been prepared in view to support this policy.

Car Parking Provision Rates

To achieve Arden's adopted mode-share target for 10% of all trips by private vehicles, parking rates for the proposed residential and non-residential land uses within the precinct are:

- **1-bedroom dwelling**: 0.2 spaces per dwelling
- **2-bedroom dwelling**: 0.3 spaces per dwelling
- **3-bedroom dwelling**: 0.5 spaces per dwelling
- **Everything else**: 0.32 spaces per 100sqm

Defining detail is provided in Part B: Evidence base, section 5.2 of this report.

Number of Car Parking Spaces

It is accepted that some car parking will be required in Arden; it is preferred this is limited to a maximum rate of provision. However, parking maximums do not sit easily alongside a strategy to consolidate car parking into parking stations – they confer a right to provide on-site parking up to the maximum allowable.

A default setting such as this will undermine future demand for consolidated parking. This goes against the principle of resilience by locking-in one outcome based on contemporary travel behaviour.

A mechanism is also sought by which the responsible authority can review permit applications that come with new parking and determine if these are likely to undermine the movement and parking principles for the precinct, mostly prominently, the success of consolidated parking.

A permit requirement to provide above a discretionary rate of zero car parking spaces on a development site deals with this issue.

In this instance, applications for key land uses are ringfenced from a permit requirement. These land uses are reasonably foreseeable at the time of writing, and/or come with known parking requirements.

Maximum Car Parking Rates

The precinct mode share targets can be supported by implementing discretionary maximum parking rates.

The proposed maximum parking rates can be implemented within a Schedule to the Parking Overlay.

The schedule must include permit application requirements and decision guidelines for circumstances wherein exceeding the maximum parking rates may be warranted due to having wider benefits for the precinct.

3.2 STATUTORY IMPLEMENTATION – SCHEDULE TO THE PARKING OVERLAY

PN57 has specific controls that can be included in a Schedule to the Parking Overlay. Those relevant to Arden are explored here

Application Requirements and Decision Guidelines

The ability to exceed the maximum parking rates is a standard inclusion in a Schedule of this nature. For example, this is currently the approach used elsewhere in Melbourne covered by the Capital City Zone. It provides a level of flexibility to seize an opportunity that is otherwise not permitted, acknowledging that those opportunities should be the exception.

When an application to provide on-site parking is made, this triggers a sequential review using application requirements and decision guidelines that was broadly described previously but is set out here in more detail.

The principle is that the decision-making process must pass through a series of decision points before the proposed parking can be deemed an acceptable outcome.

Decision Guidelines for Parking Plans

The draft Schedule to the Parking Overlay includes decision guidelines that support the car parking Design Standards, including, among others:

- Measures to minimise the number, size of car park access points and their impact on transport networks.
- If a car park access would conflict with a proposal to prohibit traffic on a road
- If the proposed car parking can be adapted to allow for other land uses
- Whether existing on-street or other off-street parking spaces are available within 200 to 250 metres of the site and other sustainable transport alternatives within 200 metres of the site.

These are reasonable items to include as decision guidelines rather than requirements. This is allows for flexibility in precinct planning, as it recognises that not all development sites will have ideal access to frontage roads, but may still be acceptable if all reasonable steps are taken to adhere to the Movement and Parking principles and vision for the Arden Precinct./

Figure 3.3: Steps to Determining if Parking Should be Permitted

1. Application Requirements

- Number of Parking Spaces – Must be shown to be the viable minimum amount with consideration of the Decision Guidelines
- Any maximum parking rates do not apply to land being developed for a "Car Park' land use

2. Decision Guidelines

A selection of decision guidelines include:

- Is the land use is within walking distance of a precinct parking station?
- Is there already publicly available parking within walking distance?
- Does the proposed parking comply with the maximum rates of provision?
- Is the proposed parking to made available for public use?
- Can the parking be adapted to allow for other land uses?
- Will the car parking have an adverse impact on the urban realm?

3.2 STATUTORY IMPLEMENTATION - SCHEDULE TO THE PARKING OVERLAY

PN57 has specific controls that can be included in a Schedule to the Parking Overlay. Those relevant to Arden are explored here.

Financial Contributions

Mandating financial contributions to fund the construction of parking, even if in an off-site location, is not in keeping with the sustainability goals of the precinct, where development should be able to be provided without car parking.

Further, and more fundamentally, financial contributions cannot be sought where maximum parking rates apply,

Requirements for a Parking Plan

While this Precinct Parking Plan sets the overall strategy and controls for the precinct as a whole, it will not have regard all the possible circumstances that may be faced when trying to implement the strategy at individual car parks.

For Arden, as permit applications for on-site car parking will be determined with weight given to whether parking is made available for shared use and the extent to which the parking is unbundled from the land use.

This creates a requirement for a car parking plan to be prepared for individual sites that have shared or unbundled parking, do demonstrate how this will be secured and implemented as intended.

This requirement is in addition to all the typical requirements for a car parking plan that are set out in Planning Scheme Clause 52.06-8.

Design Standards for Car Parking

Additional design standards for how a car park should be set out geometrically are specified in this part of the Parking Overlay.

In this instance, the Parking Overlay for Arden specifies the following:

- Parking for people with disabilities, loading vehicles and car share to be located in the most convenient places
- Parking rates for people with disabilities, car share, electric vehicles and bicycle parking are to be provided as set out in this report
- Car parking and building security arrangements are to enable 24 access for shared parking purposes
- Ensuring access to car parks is taken from roads on the Primary Vehicle Access Plan for the Arden Precinct.

These design standards are consistent with the premise of consolidated parking and other Movement and Parking Principles established in this report.

Additional design standards are set out in other precinct planning controls and are separate to the parking overlay. The intent of these standards is to provide a guide as to how external design should apply to parking to minimise its impact on the public realm, such as sleeving parking structures and limitations on ground floor car parking.

3.2 STATUTORY IMPLEMENTATION – ALIGNMENT OF OVERLAY PROVISIONS WITH MOVEMENT & PARKING PRINCIPLES

The provisions in the Schedule to the Parking Overlay are consistent with the Movement & Parking Principles that guide this study. The 8 principles are provided here for reference.

The parking overlay provision must align with the principles of movement and parking outlined in this precinct parking plan that were developed to ensure alignment with the Arden Vision.

Importantly, the provisions do not need to deliver on every one of the principles, but should at minimum, not violate or prejudge the delivery of parking in a way that conflicts with the principles.

Principles

1. Design a movement network to prioritise active transport over private vehicle movements
2. Minimise the impact of car parking and associated vehicular movements in Arden
3. Use car and bicycle parking to rebalance modal priorities in favour of active travel
4. People using cars should pay for parking
5. Prioritise the parking needs of different land uses
6. Protecting amenity and the environment
7. Support the Arden economy
8. Plan for the future

Table 3.1: A summary of the alignment of overlay provisions to movement and parking principles

Clause	Alignment with Movement and Parking Principles?								Comment
	1	2	3	4	5	6	7	8	
1.0 Parking objectives to be achieved	✓	✓	✓		✓	✓		✓	**The objectives should encompass all 8 Movement and Parking Principles Suggest adding objectives on unbundled parking (Principle 4) and enabling last kilometre servicing (Principle 7)**
2.0 Permit requirement to exceed parking rates specified in Clause 3		✓	✓		✓			✓	N/A
3.0 Number of car parking spaces required (zero parking only)		✓	✓		✓			✓	Parking is limited to zero on-site provision outside of permitted land uses

3.2 STATUTORY IMPLEMENTATION – ALIGNMENT OF OVERLAY PROVISIONS WITH MOVEMENT & PARKING PRINCIPLES

The provisions in the Schedule to the Parking Overlay are consistent with the Movement & Parking Principles that guide this study. The 8 principles are provided here for reference.

Table 3.1: A summary of the alignment of overlay provisions to movement and parking principles

Clause	Alignment with Movement and Parking Principles?								Comment
	1	2	3	4	5	6	7	8	
4.0 Application requirements and decision guidelines for permit applications	✓	✓	✓	✓	✓	✓	✓	✓	Requires any on-site parking to be minimised through a series of decision guidelines to protect the primacy of consolidated car parks. Where parking is needed, this process is designed to best align the outcome with all 8 Movement and Parking Principles.
5.0 Financial contribution requirement	Not required – (None specified).								Mandated financial contributions to provide parking elsewhere in the precinct would violate the principle of being able to provide no parking.
6.0 Requirements for a car parking plan		✓		✓					A parking plan is required to show how shared and unbundled parking will be managed.
7.0 Design standards for car parking	✓	✓		✓	✓	✓	✓	✓	Minimise intrusion of car park vehicle accesses on the public realm and reduce modal conflict, and support access for loading vehicles. Prioritise parking for key or vulnerable users Ensure access to car parks for all users to enable shared parking.
8.0 Decision guidelines for car parking plans	✓	✓	✓			✓		✓	Considerations to result in a safe, adaptable car park that has minimal impact on the urban realm within Arden.

3.3 OTHER IMPLEMENTATION MECHANISMS

Arden will be supported by on-street parking that will allow for pick-up and drop-off, deliveries, other loading needs and access for vulnerable user groups.

On-Street Parking

On-Street Parking Controls

All on-street parking used by general vehicles should be time-restricted paid parking, with limits generally no more than 30-minutes.

The paid parking system should generally align with the wider municipality, unless the precinct is used for a testbed for new paradigms such smart parking and demand responsive pricing.

Replacing Existing On-Street Parking Spaces

Section 2 of this report indicates that some on-street parking is likely to be removed to make way for widened footways, a reduced number of vehicle lanes and high capacity public transport corridors. Many of the people parking on-street in these existing location will be existing permitholders.

Removal of these on-street parking spaces should result in at least the same number of current parking permitholders being able to park either on-street or within a consolidated car parking facility. Parking permits will need to be reissued to suit, and the parking supply will need to be maintained in a convenient location for existing permitholders as the precinct is redeveloped.

Changes to parking entitlements must occur in consultation with the affected permit holders and should be done prior to any removal of permit parking.

Loading Vehicles

As set out in Part 2 Section 4.2, there will be a need for approximately 100 loading vehicle spaces across the precinct. Loading zones should be located at the end of an on-street parking lane, with the number of loading spaces corresponding to land use intensity.

Ride Hailing Services

It is difficult to quantify specific rate of demand; however, rather than dedicate specific on-street parking for taxi's or ride hailing, the length of kerb between the last parking space on the block and the street corner can be designated as a ride hailing zone. This is unlikely to be problematic given the short duration of this parking.

Train Station Parking

Train station parking needs are anticipated to be limited to street-level private car and ride hailing pick-up and drop-off. Given the location of Arden Station within the planned street network and likely locations where on-street parking could be provided, this type of parking could be provided along Laurens Street or along Queensbury Street.

3.4 OTHER IMPLEMENTATION MECHANISMS

Arden will be supported by on-street parking that will allow for pick-up and drop-off, deliveries, other loading needs and access for vulnerable user groups.

Parking for People with Disabilities

Parking for people with disabilities should be provided in accordance with the National Construction Code / Building Code of Australia as a minimum to comply with Disability Discrimination Act (DDA) requirements. This results in a parking provision of around 1-2% specifically for people with disabilities.

In Victoria, approximately 320,000 people with disabilities need a parking permit. Given there are approximately 4,000,000 issued drivers licences in Victoria, the number of permits for people with disabilities is approximately 8% of all drivers.

It is noted that Planning Scheme Amendment C309 (West Melbourne) required 5% of all parking to be provided for use by people with disabilities.

Providing 5% of all parking spaces for people with disabilities would elevate Arden to the top of precincts that more equitably provide for these users.

Heightening awareness of the availability of parking permits for this user group will lead to greater uptake and the need for further parking provision.

If more parking is needed beyond 5% of total provision, these can be easily retrofitted into the existing parking supply by converting a group of 3 standard car spaces into 2 DDA compliant parking spaces and a central shared area, set out in accordance with AS 2890.6

Other Types of Car Parking

A principles-based approach has been adopted in the evidence base as a guide to demand for other types of parking.

Electric Vehicles – It is recommended that all off-street parking is capable of being retrofitted for electric vehicle charging. This ensures resilience in building design that accommodates a wide range of future outcomes on how we will power cars in future. Locking in a narrow range of outcomes is not recommended.

Initially, 5% of all off-street parking should be provided with electric vehicle charging equipment. This can be revised through the monitoring and review of the precinct parking plan.

Car Share – At least 5% of off-street parking should be set aside for use by registered car share vehicles. This is similar to (slightly higher than) the rate adopted in Planning Scheme Amendment C376: Sustainable Building Design (4%).

Further information is provided in Part 2: Section 5.2 of this report

Bicycle Parking

The Austroads National Cycling Participation Survey (2019) identified that that approximately 60% of Victorian households own a bicycle.

Of these, in Victoria:

- 23.5% of households own 3+ bicycles
- 17.5% of households own 2 bicycles
- 20% of households own 1 bicycle

These rates imply a state-wide average of 1.26 bicycles per household. It is noted that this average rate includes areas of both poor and excellent cycling connectivity. Notionally, the areas with better cycling infrastructure will have higher rates of bicycle ownership, such as that planned for Arden.

This implies a much greater rate of bicycle ownership than would be implied by typical travel to work characteristics, or Planning Scheme Clause 52.34 requirements.

Enabling 90% non-car travel means focusing energies on all non-car modes of travel. The sustainable travel design response in Arden needs to be well above state averages to ensure vehicle use that is well below state averages.

It is recommended that, at a minimum, bicycle parking is provided in accordance with detailed demand studies completed for City of Melbourne. The recommended rates are:

Table 2.1 Bicycle Parking minimum rates

Land Uses	Employee/Resident	Visitor/Customer
Residential	1 per bedroom	2 per 5 dwellings
Commercial	1 to each 100sqm NFA	4 minimum, plus 1 to each 100sqm NFA

Source: Phillip Boyle & Associates, Off-street Bicycle & Motorcycle Parking Review, March 2016.

Motorcycle Parking

The same detailed study recommends 1 motorcycle parking space per 40 car spaces. This is adopted for Arden to ensure adequate off-street parking provision with a view to removing on-street clutter caused by motorcycle parking, and to ensure expected growth in demand is met with adequate supply (noting this is currently 1% of travel demand in the Melbourne CBD).

3.5 APPROPRIATENESS OF THE STRATEGY & ITS ONGOING SUCCESS

The strategy set out in this Parking Precinct Plan and the Parking Overlay are an appropriate way of handling parking for the Arden Precinct. It is recommended the strategy and overlay are reviewed every 5 years to ensure its ongoing success.

Appropriateness of the Strategy

The proposed strategies in this Precinct Parking Plan are considered to be appropriate.

The adoption of the strategy, in preference of no on-site parking, does not mean that car parking will not be generated by the precinct. The strategy sets out measures to control the amount and design of car parking, which will be control by planning policy. The strategy also sets out on-the-ground management measures that will be implemented by the responsible authority.

Policy Measures (amount and design of parking)

The following measures will be implemented through Schedule 14 to the Parking Overlay (Clause 45.09):

- On-site car parking within the area will be constrained by way of parking maximums. The Precinct will be well served by alternate transport options which will naturally promote the use of walking, cycling and public transport modes of travel. This will result in a reliance on alternate travel modes for people accessing the site.
- The objective of consolidating precinct car parking in an effort to minimise overall car parking provision is clearly set out in the Schedule, providing certainty on how car parking will be treated within the precinct.
- The strategy includes management measures to decouple car parking from the land use it serves, to promote shared parking facilities and ensure that people who drive pay for their parking.
- This Precinct Parking Plan sets out exemplary rates of parking provision for bicycles, motorcycles, electric vehicles, car share and people with disabilities. These will be implemented through the parking overlay.
- The design standards set out in the car parking overlay will minimise the obstructiveness of car parking on the urban realm and provide for an expected change towards electric vehicles over the lifetime of the Arden Structure Plan (to 2051).

Ongoing Parking Management measures

The following measures will be implemented and enforced by the responsible authority to control the use of parking within the precinct:

- Parking in the area will be subject to parking permit restrictions for residents and businesses, where necessary
- On-street parking will be primarily for short-term use by loading vehicles, visitors and other pick-up/drop-off use.
- Time restrictions will be implemented as appropriate
- All publicly available parking will be paid parking, with cost escalation relative to the duration of stay
- Where on-street parking is available in surrounding areas, some increase in demand may occur; however, this could be controlled by a parking permit system for these streets.

Monitoring and Review

A Precinct Parking Plan is a living document that should be monitored and reviewed to ensure its aims and objectives continue to be met.

PN57 notes the following, in this regard:

"The characteristics of a precinct often change over time, affecting local parking conditions. It is important that the Parking Overlay is regularly monitored and reviewed to ensure it continues to reflect the precinct's actual parking requirements, and is consistent with future plans for the precinct.

It is recommended that any Schedules to the Parking Overlay are reviewed concurrently with the council's Municipal Strategic Statement to ensure the specified car parking rates still reflect the car parking demand for each land use"

Accordingly, it is recommended that this Precinct Parking Plan and the associated Schedule to the Parking Overlay are reviewed and updated as required every 5 years over the lifetime of the Arden Structure Plan.

[1] Arden Retail Demand - Deep End Services, Dec 2018