

West Melbourne Parking Analysis



City of Melbourne
Draft Report

17 February 2017

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Executive Summary

This report has been requested by the City of Melbourne to identify high level key findings and recommendations from the West Melbourne Parking Management Analysis that was completed in December 2016.

It is important to note that the parking management analysis project focussed on the collection of data and has not comprehensively interrogated the data. The findings in this report must therefore be considered preliminary and indicative rather than final. The project reported:

- The supply of parking bays provided by the City of Melbourne
- The management of that supply
- The scale of the supply in each street

This overview is derived from samples of data provided in Appendix A. More thorough analysis of the data would provide a more nuanced understanding. Broadly, analysis of the data shows that:

- There are around 3,300 on-street parking spaces in West Melbourne. This is just under half the total as there are 3,400 off-street parking spaces in the precinct.
- There are many more on-street parking spaces in West Melbourne than in similar sized areas of Carlton or the CBD. As land uses change, there will be less demand for parking during weekdays and increased demand for some bitumen to be converted to grass (like local road medians in Carlton)
- There are two broad parking management ‘settings’ that typically apply to on-street parking in West Melbourne (noting that on-street is only 49% of the supply)
 - On weekdays and Saturdays, most of the bays (70 – 80%) are managed to support short-term visitation to the precinct. Around 30% of these bays are metered (fees apply). The balance of around 500 bays are set aside for all day storage. Around 85% of these are metered.
 - On Sundays, the broad setting is the opposite: most of the bays are set aside for storage. Around 500 bays are designated for short-term visits (under 4 hours). Both the storage and parking bays are typically provided at no charge.
- Around 1,200 spaces are currently provided for long-term storage of vehicles with a resident permit. Most of these spaces have a dual use, supporting short-term visitation to the precinct during weekdays.
- Changes to the weekday management settings would enable more visitors to use the same number of spaces.
- The Sunday management settings reflect historical character of the precinct attracting few visitors on Sundays. These settings could be reviewed considering impacts from Docklands Stadium and evolving land use changes.
- To cope with growing activity in the precinct, there will be a need to consider a broader range of parking management practices and tools.

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1. Introduction

The West Melbourne precinct is adjacent to the CBD and suburban North Melbourne but, during the last one hundred and fifty years, its transport character has reflected the needs of industry and transport uses clustering around the abutting national rail freight depots and lines. As recently as 2010, there were more employees (11,360) in 'West Melbourne' (an area slightly larger than the study area) than residents (3,900).

The small population of West Melbourne has attracted few providers of day-to-day needs or regional services. To meet these needs, people in the precinct rely on connectivity to surrounding areas (including neighbouring municipalities).

The residents of the area enjoy housing of a similar heritage character to other areas of the municipality such as East Melbourne and Carlton. Unlike the leafy streets and grassy medians of these other suburbs, the West Melbourne houses sit in a context of wide roads, crossovers for large trucks and asphalted central medians.

The use of the non-residential land in the precinct has begun to change. Some of the industrial and commercial land uses are now obsolete and buildings are lying vacant or being developed. In 2010, there was more vacant space (150,706 m²) than occupied office space (147,487 m²).

The population has grown from 3,923 in 2011 to the current total of 5,240. The City of Melbourne expects the population to triple to 16,696 by 2036. Across the municipality, the motorisation rate is currently 31 vehicles to each 100 people. This suggests that there are 1,600 vehicles based in the suburb today and that the number could rise to over 5,000 by 2036. That number of cars would occupy around 15 ha of land and building floor-space.

Inside the precinct, motor vehicle traffic – especially through traffic – is dominant. The wide local roads and intersections have been laid out to facilitate motor vehicle access to the historically dominant industrial land use. These priority settings have negative impacts on the overall network operation, causing rat-running, delay on arterial roads and increased risk for all road users. However, congestion levels are most likely to have eased over the last decade as transport intensive land uses have ceased operating in the precinct.

Residential population growth is going to bring a range of pressures to the area. One of these will be increasing demands for space in the public realm. Future residents who are walking will create pressure for wider footpaths, while future residents driving will increase local congestion and reduce mode share.

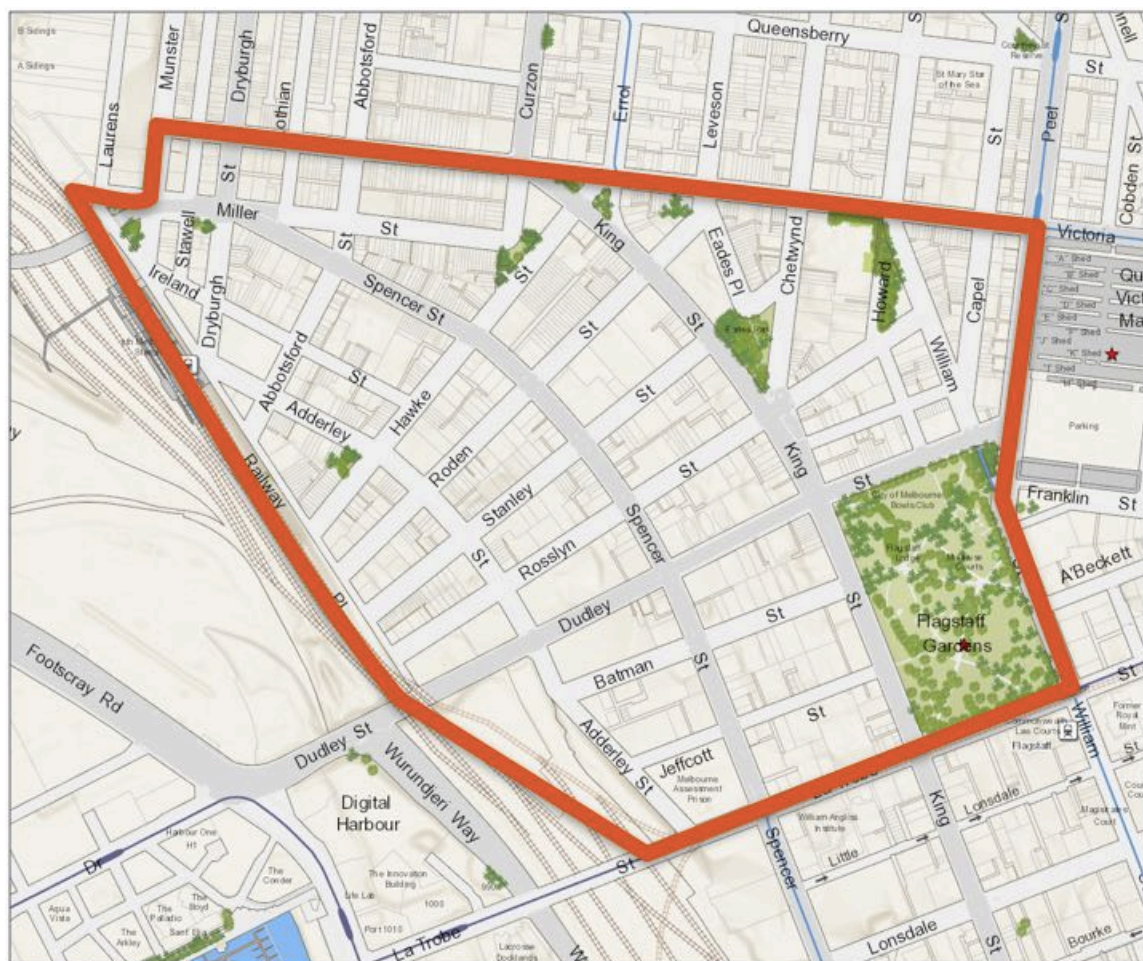
In this context of change, the City of Melbourne is developing a structure plan to shape an appropriate future for West Melbourne. This report provides a baseline summary of the current parking supply and management controls to inform the structure plan development.

2. Supply

The project established the total length of kerb and total central median space in the precinct. Some lengths were removed from this total, including driveways at the kerb (where parking is not possible) as well as plantings and Keep Clear areas in the central medians.

The total length of 'available' kerb would allow a supply of 3,700 parking bays in the precinct as shown in ?? below. This total includes kerbside space that is not available for parking such as bus stops.

FIGURE 1: STUDY AREA



The total actual supply of car spaces for passenger vehicles and 'white vans' in the precinct is around 3,300 spaces. This includes spaces permanently set aside for taxis and car share vehicles (16) and residents (59-99) as well as spaces that are for some periods only available to some users, such as loading zones, or are generally available but for periods less than 15 minutes (174).

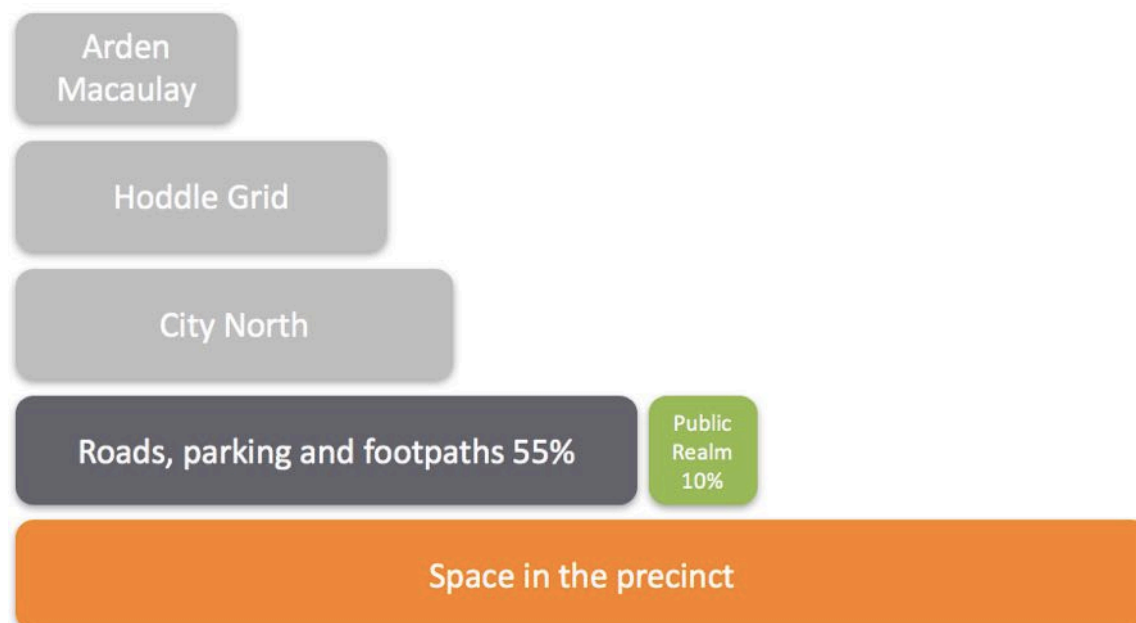
The total general supply rises and falls as controls come into force on weekday mornings and are switched off in the evenings or on Sundays. Loading zones for example reduce the supply during weekdays but are available for general use at other times.

- The general supply of parking bays in the roadway (and central medians) that have been set aside in the precinct – 3,295 spaces
- West Melbourne (the study precinct) also has at least 3,446 additional bays on private land including:

- Private spaces (those in a non-residential building for use by staff, customers or visitors). CLUE data records 1,571 spaces – half of which are at offices.
- Commercial spaces (often in temporary surface lots) managed by companies such as SecurePark and peer-to-peer aggregators such as Parkhound. CLUE data records 297 spaces. (Parkhound claims ‘1,066 cheap and secure car parks available for rent in central West Melbourne.’)¹.
- Residential spaces in apartments and on surface lots. The assessment of C133 found that since 2002 there has been 1,578 spaces approved in new dwellings in West Melbourne.
- Two other points are relevant:
 - The report did not consider the available supply outside the precinct. For example, the East Car Park at 90 Waterfront Way managed by CarePark has at least 600 unused spaces permanently locked off and is within one kilometre of much of the precinct.
 - The report did not compare in detail the scale of the total supply or the proportion of City of Melbourne bays with the supply in other areas. It is likely for example, that West Melbourne has ‘a lot of parking’ compared to other areas. There are probably fewer bays per hectare and per person in areas, such as East Melbourne or South Yarra, and that the proportion of bays provided on the roadway to the total supply is greater in those areas.
- On this basis, the discussion paper can say that the City manages around half the supply of car spaces within the precinct and that a significant number of other spaces are available for people who want to park and store cars in or near the precinct.

Overall there is a significant difference in how much public space is allocated to traffic lands and parking in West Melbourne when compared with other neighbourhoods in the City of Melbourne. This is illustrated in Figure 2 below.

FIGURE 2: PROPORTION OF PUBLIC SPACE USED FOR ROADS AND PARKING



Source: PBA analysis

Note: Light grey is the proportion of roads, parking and footpaths in other neighbourhoods. Dark grey is the proportion of roads, parking and footpaths in North Melbourne

¹ <https://www.parkhound.com.au/parking-west-melbourne-vic> February 2017

3. Management

The time controls reveal the consistent but unwritten parking management policies that are currently in place in the precinct.

Short-term use and vehicle storage

A small number of spaces are set aside for uses such as loading zones, taxis, car share and disability permit holders. The balance is managed as turnover parking and storage.

At noon Mondays to Saturdays 83% of the City of Melbourne spaces (roughly 2,500) are time controlled for 'turnover parking' (less than 4 hours). This reflects the typical control from 8am-5pm meaning that during the day at least two vehicles can use each space allowing at least 5,000 people to visit the precinct.

The balance – around 500 bays – are set aside for storage of a vehicle by one user per day. These spaces will be relevant to car owning residents who do not use their car on a weekday and employees who drive to work in or near the precinct.

The situation is reversed at noon on Sundays when 88% of the spaces are available for storage (more than 4 hours). This allows 2,500 people to leave a car in the precinct all day. This is one reason that people choose to park in the precinct when attending events at Docklands Stadium.

The management regime has responded to increasing competition for spaces by applying charges for some spaces.

On weekdays, around one third (30%) of the 2,500 turnover spaces require a fee. Most bays are free to use but limited by time controls supported by enforcement.

There are no formal occupancy measures in place so it is likely that the weekday turnover parking supply could be managed to 'work harder' either by:

- Increasing turnover in the existing spaces so that more people can visit the precinct; or
- Reducing the number of spaces for turnover parking but making them 'work harder' to support the current level of use.

Monday to Saturday (roughly 8am-5pm) approximately 500 spaces (18% of the supply) are allocated for storage. Most are pay-for-use. 75 bays are free to use.

On Sunday the settings are switched so that 84% of the supply provides for vehicle storage. Only 27% of this allocation requires a fee. Turnover parking supply is reduced to around 500 spaces. Only 10% (45 spaces) of these require a fee.

Residents

The City runs a residential permit system in West Melbourne. The project did not investigate the number of permits that have been issued, the number of vehicles per household or the operation of the permit scheme in the precinct. The parking survey was focussed on identifying the number and location of parking spaces that can be used by residential permit holders.

The permit system has two purposes:

- To enable residents to store a vehicle on-street within a designated area. The City has designated some bays to be 'permit exempted'. This means that the controls over time or payment that apply generally are waived for the holders of a permit. 'Permit exempted' is an efficiency measure based on the assumption that some permit holders will take their vehicle out of the precinct during the day, allowing others to use the space in their absence.

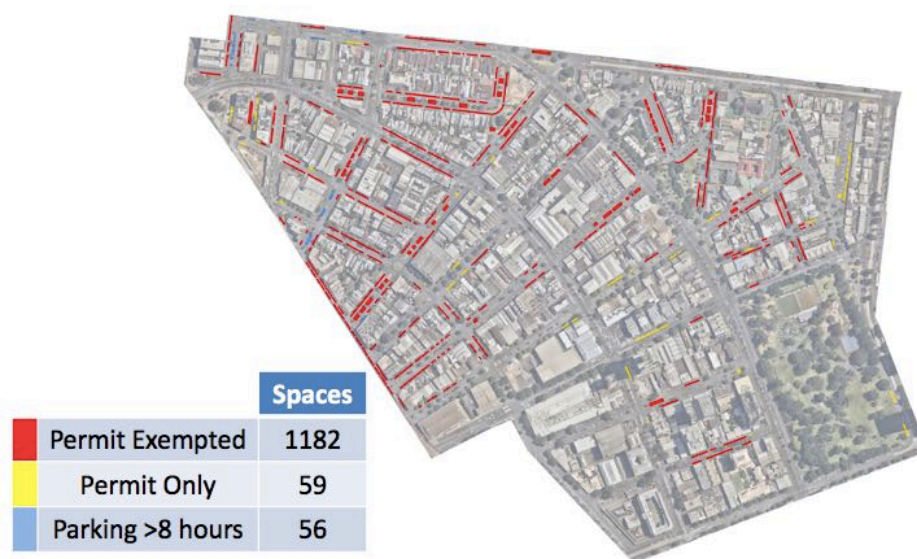
- To prevent (or deter) people who move into new dwellings from storing vehicles on-street.

The project found that in the precinct there are:

- 56 spaces where a non-permitted vehicle could be stored for an indefinite period of time
- 59 permit-only spaces at midday on weekdays
- 1,182 parking bays available to permitted vehicles at midday on weekdays

This is reflected across the area as shown in Figure 3 below.

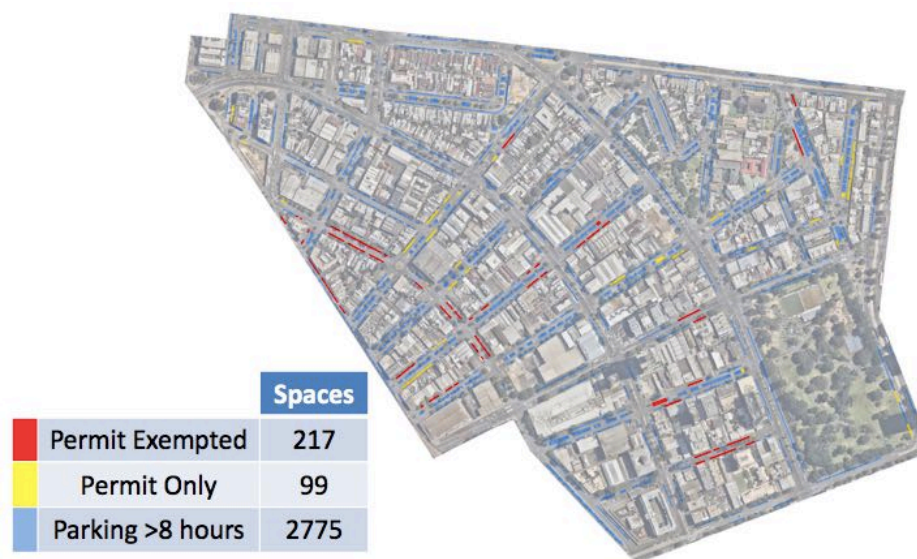
FIGURE 3: PARKING CONTROLS AT NOON



Source: PBA analysis of the Kerbside Operational Management Model

In the evenings the purpose of many spaces changes to that of car storage overnight. This is reflected in the parking controls across the area as shown in Figure 4 below.

FIGURE 4: PARKING CONTROLS AT 10PM



Source: PBA analysis of the Kerbside Operational Management Model

Currently the City is managing the permitted vehicles loosely, allowing them to occupy spaces that for others are only for the short term. This will be working well if most of the resident vehicles leave the precinct during the day. If the stay-at-home fleet is growing, then the number of short-term spaces will be reduced which could compromise activity in the precinct.

It will be necessary to manage the parking system more closely as the resident and visitor population in the precinct grows. On this basis, the discussion paper can say that:

- Around 1,200 spaces have been set aside for long-term storage of vehicles that carry a resident permit
- Most of these spaces have a dual use, supporting short-term visitation to the precinct.
- It is likely that a more closely managed system will be needed in the near future to cope with the growing activity in the precinct.

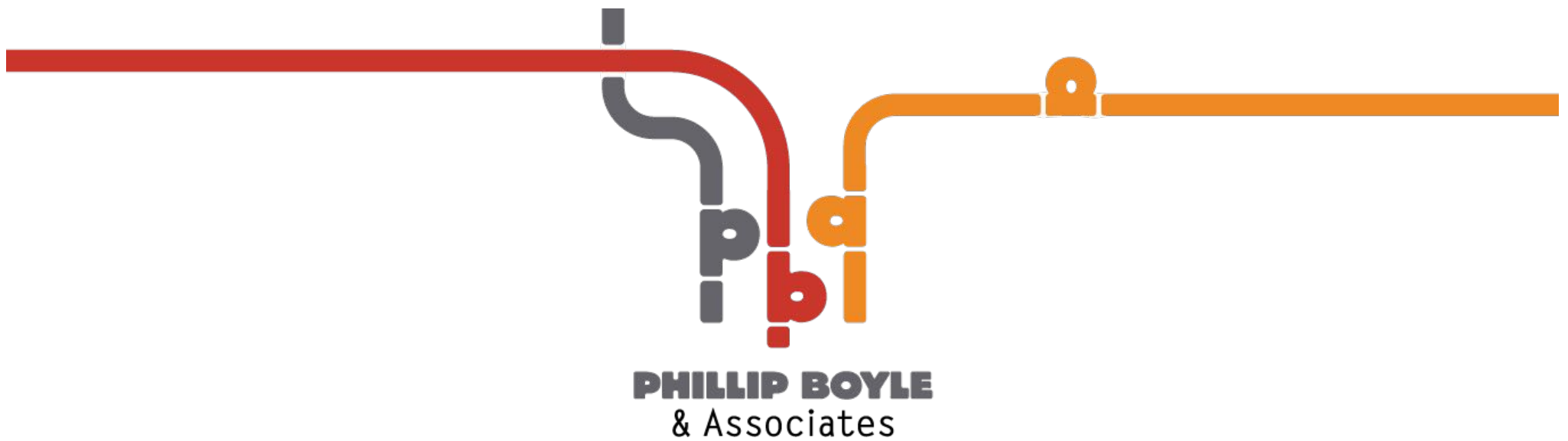
4. Conclusion

This report considers the supply and management of on-street parking in West Melbourne. Analysis found that the off-street parking supply is greater than the on-street supply. It also found that parking controls vary significantly across the area and include long-term and short-term parking, or permit parking allocated to various user groups. Some areas require a fee to be paid some of the time. Though most are free to park in all of the time.

The amount of parking within the area will have a direct impact on the amount of local congestion occurs in future. With significant population growth forecast for the area, traffic congestion could increase significantly if the growth in population is matched with a growth in car ownership.

There seems to be significant scope to review parking controls which currently favour employees (often working outside the suburb), loading and access to industrial premises.

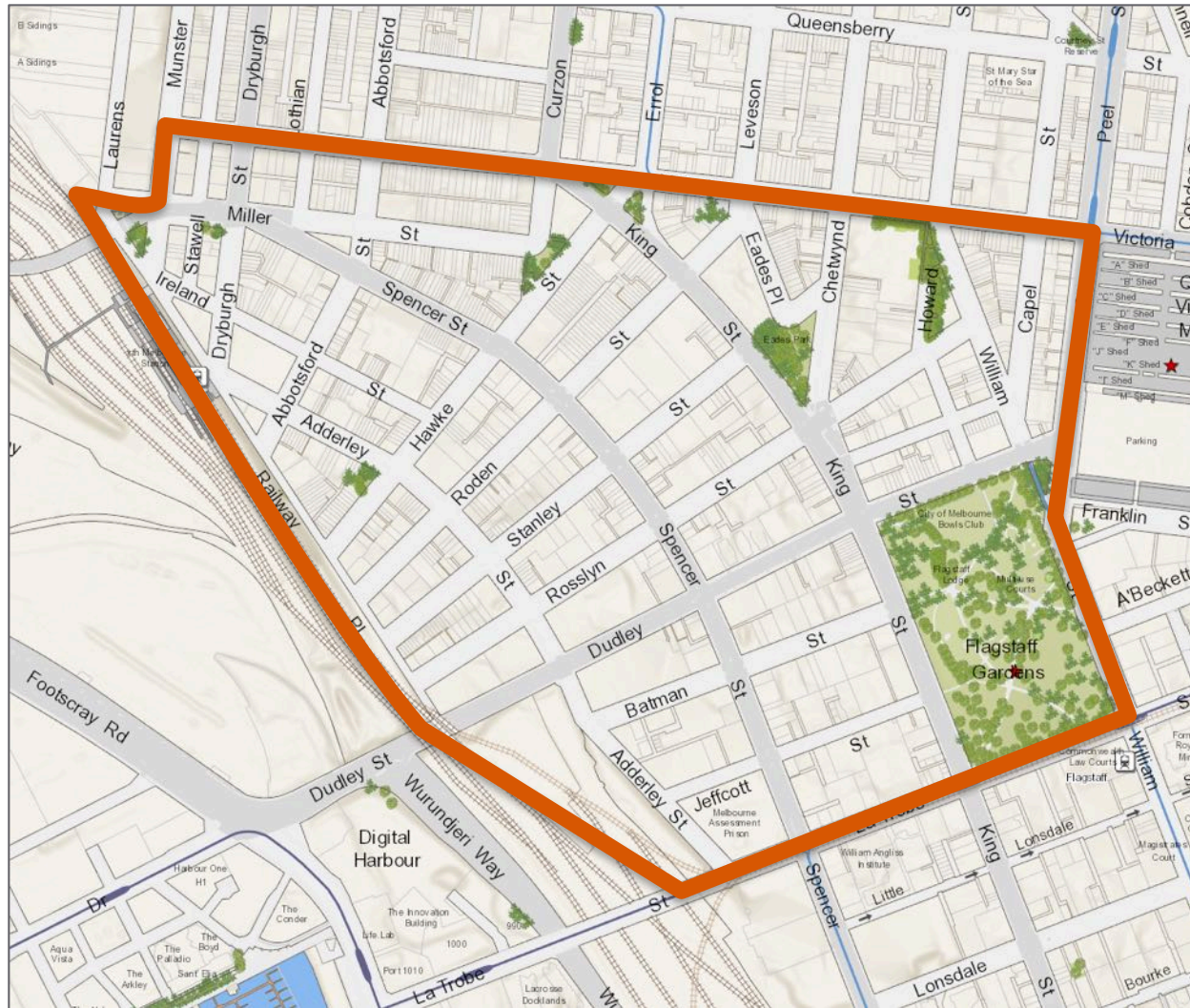
Appendix A: Summary of key geographic information



West Melbourne Parking Management Analysis

City of Melbourne
20 December 2016

West Melbourne has 3,700 on-street car parking spaces immediately north of the CBD



Source: City of Melbourne (maps website)

PBA were asked to analyse the operational management

PBA have developed a Kerbside Operations Management Model (KOMM) to assist with analysis of kerbside parking controls

To use KOMM for this project we:

- Collected data from each street (1,300 parking control sign photos)
- Built KOMM by assigning parking control rules to groups of spaces as documented in field collection
- Utilised KOMM to analyse current parking management strategies

Road space design leads to wide ranging outcomes

Typical central median 200m

East Melbourne

Hotham Street

Planting

Keep
Clear

West Melbourne

Miller Street

Planting

Parking &
storage

Keep
Clear

Batman Street

Parking & storage

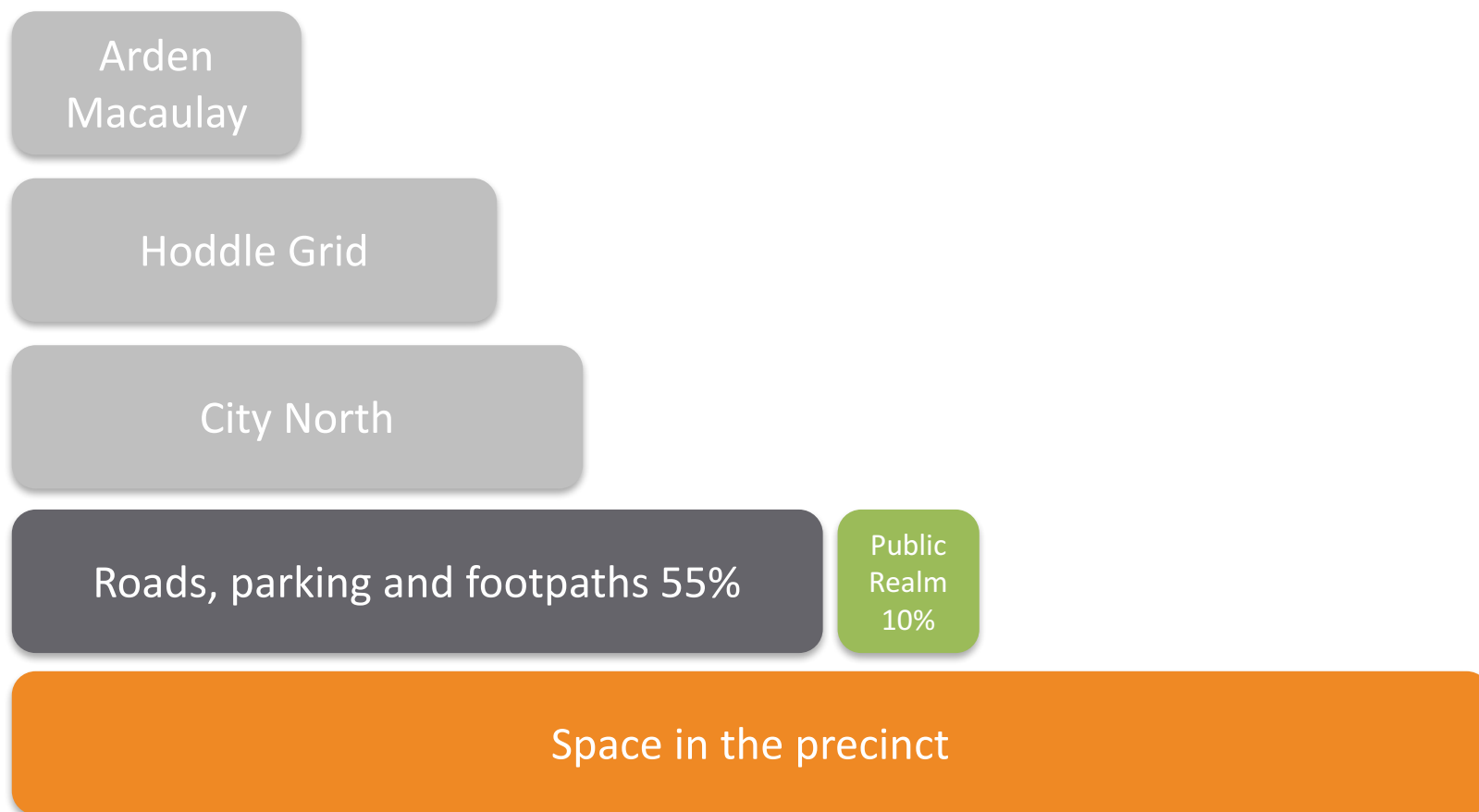
Keep Clear

Roden Street

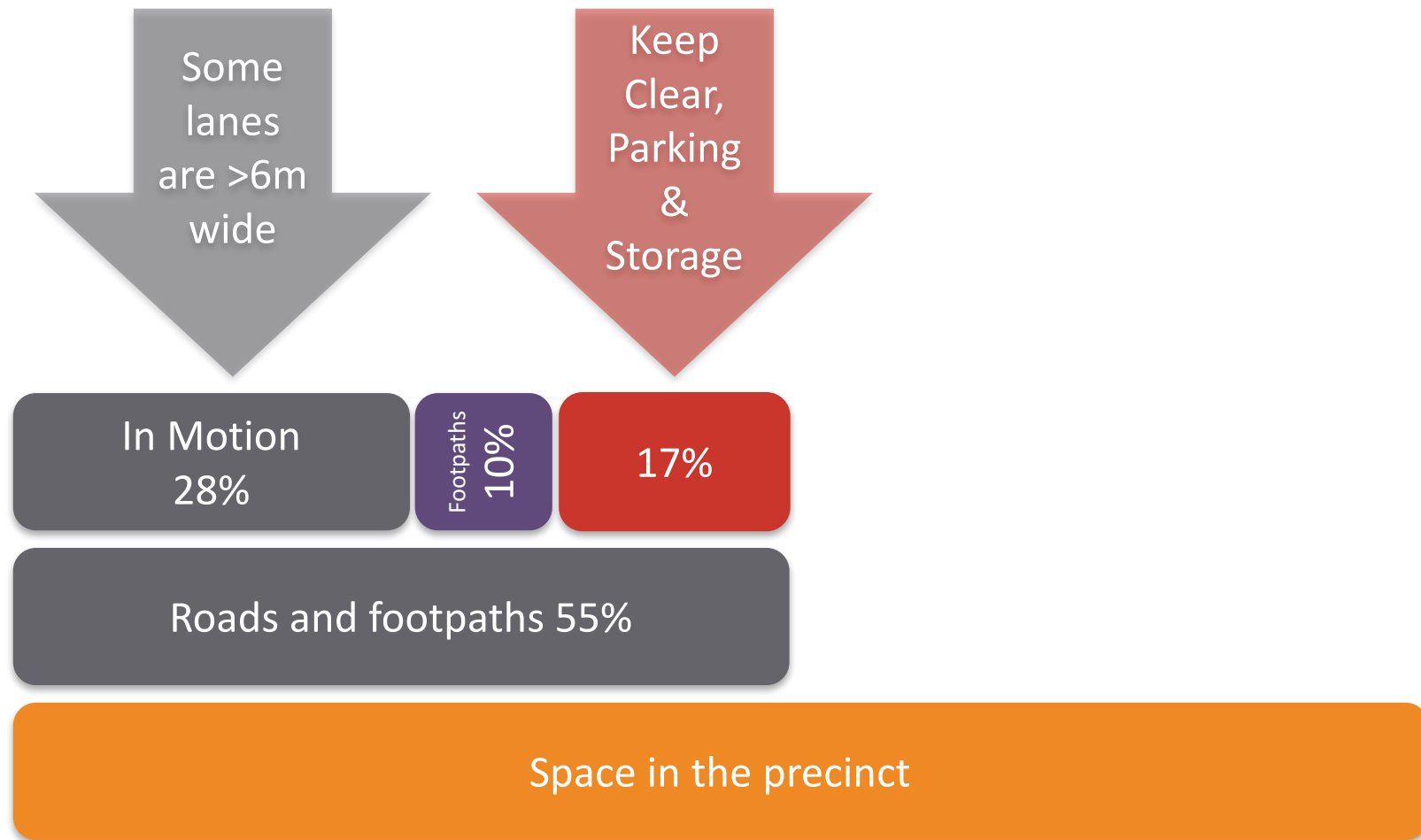
Parking & storage

Keep Clear

In West Melbourne roads use more space than in neighbouring precincts



The space currently allocated to transport needs to be understood



In order to understand improvement opportunities

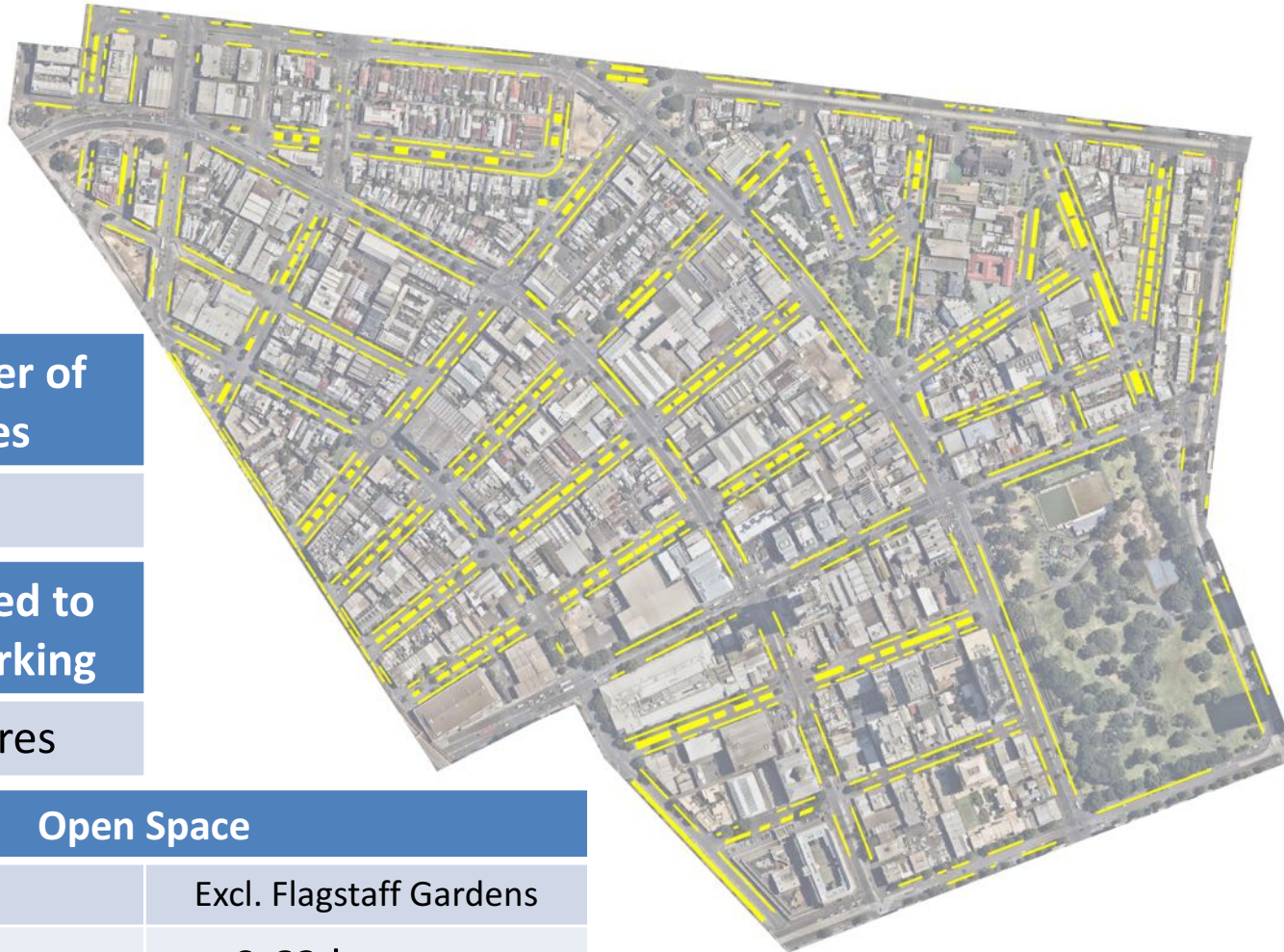
Roads & parking replaced by open space in North Melbourne



Findings from KOMM Analysis

WEST MELBOURNE: EXISTING PARKING SUPPLY

Total available space



Total Number of Car Spaces

3295

Area allocated to on-street Parking

5.47 hectares

Open Space

All Space

7.98 hectares

Excl. Flagstaff Gardens

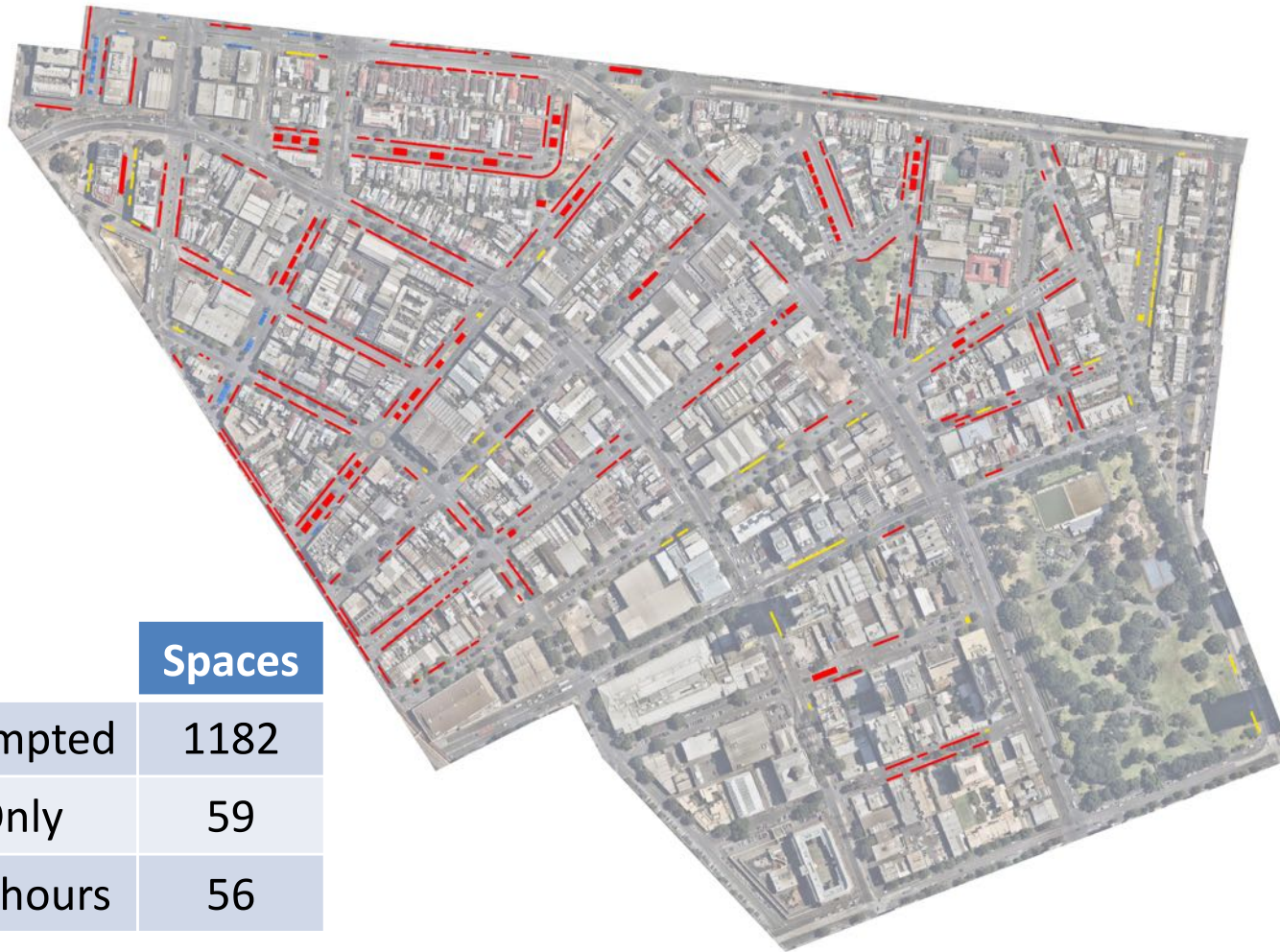
0.63 hectares

Note: The number of car spaces is approximate due to the design of some parking areas that do not have line marking. In these areas the number of potential spaces depends on the length of vehicles using the space and the distance between those vehicles.

How does Resident Permit Parking change throughout the day?

WEST MELBOURNE: EXISTING PARKING SUPPLY

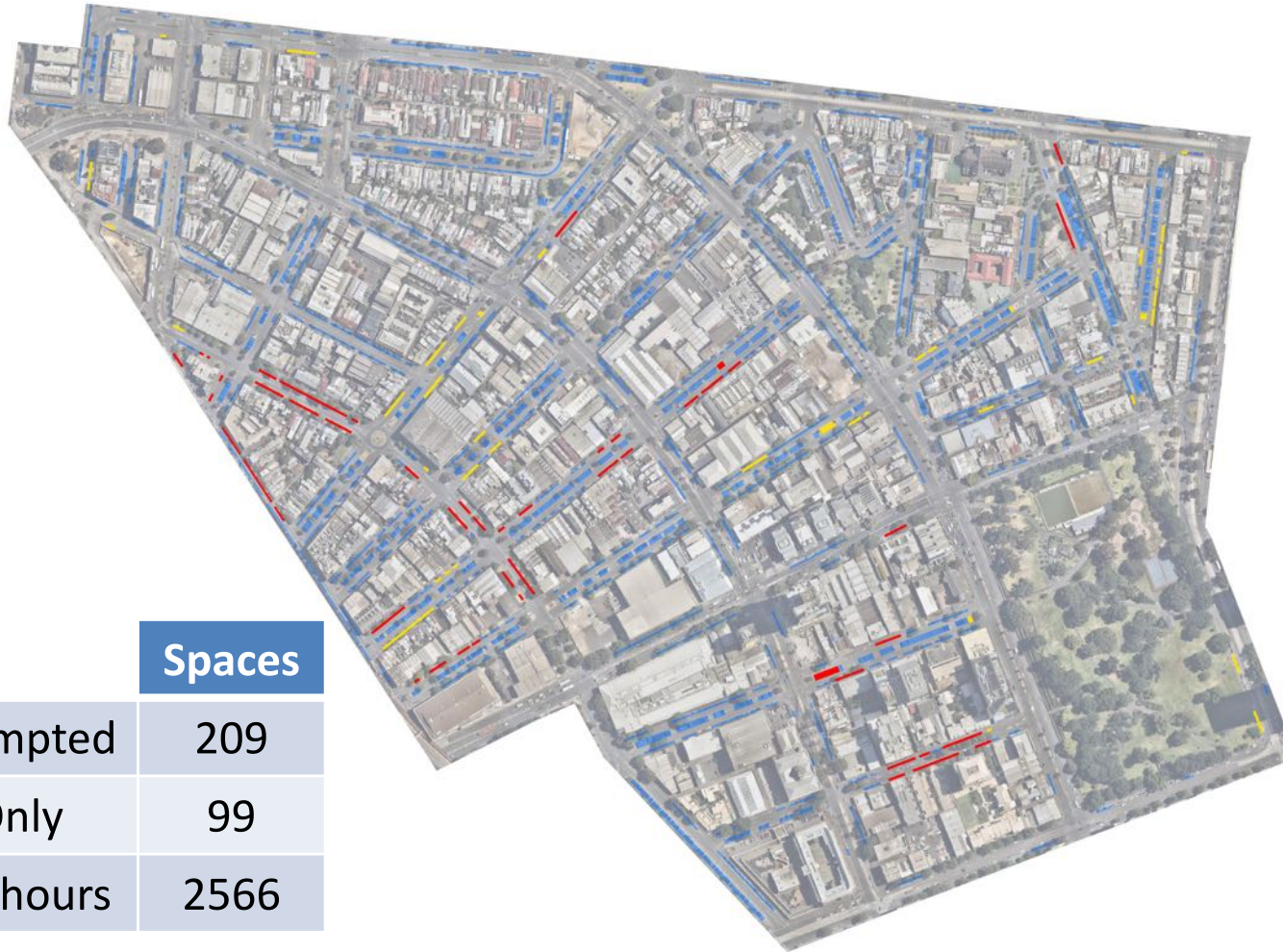
Total space allocated to residential storage permits Monday at Noon






	Spaces
Permit Exempted	1182
Permit Only	59
Parking >8 hours	56

Note: **Permit Exempted** includes space available for **both** casual parking as well as permit holders who are exempted from complying with the usual restrictions of that space.
Permit Only are those spaces available exclusively to residents.

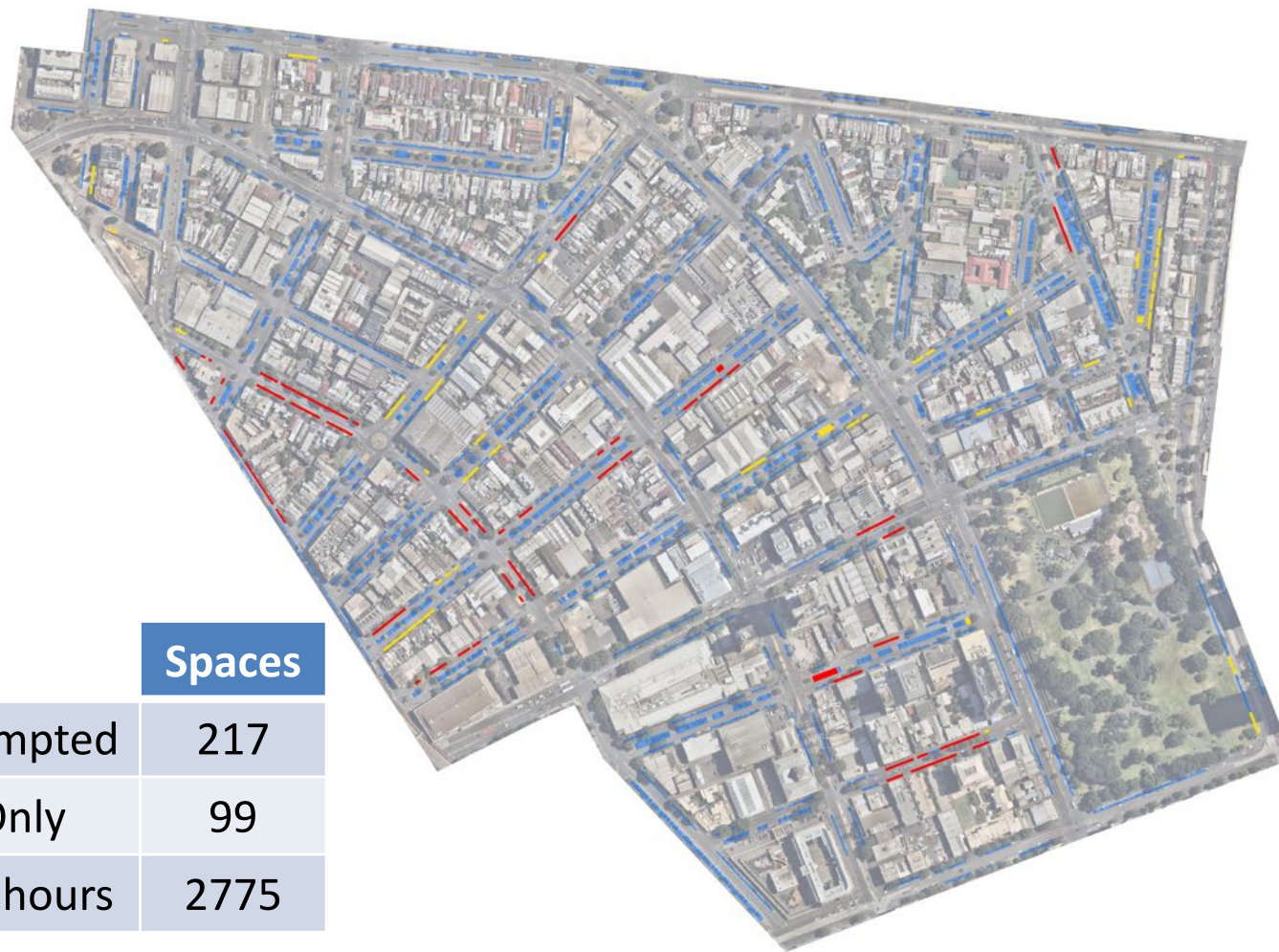
Total space allocated to residential storage permits Monday at 7:30pm






		Spaces
	Permit Exempted	209
	Permit Only	99
	Parking >8 hours	2566

Note: **Permit Exempted** includes space available for **both** casual parking as well as permit holders who are exempted from complying with the usual restrictions of that space.
Permit Only are those spaces available exclusively to residents.

Total space allocated to residential storage permits Monday at 10:00pm



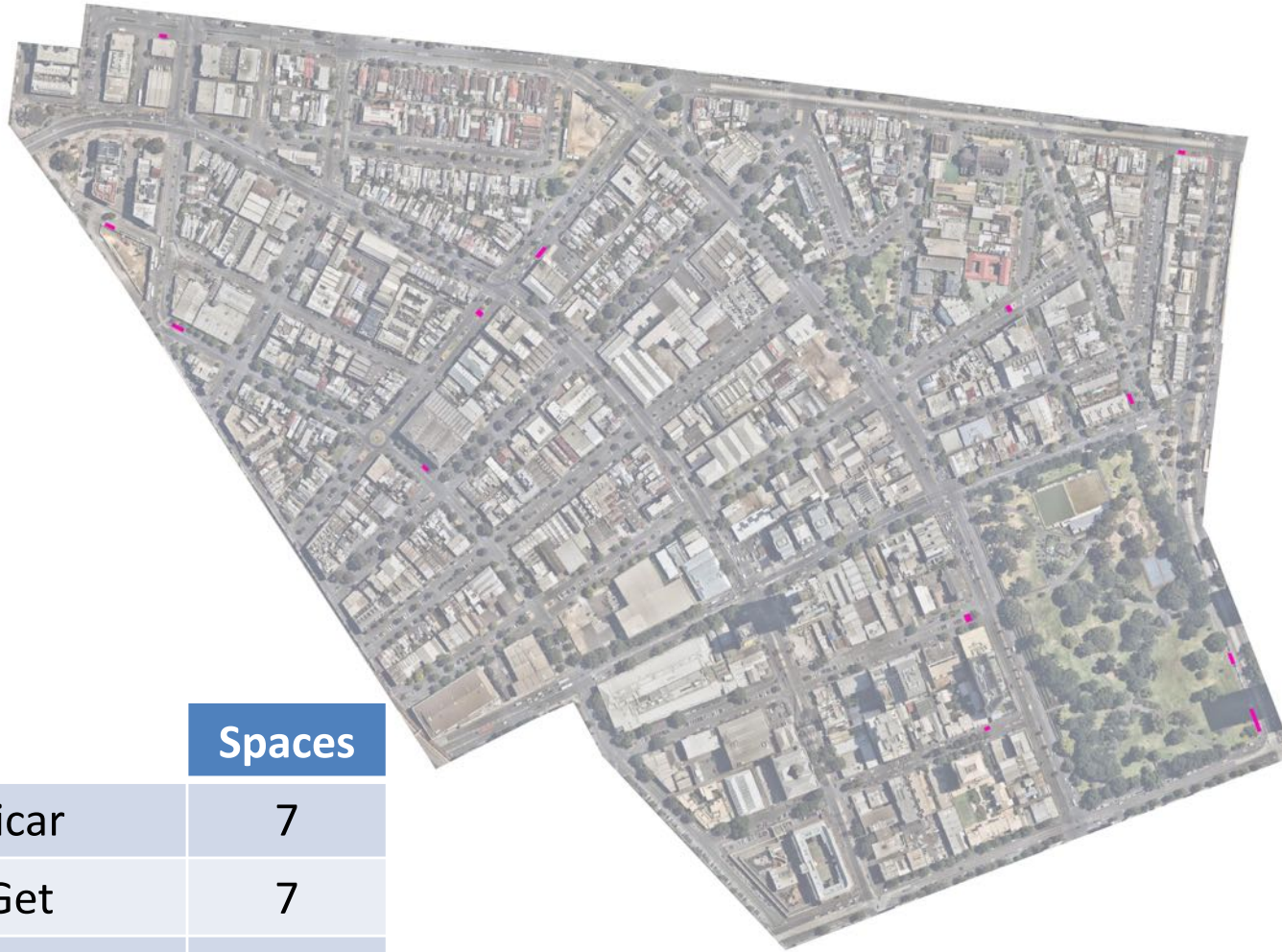
	Spaces
 Permit Exempted	217
 Permit Only	99
 Parking >8 hours	2775

Note: **Permit Exempted** includes space available for **both** casual parking as well as permit holders who are exempted from complying with the usual restrictions of that space.
Permit Only are those spaces available exclusively to residents.

How are Car Share spaces distributed throughout West Melbourne?

WEST MELBOURNE: EXISTING PARKING SUPPLY

Total space allocated to car share vehicles

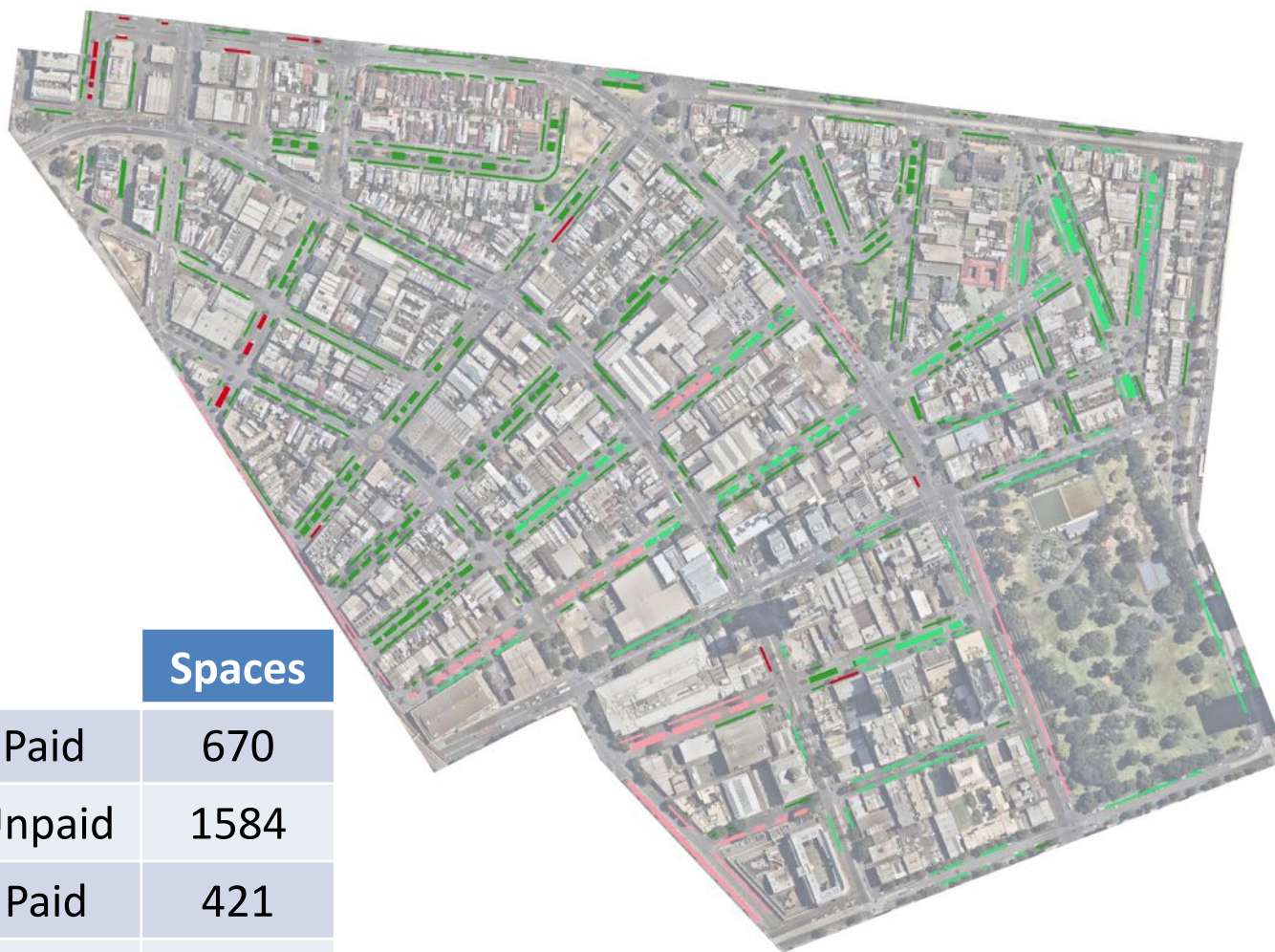






	Spaces
Flexicar	7
GoGet	7
Green Share Car	2

How are parking spaces distributed between “Storage” (greater than 4 hours) and “Parking” (4 hours or less)?

WEST MELBOURNE: EXISTING PARKING SUPPLY

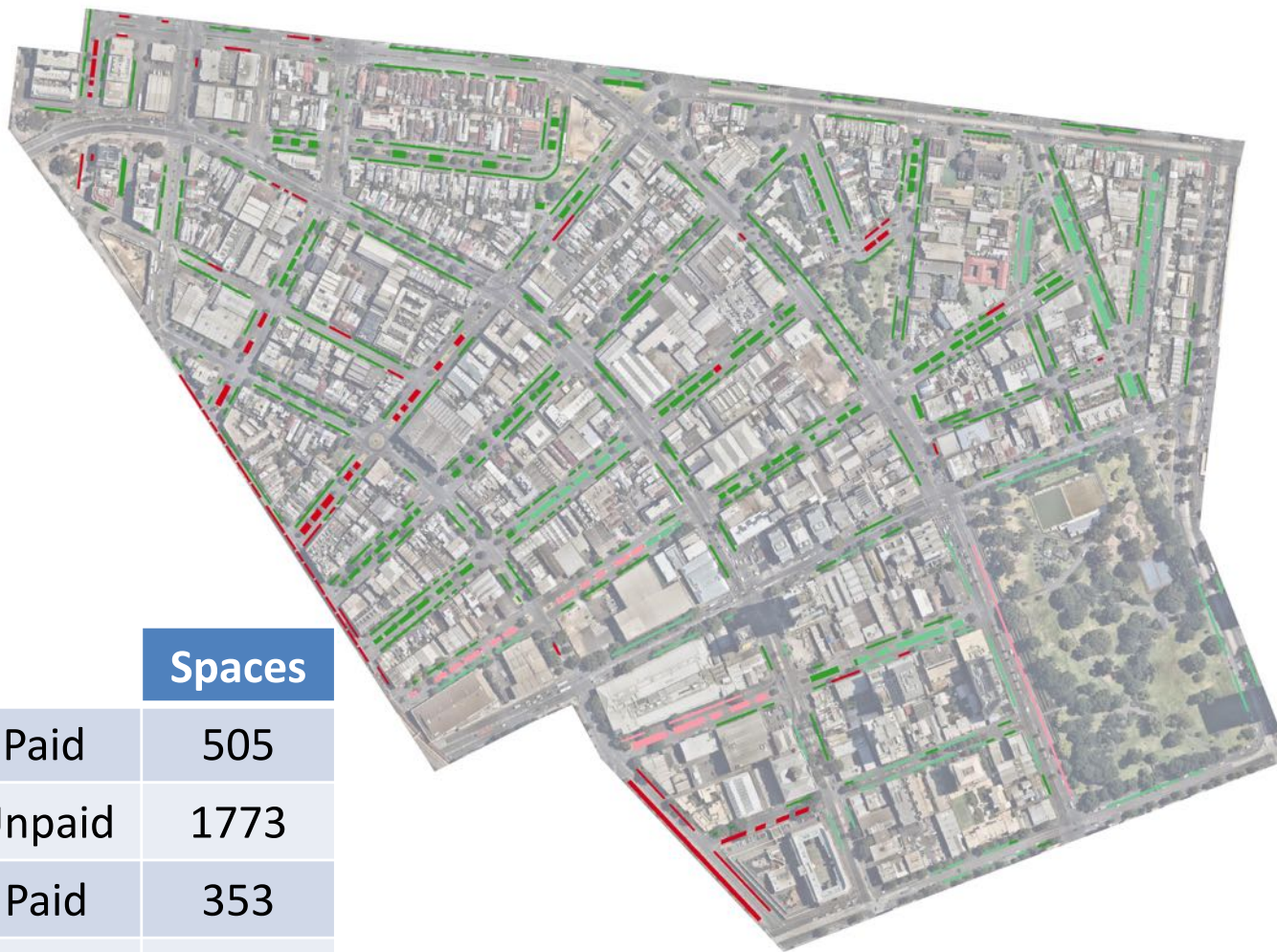
Available Parking (30 minutes or more) Monday at Noon







		Spaces
	Parking – Paid	670
	Parking – Unpaid	1584
	Storage – Paid	421
	Storage - Unpaid	75

Note: **Parking** is defined as a signed duration greater than 15 minutes, and less than or equal to 4 hours.
Storage is defined as a signed duration of greater than 4 hours.

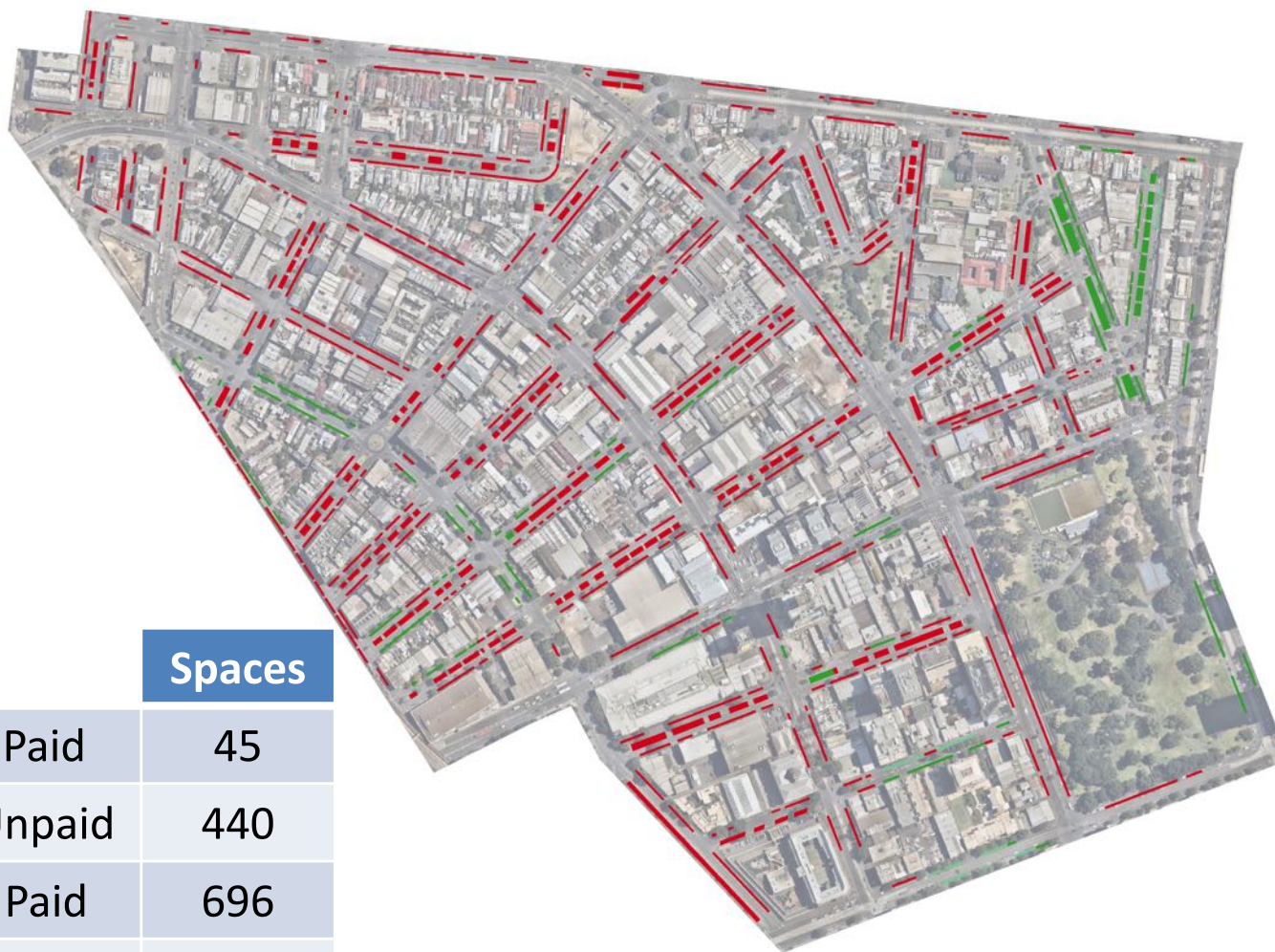
Available Parking (30 minutes or more) Saturday at Noon







	Spaces
 Parking – Paid	505
 Parking – Unpaid	1773
 Storage – Paid	353
 Storage - Unpaid	187

Note: **Parking** is defined as a signed duration greater than 15 minutes, and less than or equal to 4 hours.
Storage is defined as a signed duration of greater than 4 hours.

Available Parking (30 minutes or more) Sunday at Noon



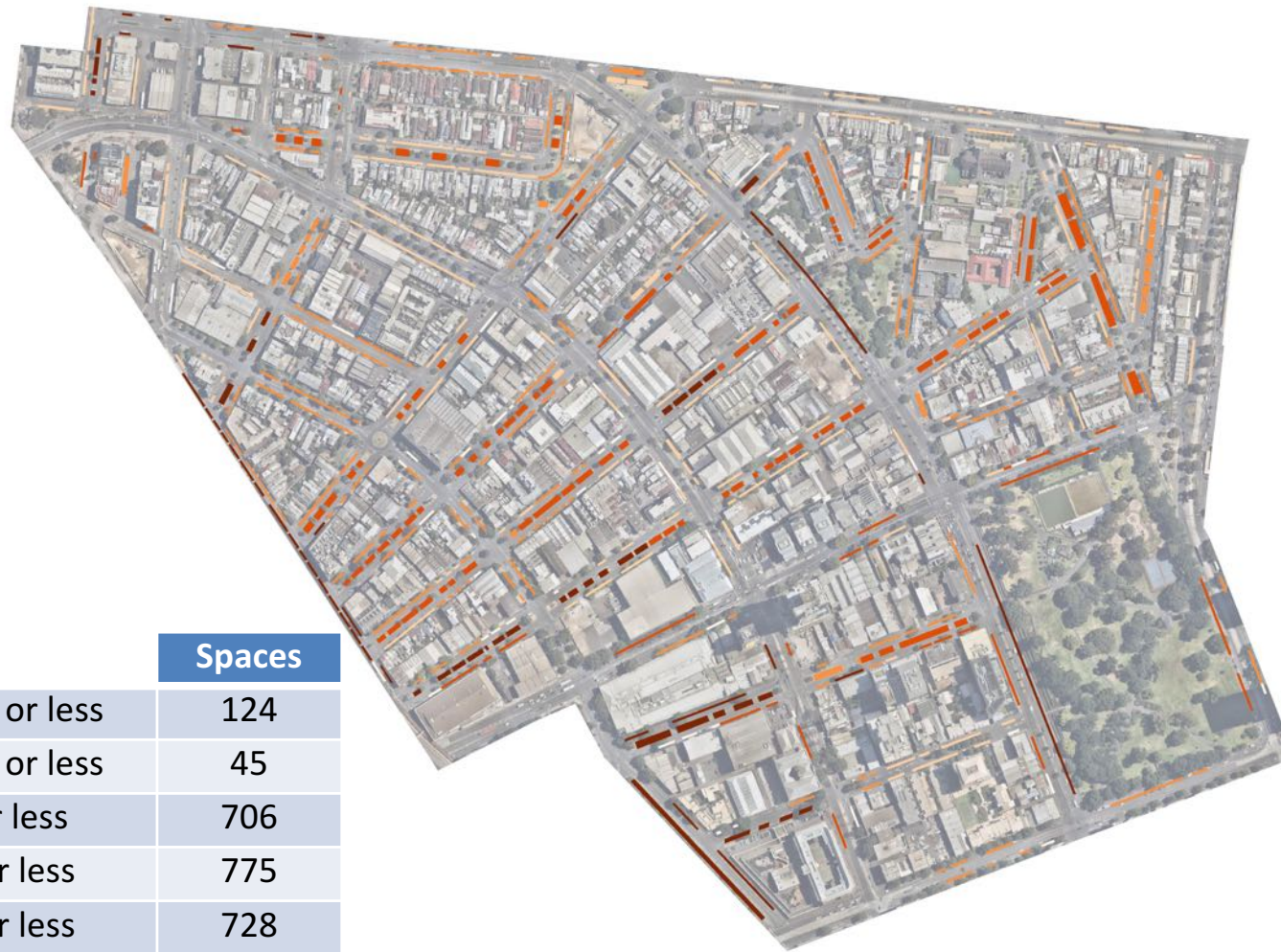
		Spaces
	Parking – Paid	45
	Parking – Unpaid	440
	Storage – Paid	696
	Storage - Unpaid	1835

Note: **Parking** is defined as a signed duration greater than 15 minutes, and less than or equal to 4 hours.
Storage is defined as a signed duration of greater than 4 hours.

What is the maximum permitted duration in parking spaces throughout West Melbourne?

WEST MELBOURNE: EXISTING PARKING SUPPLY

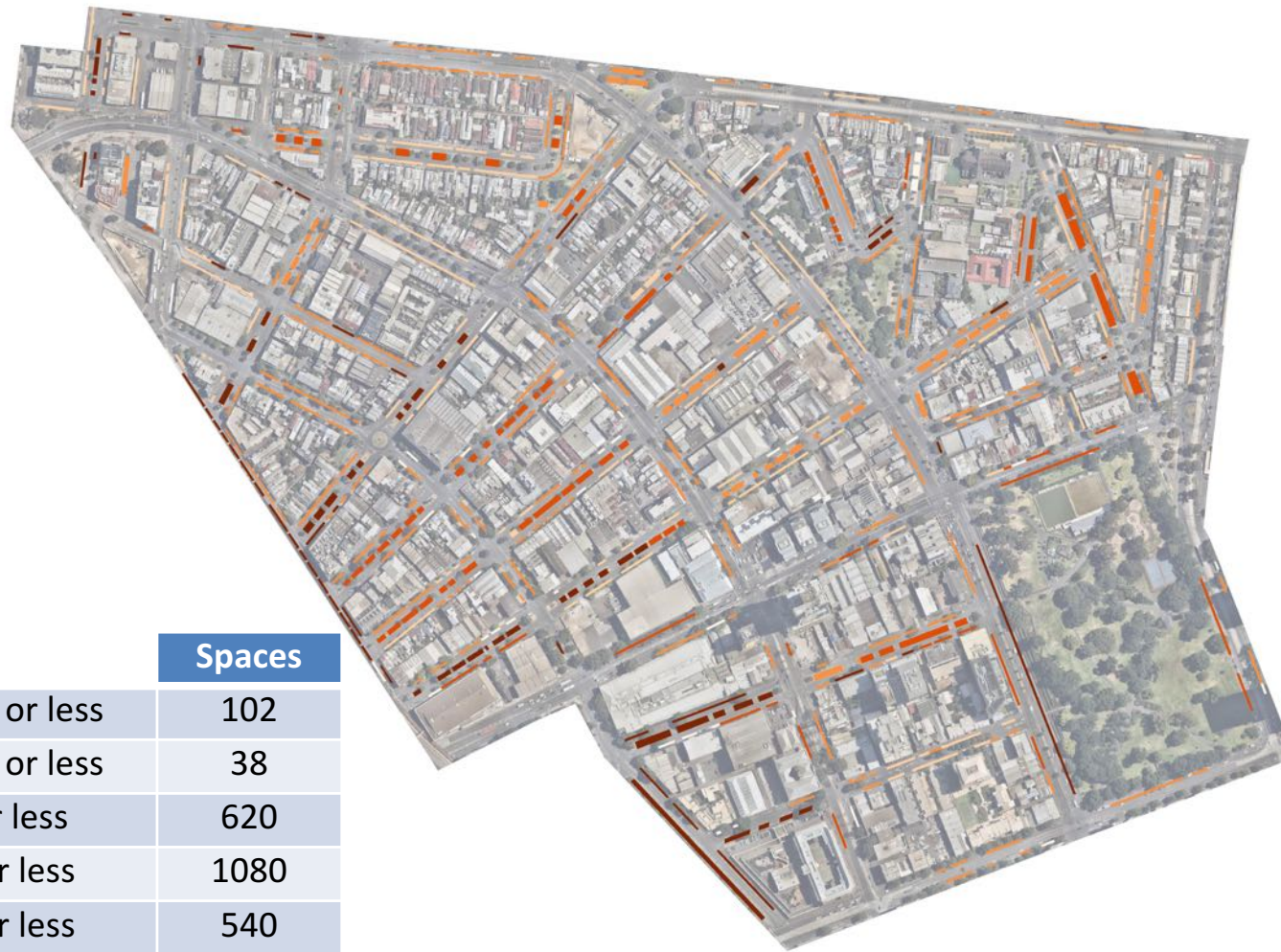
Time-Based Controls – Monday at Noon



	Spaces
15 minutes or less	124
30 minutes or less	45
1 hour or less	706
2 hours or less	775
4 hours or less	728
More than 4 hours	496



Times-Based Controls – Saturday at Noon



	Spaces
15 minutes or less	102
30 minutes or less	38
1 hour or less	620
2 hours or less	1080
4 hours or less	540
More than 4 hours	540

Time-Based Controls – Sunday at Noon

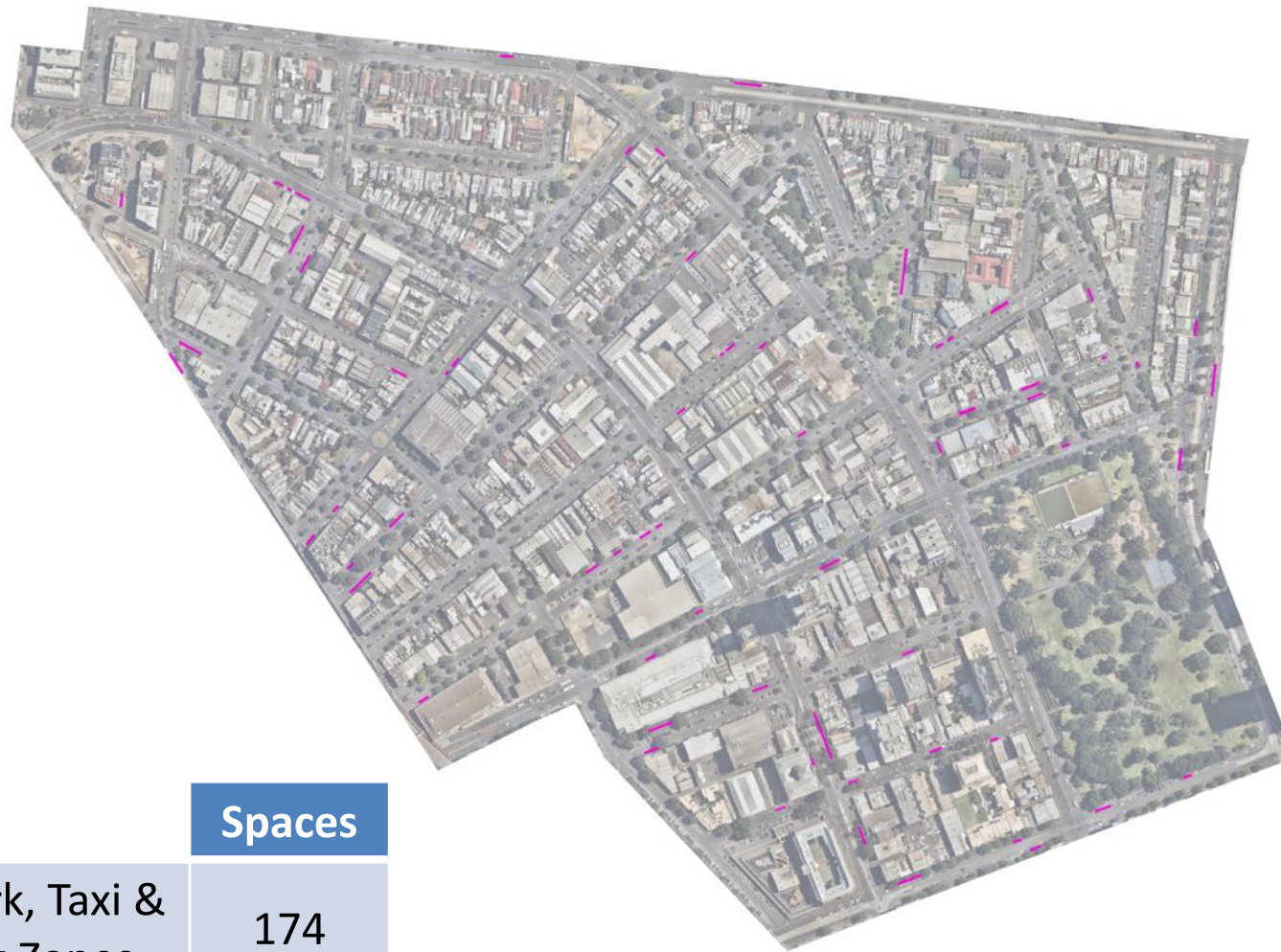


		Spaces
15 minutes or less	10	
30 minutes or less	3	
1 hour or less	127	
2 hours or less	355	
4 hours or less	0	
More than 4 hours	2531	

How are Loading Zones, Taxi Zones and other short stay parking (15 minutes or less) distributed throughout West Melbourne?

WEST MELBOURNE: EXISTING PARKING SUPPLY

15min Parking, Loading & Taxi Zones – Monday at Noon



	Spaces
Short Park, Taxi & Loading Zones	174