



# watch this space

Mosman Council's parking innovation journey 2019

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# Introduction

Traffic and parking feature prominently in the minds of residents and local business owners. These issues have ranked amongst the 'Top 3' for Mosman residents in four consecutive biennial community surveys. In these surveys, an average 33% of respondents have identified traffic and parking as major issues for Mosman over the next 5-10 years.

In 2014, to properly address these concerns, Mosman Council enlisted various consultants to help it chart a new direction for efficient management and forward-planning of the area's traffic and parking requirements. Over the past five years since that time there have been many twists and turns, and the path continues to evolve.

In July/August 2014 Council undertook a Community Engagement Program to source feedback on parking issues from a broad section of the community. This was intended as a critical first step to developing a comprehensive Parking Strategy. To facilitate the community engagement Council utilised the services of a local traffic consultant familiar with the area and the subject, Parking & Traffic Consultants (PTC).

Feedback was collected from community members through various channels; online, in hard copy questionnaires and during workshops for residents, business owners and visitors. The engagement program was comprehensive, however sourcing constructive and specific feedback proved difficult. The results were detailed in a report that identified parking simply and unsurprisingly as "a problem that Council needs to address".

In 2015 following this extensive community engagement, Council again engaged PTC to develop The Mosman Parking Strategy.

The terms of reference considered a number of Council's other key strategic documents, including:

- MOSPLAN - Strategic Delivery Program and Operational Plan
- Bicycle Plan
- Mosman Accessibility Strategy
- Mosman Pedestrian Access and Mobility Plan

To assist in development of the Strategy a Stakeholder Engagement Group was established with representatives from:

1. Chamber of Commerce
2. Local primary and high schools
3. Bridgepoint Shopping Centre (Large retail premises)
4. Mosman RSL Club
5. Community

The Draft Strategy was adopted by Council and subjected to another comprehensive Community Engagement Program, this time under the guidance of a community engagement specialist. Despite best efforts, it again proved difficult to elicit constructive and specific feedback from members of the community.

Later in 2015 The Mosman Parking Strategy was adopted. It identified five key objectives across a number of areas:

1. Better management of existing spaces utilising technology
2. Improvements to timed restrictions
3. Improvements to signage and wayfinding
4. Enforcement opportunities using technology
5. Increases in sustainable and non-car trips

This submission details the actions undertaken to meet these objectives, and the challenges, opportunities and successes in 'Mosman Council's parking innovation journey 2019'.





1

Better management  
of existing spaces  
utilising technology

# Better management of existing spaces utilising technology

Essentially, parking is a land management issue and in a developed environment there is little opportunity to create more available parking spaces without significant cost or displacement of an existing amenity.

The Strategy called for Council to review its existing available parking resources and carefully assess how they could be better managed.

In the context of this need, Council also considered that Mosman residents have been shown to embrace technology and this was seen to present a key opportunity to facilitate more efficient management of existing carpark real estate.



## Parking technology

The deployment of technology has seen the installation of 158 on-street parking bay sensors, 215 off-street parking bay sensors, 509 overhead guidance indicators in three multistorey carparks, 49 LED parking availability signs and plinths, and introduction of the Smart Parking mobile app for smart phones and tablet devices.

By introducing this technology Mosman Council was able to:

- Improve the parking user experience for free and paid on- and off-street parking
- Decrease user travel times, and time spent 'circling' for parking
- Decrease traffic congestion in Mosman, and reduce user carbon footprint through reduced emissions
- Improve user compliance and parking enforcement efficiency
- Improve access to local businesses



## Innovative Park Mosman app

Given the abundance of real time data available from the sensors, Council sought the best mechanism to deliver this information to drivers. The best way was to do this via an app.

Using their smart phone or tablet device drivers can view available parking to make an informed decision about where to park. In addition to this, further information is available for individual parking zones including maximum stay, time restrictions and the type of parking available such as accessible parking.

Information provided through the app is continually updated and refined to ensure drivers stay well informed about where and when to park in Mosman.

### Keys features of the 'Park Mosman' app

Park Mosman enables users to access information on parking spaces faster due to its code optimisation, and a more streamlined and familiar user interface design. The Park Mosman app uses bands of colours, graded to indicate parking availability from high to low. The map provides an immediate snapshot of parking availability.

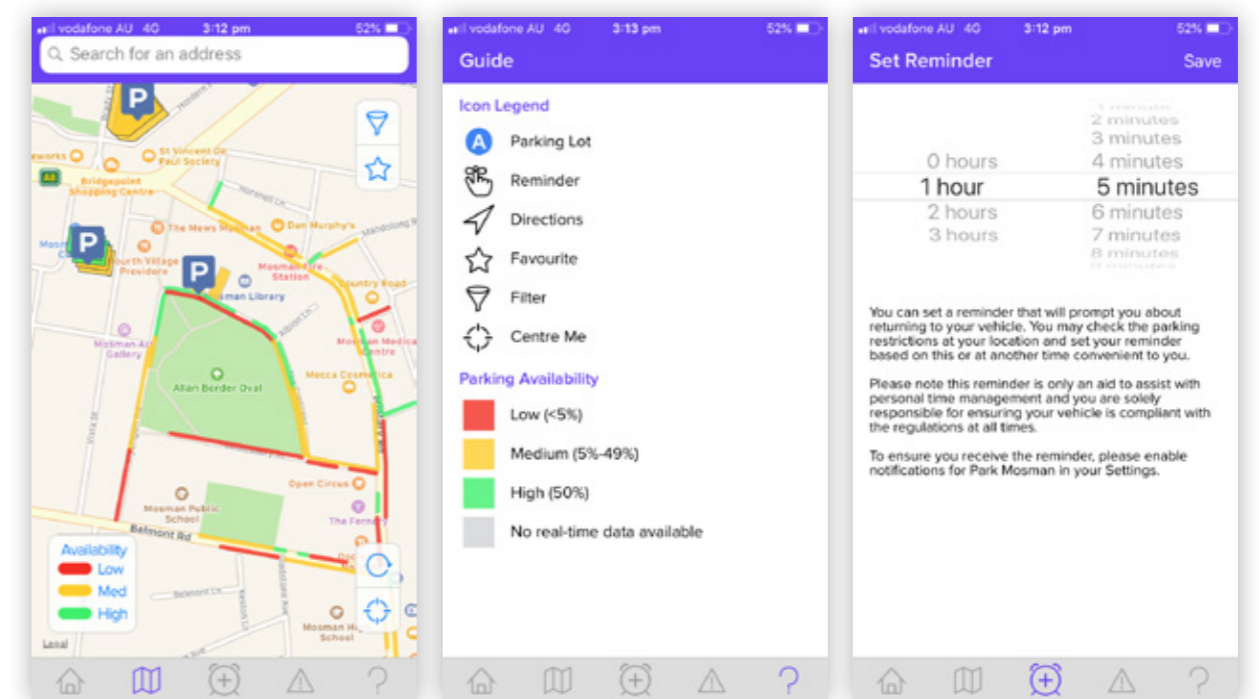
The feature-rich app utilises a tiled home interface that provides fast, easy-to-read access to all the main functions of the app including:

- Ability to search a location or choose from a pre-populated list of key popular Mosman sites to find parking conveniently located nearby
- Alerts for construction and works in the area, some of which may affect traffic
- GPS navigation to assist with directions to their desired space
- Setting of time reminders for duration of stay
- Graphic tutorial that provides a summary of key functions within the app
- Access to Mosman's parking permits.

### An overall better parking experience with Park Mosman

A pre-launch survey found many drivers spent considerable time looking to find a car parking space. Giving drivers access to real-time parking availability through the Park Mosman app has enhanced their ability to avoid traffic congestion and improves their overall parking experience. They spend less time searching for a space, therefore improving traffic flow, and are less inclined to park non-compliantly, hence reducing the number of penalties they receive. This leads to a reduction of traffic congestion in the suburb and also means that fewer on-street resources are required to maintain compliance, reducing the cost for staffing.

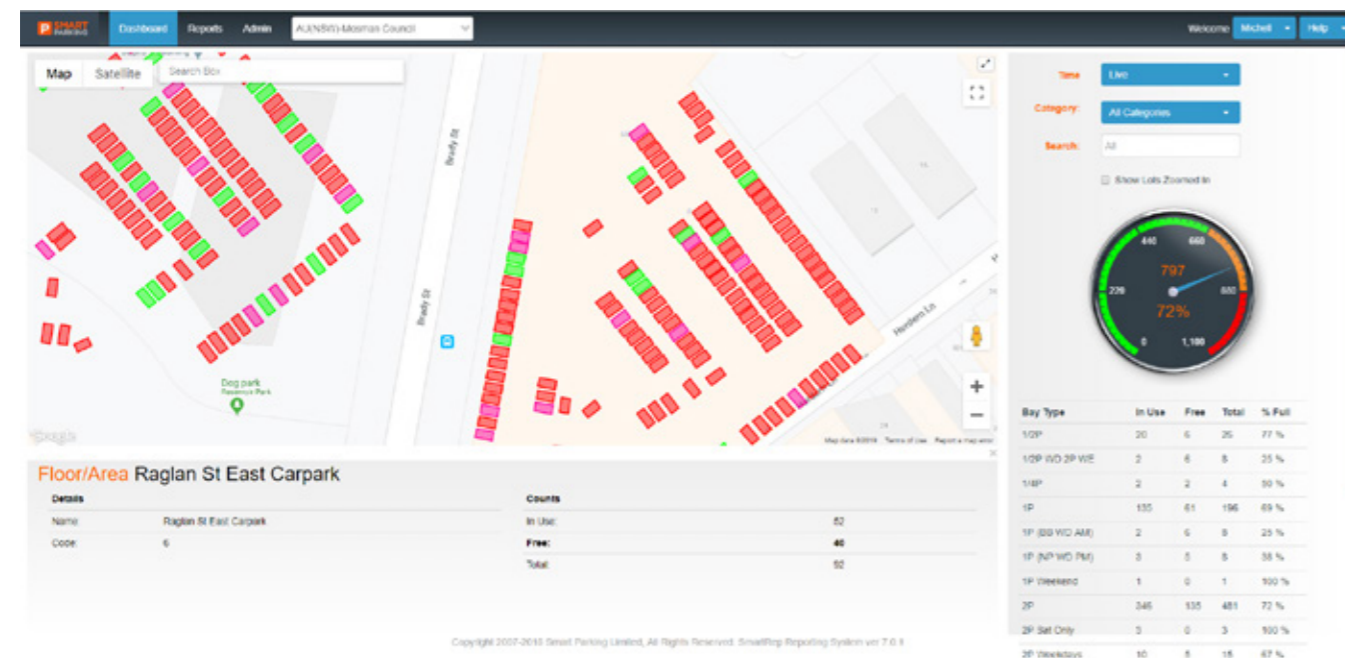
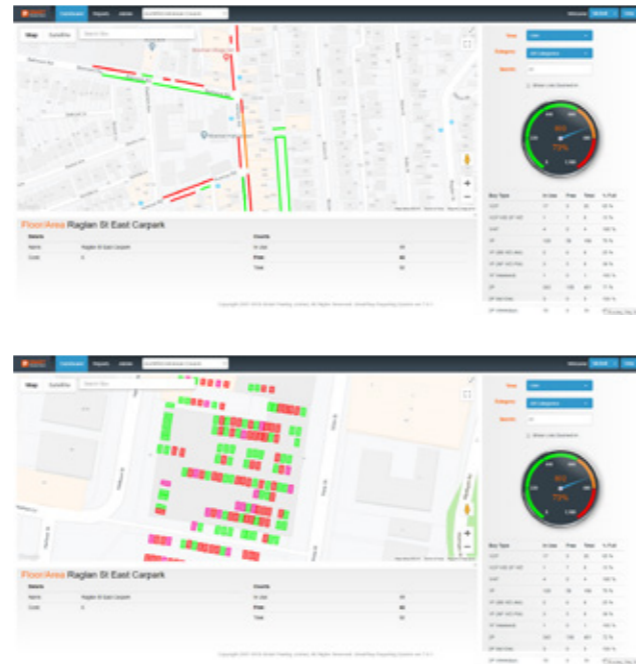
Park Mosman provides drivers with instant parking availability, free of charge. It allows them to make better-informed decisions regarding their chosen parking location, moderate their behaviour and seek parking in less occupied streets/car parks closer to their desired destination. Not only does this reduce the time taken in parking, and make parking in Mosman easier and more convenient - improving the customer experience, it also indirectly helps to reduce congestion, free up parking spaces and ultimately helps to improve amenity and the local environment.



## Intelligent data

The occupancy data collected through Mosman's parking sensors is relayed in real-time to the SmartRep, management software tool. Accurate vehicle-by-vehicle, minute-by-minute data on actual usage of the car parks gives Council the key data needed in day-to-day management as well as allowing us to make informed decisions on our parking policies.

This data has allowed Council staff to identify areas of high occupancy as well as identify areas where duration of stay is an issue. Informed decisions can then be made as to time restrictions without relying on anecdotal information. In addition this data means Council does not have to undertake extensive parking surveys which might only provide a narrow view on issues and little information on patterns of behaviour.



## Virtual parking permits

To further progress its innovative approach and harnessing of technology, in 2017 Mosman Council set about replacing its display parking permit stickers with digital parking permits.

Council, like many other institutions of government, had an outdated process of issuing and managing year-long display parking permit stickers. Customers would have to visit Council's premises to get a physical parking permit sticker, and then attach that sticker to their vehicle's windscreen. If they changed vehicles during the year, they were required to return to Council's offices to fill in a statutory declaration and get a replacement sticker. This approach was time intensive and a frequent source of customer frustration, and congestion in Council's customer service. It also resulted in some cases of fraud, with the photocopying of permits, and presented a significant administrative burden for Council staff.

Council made the decision to modernise and move permits to an online system, taking cues from examples such as NSW's switch to digital vehicle registrations in 2013 and Medicare's technology upgrade to allow claims to be made online.

As of early 2018, no local government in Australia was using year-long digital parking permits. Council conducted a review of possible system providers, and invited proposals and presentations. A provider that had established systems in a number of universities across Australia was selected, CellOPark (also known as Smarter Parking). The solution they provided was vPermit (virtual permit).

Mosman Council operates two annual parking permit schemes – resident parking schemes, to provide easier parking for people living in areas that experience heightened demand for parking due to commercial reasons, and the foreshore parking scheme, which

enables residents to park in selected foreshore parking areas for recreational use. As the number of resident parking scheme permit holders is the much lower of the two, Council decided to develop the system to cater for this group first as a means of controlling risk during innovation.

vPermits for the resident parking scheme were launched in October 2018, and since that time Council has successfully issued over 1,100 digital resident parking permits. Using this scheme enforcing officers simply type in the licence plate number into an app on their smart phone to check the validity of the permit.

During this first stage of the rollout a range of user feedback was collected, and improvements to the user experience have accordingly been made in preparation for the bigger migration of foreshore parking permits to the vPermit system. This will be launched in June/ July 2019 and is expected to deliver a display to digital switchover of 10,000 permits. Following migration of the foreshore parking permits to vPermits almost 100% of Mosman Council's parking permits will be managed online as digital permits.

The digital vPermit system delivers a range of benefits. Customers are no longer required to visit Council to obtain or change their permits, and can do it from the comfort of their own homes regardless of office hours, saving a considerable amount of time. Changes to permits can be made in a matter of seconds, and the use of plastics is reduced giving a better environmental outcome. Council is also better able to analyse its parking permit data and control fraud, and the administrative burden for the management of the schemes is reduced.

The new system has not been without challenges. Some customers are less technologically literate and require guidance to use the system, which Council customer service staff provide. Optical character recognition to read customers' drivers' licences (which prove residency in Mosman), and matching data sets between Council's property database and RMS's address database, is good but not perfect. Despite these challenges, the system has delivered superior customer convenience for parking permits in a first for local government in Australia.



# 2

Improvements to  
timed restrictions

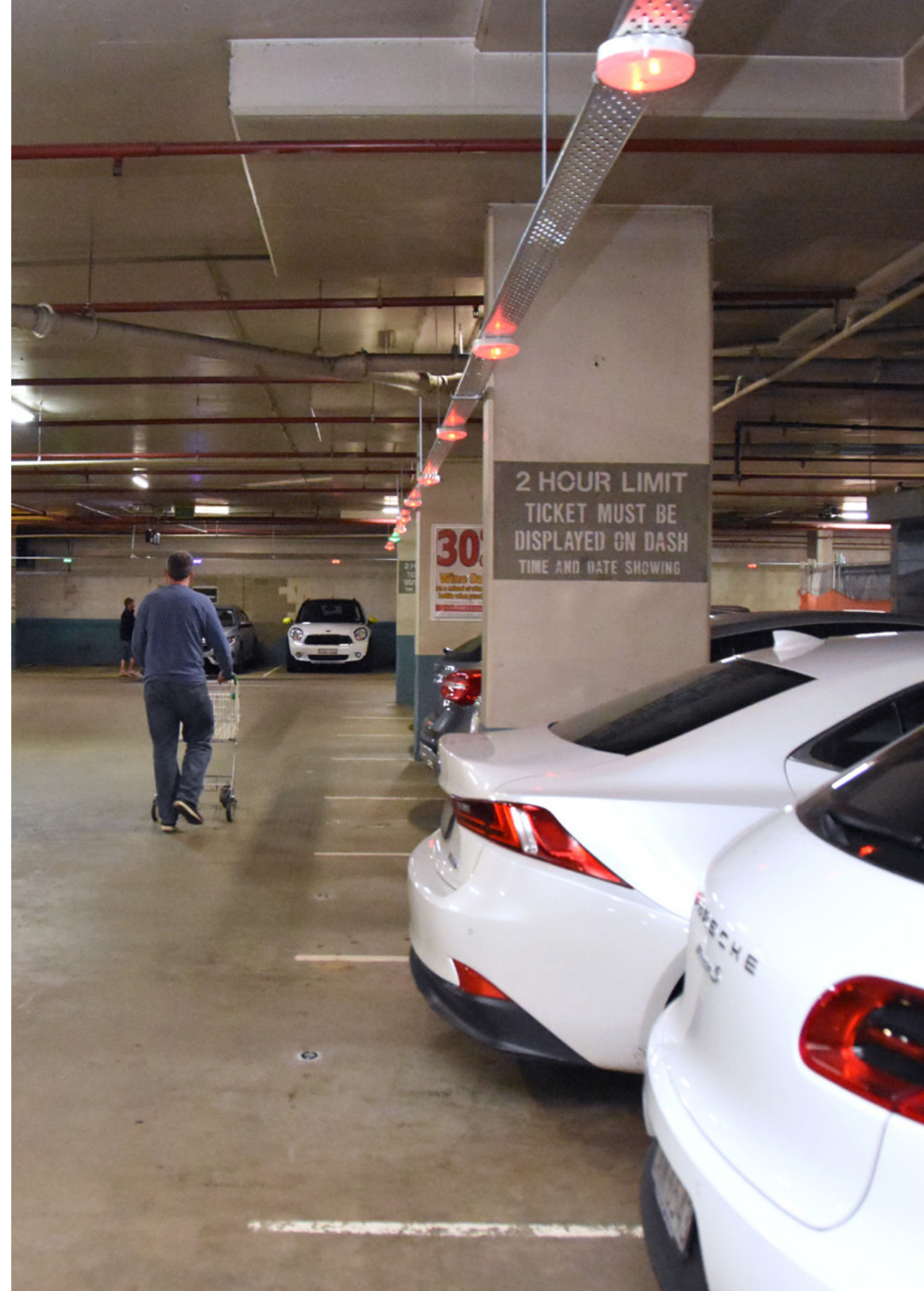


## Improvements to timed restrictions

Another key objective of the Strategy was to rationalise parking time restrictions. The methodology involved shorter time restrictions closer to the main shopping strip and longer times as the distance from it increased. Mosman Council, like other municipalities, had suffered ad hoc parking changes over many years resulting in a lot of variability in parking times restrictions within close proximity to each other.

A new parking hierarchy was established and new time restrictions were proposed.

However Council did not anticipate the emotional response to this change. Despite a solid foundation and reasoning, resistance from the community prevailed and Council did not pursue this objective.





# 3

Enforcement  
opportunities with  
technology

# Enforcement opportunities with technology

In order to satisfy the community and Council that the installation of in-ground technology was not a 'cash grab' the use of technology for enforcement purposes was deferred until the system was operational and there was time to undertake sufficient monitoring and research. In due course, it will offer many opportunities for this.



## Open application programming interface (API)

The current system allows for future expansion and implementation of other technologies.

Since parking rangers first started walking streets little has changed in the use of white chalk. The sensors technology looks to make this redundant with a more effective and efficient approach to compliance. It provides access to the most highly-requested real-time status information across both a local and global parking network, in a single and consistent way.

In line with Council's original intention, in 2019 Council re-engaged PTC to review the system with a view to utilising it for enforcement. As part of the review, the community was consulted but this resulted in little meaningful feedback. Analysing the data however showed how useful that in itself was, and yielded interesting insights:

- On average, 7.8% of vehicles overstay the timed restriction including a grace period
- On weekends this reduced to 5.8% of vehicles
- The majority of overstays occur on the bottom/ground level of car parks
- The majority of vehicles overstay 0-30mins
- Of those who overstay, up to 40% overstay over 30 minutes in a 2 hour zone

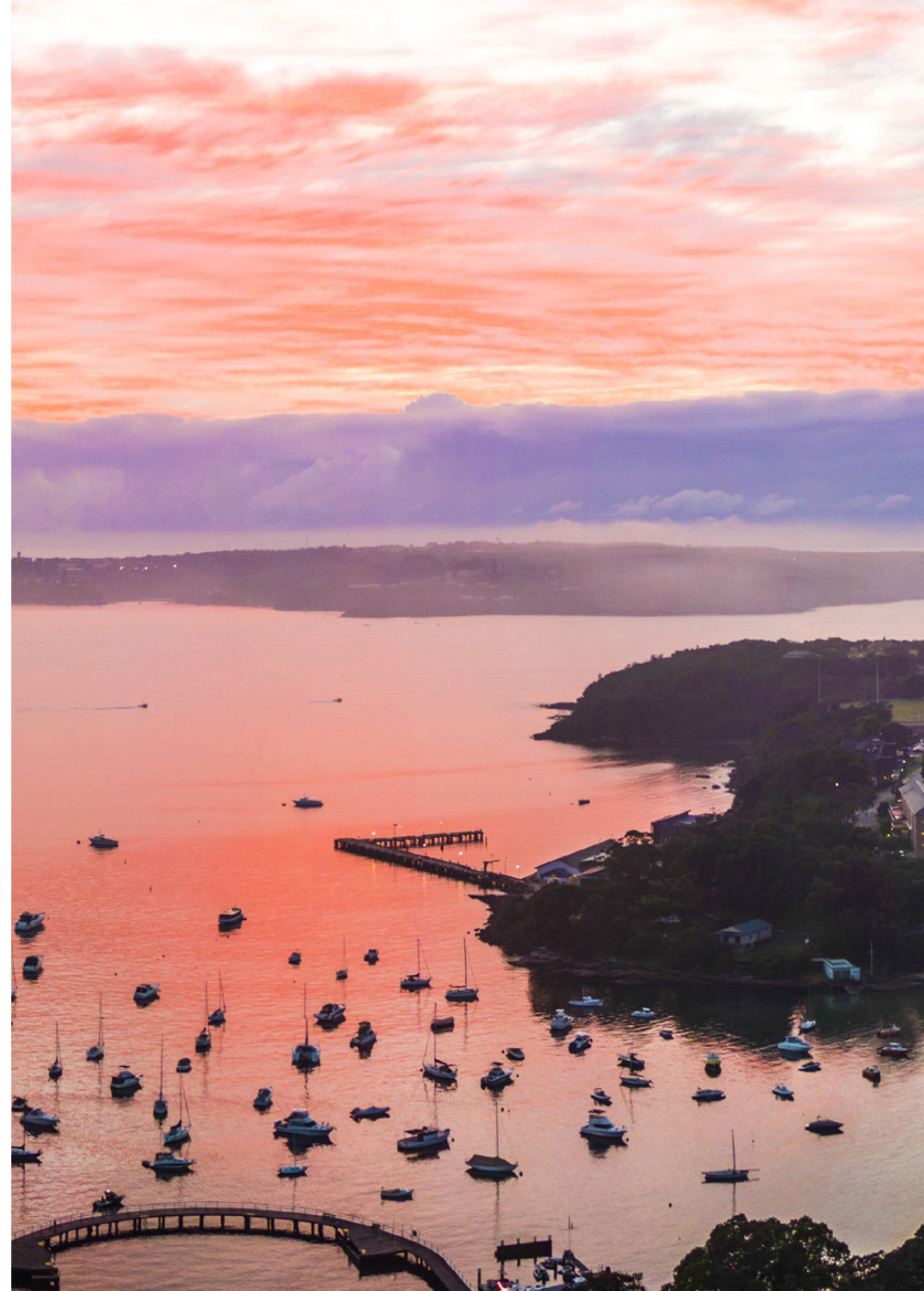
Council considered this matter again mid 2019, when an agreement was reached to adopt the technology for enforcement purposes.



## Future opportunities

What's in store for the future? Time will tell, but given Mosman's size Council can be nimble and agile in the technology space.

Given the journey it has embarked upon Mosman Council is in the enviable position of being able to further explore the ways residents and customers interact with the area's parking bays. This might include automated pre-paid parking based on the length of time vehicles occupy a space, or integration of other technology with Council's permit management system to offer specialised permits for disability and carers, resident and foreshore parking, contractor parking and specialised event parking.



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