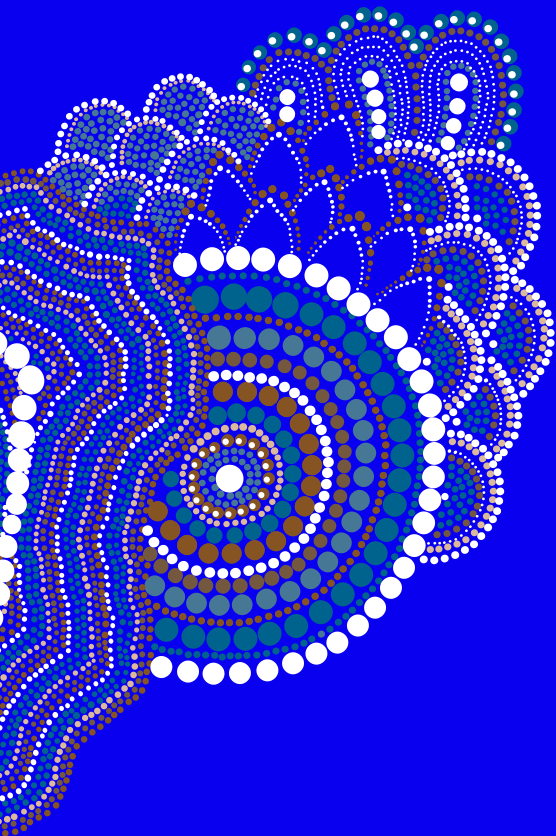NRMA | ROAD TRAVEL REWARDS

Parkin' mad

March 2025

Acknowledgement of Country

We acknowledge the land on which we gather, from places as widespread and diverse as the NRMA. In the presence of Elders past, present and future, we recognise all journeys and our mutual role in creating new paths together.

NRMA | ROAD TRAVEL REWARDS

The NRMA is a member-owned mutual organisation. For over 100 years, we have proudly advocated on behalf of these members. Today, the NRMA represents 3.3 million Australians, providing a range of services for the road, travel and rewards. We have focused on better road and transport infrastructure since 1920, when our founders lobbied for improvements to Sydney's Parramatta Road. Independent advocacy is the foundation activity of the NRMA, and remains critical to who we are today.

BUSINESS WESTERN SYDNEY

Business Western Sydney is the peak business advocacy organisation, representing and championing the businesses driving Australia's third-largest economy — Western Sydney. Its mission is simple: to make Western Sydney the best place in Australia to live, work, learn and invest. With member-driven policy and strategic advocacy priorities, Business Western Sydney connects business leaders with industry and government to drive action and deliver meaningful change.

BUSINESS SYDNEY

Business Sydney is the leading voice for business in Sydney. We advocate, influence and deliver policies and outcomes to drive economic growth and create opportunities to invest, work, live and visit our city. For nearly two hundred years, we have worked to advance Sydney as a global, competitive and liveable city.

Contents

Foreword

Cost of living pressures impacting Australian families and businesses are well-known and in the area of transport and mobility these costs continue to rise. It is unacceptable to the NRMA, a 3.3 million member strong mutual, that the average Sydney family today has to allocate almost one-fifth of their weekly family budget just to getting around.

The exorbitant costs of parking in Sydney and the growing scarcity of reliable parking spaces is adding to this pain. It is the NRMA ethos to listen to the concerns of our members and to act.

For this reason I am proud to present the *Parkin' Mad* report, in conjunction with our partners at Business Western Sydney and Business Sydney, as a comprehensive and effective tool to drive meaningful change and reform.

Sydney is a world-class metropolis yet we unfortunately find ourselves atop a notorious list as one of the most expensive cities in the world for parking. It is unacceptable that parking costs continue to skyrocket at the same time that the disposable incomes of our members fall.

We also know that a failure to provide easily accessible and abundant parking across Greater Sydney, particularly in and around commercial hubs, is having an adverse effect on economic growth and adding to congestion.

Parkin' Mad provides a series of recommendations and proposed reforms intended to address these problems.

Sydney is being held back by expensive and hard-to-find parking. For 105 years the NRMA has forged a reputation for delivering meaningful change. Let that change begin with this report.

Rohan Lund
NRMA Group CEO

"Sydney is a world-class metropolis yet we unfortunately find ourselves atop a notorious list as one of the most expensive cities in the world for parking."

A message from...

Business Sydney

The cost of parking, the lack of off street parking and the complexity of parking regulations are a handbrake on Sydney's economy. In short, three words sum up Sydney's parking dilemma. It is expensive, scarce and regulation is fragmented. The cost alone at the height of a cost-of-living crisis means Sydneysiders and visitors have less disposable income. The more they have to spend on parking leaves even less to spend in the economy. And that hits the hospitality, retail and tourism sectors very hard indeed.

This paper, a combined project of Business Sydney, Business Western Sydney and the NRMA, examines the issue and offers commonsense solutions. This paper confirms that Sydney's parking fees are among the highest in the world, certainly higher than in comparable US cities.

It demonstrates that parking fees are locked in an upward spiral that doesn't take into account that household disposable incomes are falling in the cost-of-living crisis. In fact, this study finds that parking fees are 20 per cent higher in Sydney than they otherwise should be.

This paper covers other thorny questions such as the steady reduction of on-street parking and the high cost of parking in hospital car parks. I recommend this paper's contribution to a sensible discussion of parking — the issues and the solutions.

Paul Nicolaou
Executive Director
Business Sydney

Business Western Sydney

Parking is the bane of Sydneysiders. Whether grabbing a meal, visiting the shops or seeing a show, the experience has to be accessible first. Huge populations in Western Sydney are car-dependent. We don't all live next to a bus or Metro. This means it's time for parking-friendly suburban CBDs.

Take Parramatta CBD, one of Sydney's premier commercial headquarters. About 2,000 parking spaces have been lost in five years through the closure of three major carparks to make way for new infrastructure. The light rail, while welcome, has also worsened driver wayfinding and made the CBD a challenging place to navigate and park in. Attractions such as Riverside Theatres have no parking. CommBank Stadium, very little. All this restricts Parramatta's ability to appeal to a catchment of at least 1 million people in surrounding areas. Or consider Liverpool which has huge assets — from its universities to a hospital in the centre of the CBD.

Congestion and high on-street parking occupancy rates of 85% require motorists to circle for scarce spots. The visitor experience just isn't as seamless as it could be. Getting parking right is critical to reactivate the economies of Western Sydney CBDs post-COVID. The solutions include repurposing underutilised spaces, better designed Kiss and Ride zones, an integrated parking app for our whole city.

We're also calling for a NSW Parliamentary Western Sydney Parking Inquiry to hear the perspectives of residents, workers and businesses. I hope you find this report useful.

David Borger
Executive Director
Business Western Sydney

Introduction

Sydney is renowned for its vibrant urban culture, iconic landmarks, and powerhouse economy. However, navigating its cityscape — particularly parking — has become increasingly more difficult and expensive.

The City of Sydney council has generated substantial revenue from parking meters, with the highest-earning meters bringing in over $180,000 each last financial year and total parking revenue exceeding $41.5 million.[1] The issue of high parking fees extends beyond the CBD, with NSW public hospitals generating record profits from parking charges ($51.7 million in 2024), impacting essential services and community accessibility.[2]

While not the most attention-grabbing policy issue, getting parking right is essential to ensure that living, working and visiting Sydney remains as accessible as possible. Whether in the bustling Sydney CBD or rapidly expanding centres of Western Sydney such as Parramatta or Liverpool, parking policies directly impact businesses and the daily lives of millions of people. Effective parking management is critical to encourage foot traffic, retail trade and urban amenity. It helps to support economic growth and enhance quality of life for residents and visitors alike. By contrast, a lack of parking and vehicle accessibility will continue to hurt the post-pandemic economic recovery of the Sydney CBD and suburban centres.

This report, based on research by specialist traffic engineering and transport planning firm Bitzios Consulting, identifies several parking policy challenges in Greater Sydney and proposes three key actions to address them.

In short, Sydney's economic and social well-being depends on a parking system that is fair, efficient, and accessible. By addressing exorbitant parking costs in its CBDs, tackling the unique parking infrastructure challenges in different areas of Western Sydney, and implementing smart technology solutions, policymakers can create a more balanced and user-friendly urban mobility experience for all.

Key recommendations

1. Cap parking fees

Sydney's CBD has some of the most expensive daily parking rates in the world, with median fees over A$77. These high costs impose financial strain on workers, residents, and visitors, discouraging access to the city centre and weakening local business activity. A reassessment of current parking fee policies affecting state, council and privately owned carparks is essential to align with economic realities and ensure Sydney's CBDs remain competitive and thriving hubs. This could include capping increases and adjusting the structure of the Parking Space Levy (PSL), a state government initiative that is designed to discourage car use in key Sydney business districts. Similar approaches can be applied to the carparks throughout Greater Western Sydney, by working closely with local councils.

2. Western Sydney parking inquiry

Parking infrastructure in Western Sydney is inadequate, particularly in fast growing centres such as Parramatta, Liverpool and Campbelltown. We believe this requires urgent state-level consideration and policy intervention. As Western Sydney continues to grow, its heavy reliance on cars has exposed major deficiencies in parking availability, traffic conditions and wayfinding systems. In some cases, there is also a need for better-designed drop-off zones. Using Parramatta and Liverpool as cases studies to illustrate the significant challenges faced by Sydney's west, the report calls for a State Parliamentary Western Sydney Parking Inquiry to develop comprehensive, long-term solutions tailored to each region. This would include building additional parking capacity in CBDs and at strategic locations such as hospitals and public transport nodes.

3. A unified, state-wide parking app

The successful rollout of the Park'nPay app has demonstrated the benefits of a seamless, real-time digital platform, but adoption remains inconsistent across councils. The report calls for expanding Park'nPay or ensuring its interoperability with existing council-operated systems to eliminate inefficiencies, enhance convenience and create a smarter, more accessible parking experience for all users. Although previous legislative efforts to mandate a universal parking system have faced challenges, the NSW Government should continue to foster a collaborative approach to encourage widespread adoption of a unified platform.

1   'Outrageous': Here's where to find Sydney's most profitable meter, The Daily Telegraph, January 19 2025
2   NSW public hospitals made $51.7 million from parking fees in just one year, 9 News website, Jan 20 2025, Accessed @ https://www.9news.com.au/national/nsw-public-hospitals-made-51-million-from-parking-fees-in-2024/9d39cc38-05c7-4a88-817b-3c5e77fe0abe

Sydney's prohibitive parking fees

In the wake of the pandemic and cost-of-living crisis, parking costs in Sydney are under scrutiny, particularly in the Sydney CBD.

According to our study, median daily parking fees (excluding early-bird discounts) in Sydney reach US$51 (A$77.30 mid-2024 exchange rates), making it one of the most expensive cities globally for all-day parking. Sydney's fees are almost double, compared to similar-sized US cities achieving similar or higher public transport mode shares. In Australia, fees in Sydney were well ahead of Melbourne and Brisbane, which average US$40 (A$60.60) per day.[3]
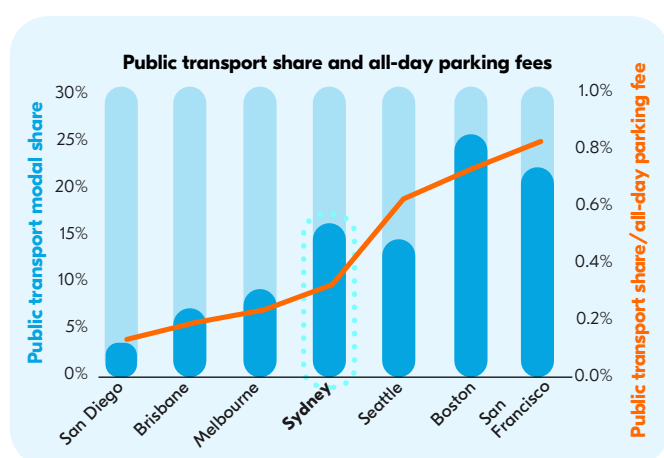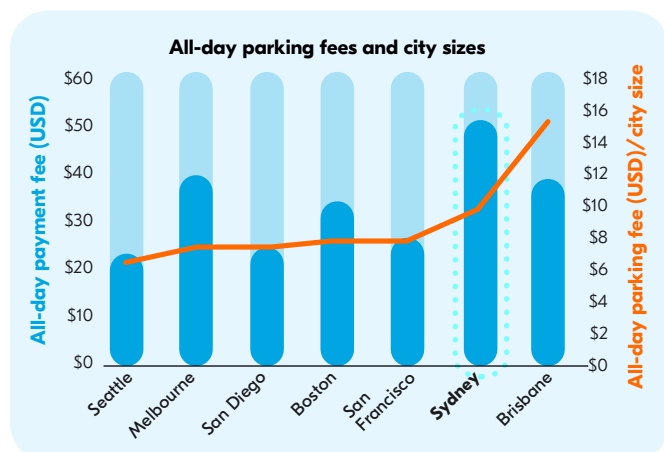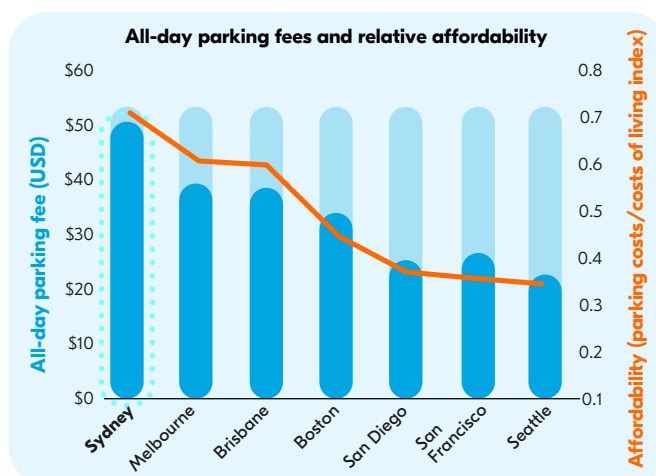
Social and economic impacts

The effect of high parking costs ripples through communities and businesses alike, impacting individuals, workers, and the broader economy. It disproportionately impacts individuals who cannot rely on public transport due to mobility impairments, or those who need to drive to access the city centre for work, healthcare, or other essential activities on their own schedule. It also discourages Greater Sydney residents without effective public transport access from visiting the Sydney CBD, pushing them to choose other destinations instead.

For many CBD workers, parking is a significant expense, reducing disposable income that could otherwise support local businesses. This reduced spending further challenges businesses already recovering from the COVID-19 pandemic and facing the pressures of high inflation and interest rates.

Misalignment with economic realities

Although most Sydney councils review parking fees annually, community feedback suggests current costs do not align with the city's post-pandemic recovery and cost-of-living crisis. The affordability index in our research indicates that Sydney's parking fees are 20% too high compared to Melbourne and Brisbane fees and their affordability.[4]

All-day parking fees and city sizes

Public transport share and all-day parking fees

All-day parking fees and relative affordability

Since 2016, disposable income per household has declined across Australian cities, while CBD parking fees have risen, compounding household financial pressures. The US cities where data is available showed comparatively much smaller changes between 2016 and 2024 in both disposable income and in CBD parking fees.

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3   Benchmarking of Sydney CBD Off-Street Parking Affordability, Bitzios Consulting 2024
4   Benchmarking of Sydney CBD Off-Street Parking Affordability, Bitzios Consulting 2024

Among Australian cities, Brisbane saw the largest drop in disposable income, followed by Sydney and Melbourne. Despite this, Brisbane recorded the smallest increase in all-day CBD parking fees. In Sydney, parking costs have risen by 9% since 2016, while disposable income has decreased by 13%, increasing the burden of parking fees on household budgets for those who need to park in the CBD.

Changes in parking fees vs. Charges in disposable income (2016-2024)

Reduction in disposable income
Increase in all-day parking charges
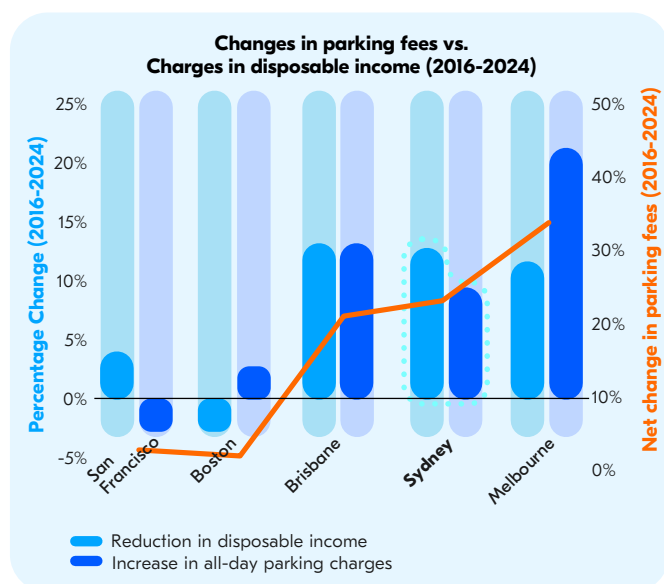
Ticketless fines and public frustration

The NSW government's role in tackling exorbitant parking fees and fines was strongly supported by the NRMA, especially given the recent surge in revenue from ticketless fines, which increased by 54% over the past financial year.[5] Many motorists have expressed outrage and confusion over the sudden rise in fines.

The increase in ticketless fines coincides with a broader trend in which the revenue generated from parking fines is being used as a financial cushion for local councils. This practice has drawn criticism from both residents and advocacy groups, who argue that fines should not be relied upon as a consistent revenue stream, particularly when they contribute to significant financial burdens on ratepayers.

While the NSW Government passed legislation in November 2024 to address the ticketless fines issue, it should seize the opportunity to comprehensively reassess broader parking policies and regulations. This includes directing councils to prioritise fairer enforcement and more accessible parking solutions that better serve the community.

Flexible parking options

Increasing the capacity of existing Park&Ride facilities, along with creating new ones at targeted public transport hubs, as well as expanding parking facilities on the outskirts of the CBD, could promote more equitable access to the Sydney CBD and centres such as Parramatta. This should be paired with more reliable, frequent and efficient public transport connections from these parking nodes to the city centre. Incentivising the use of underutilised parking facilities in the CBD could also offer more affordable options for those who need to drive in to the city centre.

Capping parking fee increases

Most people who park all day in the CBD likely do so out of necessity, as their circumstances leave them without practical alternatives. This makes high parking fees an undue financial burden. Our study indicates that while parking fees can help incentivise public transport use in CBDs like Brisbane, they may be less necessary in established CBDs like Sydney, where other factors such as congestion management and an integrated public transport network play a more significant role in encouraging modal shifts.

With the Sydney Light Rail operational and Metro expanding to areas such as Barangaroo, Martin Place and Pitt Street, the Sydney CBD may be well-positioned for a reduction or freeze on all-day parking fees.[6] The NSW Government can achieve this by reducing or capping the PSL rate to maintain current revenue levels.[7] The PSL applies in Sydney CBD, North Sydney, Milsons Point, Bondi Junction, Chatswood, Parramatta and St Leonards.

Beyond these locations, councils should also consider capping parking fee increases across Greater Sydney to ease financial strain on households and to support local businesses. The City of Sydney has indicated that revenue from parking meters is used to cover their $3.7 million annual maintenance costs. However, there is growing criticism that the current approach prioritises revenue generation over supporting economic revitalisation. Charging premium rates for street parking, only for the funds to cover administrative costs, has been criticised as an inappropriate model for a city striving to attract visitors and boost local businesses.[8]

Additionally, a thorough review of parking policies related to costs, informed by community input and underpinned by economic analysis that considers household and local business impacts, is essential. By adjusting fees and providing flexible parking options, Sydney can foster an accessible, inclusive, and economically vibrant city centre that supports residents, workers, and businesses alike.

5   *NSW government set to overhaul ticketless parking fine laws*, ABC NEWS, 17 September 2024, Accessed @ https://www.abc.net.au/news/2024-09-17/nsw-ticketless-parking-fine-overhaul-sydney-councils/104359236
6   Benchmarking of Sydney CBD Off-Street Parking Affordability, Bitzios Consulting 2024
7   Parking Space Levy Regulation review, Feedback from initial public consultation (23 October - 17 November 2023), Accessed @ https://www.transport.nsw.gov.au/system/files/media/documents/2024/Summary-of-submissions-to-Parking-Space-Levy-consultation-Oct-Nov-2023.pdf
8   'Outrageous': Here's where to find Sydney's most profitable meter, The Daily Telegraph, January 19 2025

On-street parking fees			Off-street parking fees[1]			
Sydney (City)						
Area 1[2]	$8.20/hour		1 hour	$9-$39		
			2 hours	$20-$79		
			3 hours	$30-$90		
			>3 hours	$30-$120		
North Sydney						
Parking demand Area[3]	8.30am-6pm	6pm-12am	1 hour	$11-$39		
			1 hours	$20-$60		
High	$8.70/hour	$4.90/hour	3 hours	$30-$75		
Medium	$6.90/hour	$6.50/hour	>3 hours	$30-$79		
Parramatta						
Days and times / restrictions			Westfield Parramatta		Other	
Monday-Friday 8am-6pm	$4/hour		0-2 hours	Free	1 hour	$2-$9
Monday-Friday 6am-8pm/ Saturday 8am-8pm	$2/hour		2.5-3 hours	$8-$11	2 hours	$4-$18
			3.5-5.5 hours	$15-$40	3 hours	$6-$27
10P/all day	$2/$3/hour $5.50/$8/$9.50/ day max		>5.5 hours	$50	>3 hours	$8-$90
Penrith / Campbelltown						
Free			Westfield Penrith		516 High Street Penrith	
			0-2 hours	Free	0-1 hour	$2
			2.5-3 hours	$6-$9	1-2 hours	$4
			3.5-5.5 hours	$12-$40	>2 hours	$7
			>5.5 hours	$50		
			Penrith / Campbelltown Stations Park & Ride		Commuters 18hrs / 24hrs	Non-commuters
			Monday-Friday		Free / $30	$30
			Saturday-Sunday		Free / $10	$10

1   Monday-Friday daytime rates. Early bird fees available (conditions apply)
2   Refer to City of Sydney Council's Ticket parking rates by area map
3   Refer to North Sydney Council's Parking meter rates and demand areas map

Findings

- **Sydney's high fees**
  Sydney's daily parking fees of A$77.30 far exceed those of other Australian cities like Melbourne and Brisbane (A$60.60) and comparable US cities, including Boston and San Francisco.

- **Affordability concerns**
  Sydney's parking fees are 20% too high, compared to Melbourne and Brisbane fees and their affordability.

- **Rising financial impact**
  Parking costs have risen by 9% since 2016, while disposable income has decreased by 13%, increasing the burden of parking fees on household budgets for those who need to park in the Sydney CBD.

Solutions

- **Correct policy misalignment**
  Current parking pricing strategies may be outdated for the Sydney CBD, and increasingly centres such as Parramatta, as Sydney's evolved transport network reduces the need for high fees to drive modal shift.

- **Freeze or reduce parking fees**
  The NSW Government and councils must align parking costs with affordability goals to alleviate financial strain and support local businesses.

- **Strengthen public transport integration**
  Continue expanding and integrating light rail, metro, and bus systems to reduce reliance on parking.

- **Data-driven adjustments**
  Regularly assess parking demand, usage patterns and economic impacts to inform future parking pricing policies. This includes an understanding of who currently relies on all-day CBD parking and why.

Balancing parking supply and economic vitality in Sydney CBD

Previous research highlights that Sydney reduced its parking supply from 0.21 spaces per CBD employee in 2014 to 0.14 spaces per CBD employee in 2021.9 In the Sydney CBD, many streets are reserved as loading zones during working hours, reducing the already limited number of spaces available for regular drivers.

The removal of sufficient short-stay parking could be detrimental to pockets of the CBD without sufficient foot traffic, recovering from the economic shock of the pandemic and navigating the ongoing cost-of-living crisis. Many small businesses in these areas rely on quick, accessible parking to attract customers who might otherwise choose larger retail centres with easier parking options. Reducing parking without first ensuring alternatives, such as enhanced public transport or foot traffic, risks stifling the recovery of these struggling areas.

In the short term, investing in better management of existing parking resources is crucial. Implementing a dynamic parking information system via apps and/or digital signage could streamline the process of locating available spaces, reducing driver frustration and congestion.

While repurposing road space for footpaths, parklets and cycleways can potentially increase foot traffic, these initiatives must be carefully planned in consultation with local communities and businesses. This is to ensure they meet broader accessibility needs without unintended disruptions. For example, the expansion of bicycle lanes in the CBD has drawn criticism for reducing road space for motorists and delivery vehicles, leading to increased congestion and operational challenges for local businesses.

Additionally, ticketed parking enforcement, which serves as a stronger deterrent compared to ticketless fines, should be strictly implemented to minimise overstays, particularly on streets that cater to multiple small businesses.

Findings

- **Declining parking availability**
  Sydney CBD reduced its parking supply per employee from 0.21 in 2014 to 0.14 in 2021, with many streets converted into loading zones, further limiting public parking.

- **Impact on small businesses**
  The removal of short-stay parking threatens businesses in low-foot-traffic areas still recovering from the pandemic, as customers may opt for retail centres with easier parking access.

- **Infrastructure trade-offs**
  Expanding cycleways and pedestrian zones without strategic planning has reduced road space for motorists and delivery vehicles, increasing congestion and operational challenges.

Solutions

- **Optimised parking management**
  Implement digital signage and app-based parking systems to provide real-time availability updates, reducing congestion and driver frustration.

- **Balanced urban planning**
  Ensure footpath and cycleway expansions are planned in consultation with local businesses to maintain accessibility while supporting active transport.

- **Stronger parking enforcement**
  Introduce stricter ticketed parking enforcement to prevent overstays, ensuring fair turnover of high-demand parking spaces.

9   Parking in the Sydney CBD - An International Comparison Update, Bitzios Consulting 2021

Parking issues in Western Sydney

The rapid population and employment growth in Western Sydney is driving increased demand for services, retail and commercial activity. This is exacerbating congestion and parking challenges in its major centres.

Each location faces distinct challenges; Parramatta's parking and congestion issues differ from those in smaller employment centres such as Liverpool and Blacktown. For its part, Campbelltown has become a parking hub for south-west commuters looking to catch the train into work, due to a shortage of jobs in the Macarthur region. As a result, tailored strategies are required to effectively address localised needs. This section focuses on parking challenges in Parramatta and Liverpool CBDs, highlighting key issues and potential solutions.

Parking pressures in Parramatta CBD

Parramatta CBD, often referred to as the second major commercial hub in Greater Sydney, is increasingly experiencing the strain of limited parking spaces.[10] Due to spatial limitations caused by James Ruse Drive, M4/Parramatta Road and the Parramatta River, there is a natural cap on the number of private vehicles the city centre can support. An estimated 2,000 parking spots in the Parramatta CBD have been lost in recent years. This is due to the demolition of three multi-level car parks to accommodate major infrastructure projects, including Metro West and Parramatta Light Rail. While the introduction of light rail is a positive step in improving public transport accessibility, it has also resulted in extensive changes to local traffic flow, exacerbating existing wayfinding challenges. As a result, navigating and parking in the CBD has become increasingly difficult for visitors, workers and residents alike.

The redevelopment of Riverside Theatres will double its capacity to 2,780 seats, drawing approximately 400,000 visitors annually. Despite this anticipated surge in demand, existing plans do not adequately address the strain on parking infrastructure. Major attractions such as Riverside Theatres have no dedicated parking. CommBank Stadium has very limited capacity.

Further compounding these challenges is the inefficient configuration of 'Kiss and Ride' facilities, cab ranks and distribution of car parks in Parramatta. The limited number and inconvenient locations of 'Kiss and Ride' zones near major public transport hubs hinder efficient passenger drop-offs and pick-ups. Additionally, the distribution of multi-level car parks does not adequately align with the areas of highest demand in the city, leading to congestion in certain zones while leaving other areas underutilised. Poor placement and limited availability of parking reduces accessibility and contributes to congestion, undermining efforts to position Parramatta as a leading commercial and cultural hub.

While government planners have aimed to encourage greater reliance on public transport to access Parramatta CBD, current services remain insufficient to meet the needs of the city's broader catchment. With over one million residents in surrounding suburbs expected to be drawn to the city's commercial, retail, cultural, and entertainment offerings, the shortfall in parking risks diminishing foot traffic, retail trade and overall amenity in the city centre.

Findings

- **Severe parking shortages**
  Ongoing spatial constraints coupled with the demolition of multi-level carparks due to major infrastructure projects have significantly reduced available parking in Parramatta.

- **Rising demand**
  Projects like Riverside Theatres upgrade will attract thousands of visitors annually, exacerbating existing parking shortages.

- **Suboptimal parking infrastructure**
  Poorly positioned Kiss and Ride zones, cab ranks and car parks in Parramatta CBD create congestion, underutilisation, and reduced accessibility for commuters and visitors.

Solutions

- **Parking inquiry**
  Establish a State Parliamentary Western Sydney Parking Inquiry to address parking shortages, improve drop-off zones, and expand parking capacity in CBDs, hospitals and key transport hubs.

- **Expand and optimise parking infrastructure**
  Introduce new multi-level parking solutions or repurpose existing underutilised spaces to address the shortfall, particularly in areas near cultural and commercial hubs.

- **Optimised passenger zones**
  Reposition cab ranks and Kiss and Ride zones near key precincts and transport hubs to improve accessibility.

Challenges in Parramatta's wayfinding system

Effective wayfinding is crucial to optimise the utilisation of parking infrastructure. Without clear, consistent signage, drivers face confusion, increased road circulation and missed parking opportunities. These are issues that disrupt traffic flow, increase congestion and reduce accessibility in high-demand areas.

The Parramatta CBD currently features 68 parking wayfinding signs, with a generally good distribution of 'white on blue' parking information signs. However, our review of their effectiveness and legibility, along with a gap analysis of major car park approach routes, identified key limitations. These include signs being too small to be easily visible at driving speeds, placed too far from the kerb, or located outside drivers' usual field of view.

Additionally, there is a lack of advance or multi-destination signs on critical routes, misplacement of signs beyond decision points, obstructed or poorly visible signs with conflicting instructions, and occupancy signs with poor legibility that hinder quick decision-making. Additionally, current static signage in Parramatta limits information flow, as it cannot display context-specific details such as event pricing or temporary restrictions.[11]

Cities like Perth provide a model for adaptable wayfinding through full-colour LED signage displaying real-time parking availability and restrictions, adjusting to events and temporary closures.

Sydney's smart signage trial, part of the NSW Government's $695 million Smart Technology Corridors Program, aims for similar improvements.[12] The trial, using 13 solar-powered digital signs along Chalmers Street in Surry Hills, displayed changing restrictions and clearway zones based on time of day, potentially reducing accidental non-compliance and towing incidents. The overall outcome of this trial remains to be assessed.[13]

Dynamic signage that provides real-time updates could make the parking system more responsive and efficient. Clear, strategically placed, high-contrast signs with easy-to-read iconography could help drivers navigate high-traffic areas, reduce congestion and enhance the overall user experience in Greater Sydney.

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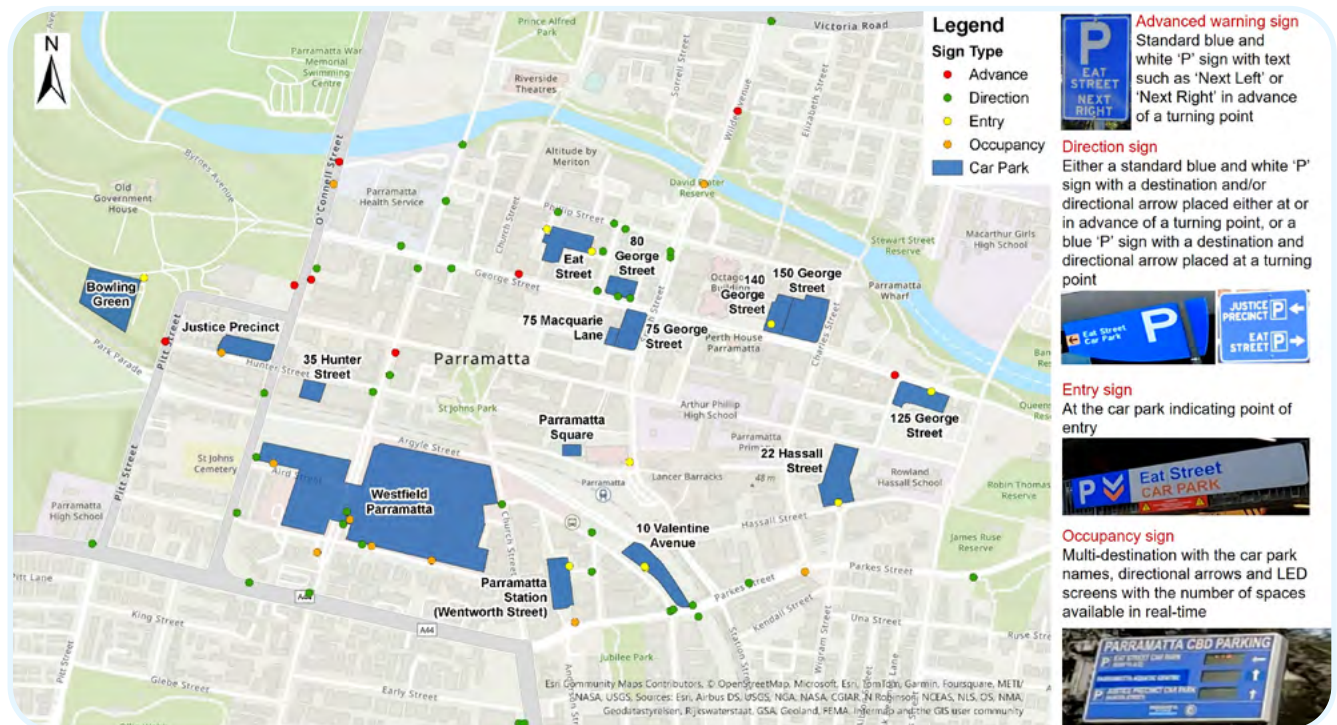
11   Parking Wayfinding in the Parramatta CBD, Bitzios Consulting 2024
12   Digital parking signs rolled out in parts of Sydney for simpler driving, 7NEWS, 2023
13   Smart Signage Trial - Chalmers St, Surry Hills between Cleveland St and Devonshire St Information Sheet, TFNSW, Accessed @ https://meetings.cityofsydney.nsw.gov.au/documents/s66279/Attachment%20-%20Item%20for%20Committee%20Information%20-%20Smart%20Signage%20Trial%20-%20Elizabeth%20Street%20Sydney%20and%20Cha.pdf

Findings

- **Parking signage issues**

  Many signs are too small, poorly placed or obstructed, reducing their effectiveness for drivers navigating at speed.

  A lack of advance or multi-destination signage on critical routes creates confusion and missed parking opportunities.

  Existing signs cannot display dynamic updates like availability or event-specific parking adjustments, limiting their utility in real-time.

Solutions

- **Dynamic signage**
  Upgrade to dynamic digital signage for real-time updates on parking availability, prices and restrictions.

- **Optimised placement**
  Reassess and reposition signage for optimal visibility and accessibility within driver fields of view.

- **Smart parking systems**
  Implement digital wayfinding and real-time parking availability tracking to help drivers locate parking efficiently.

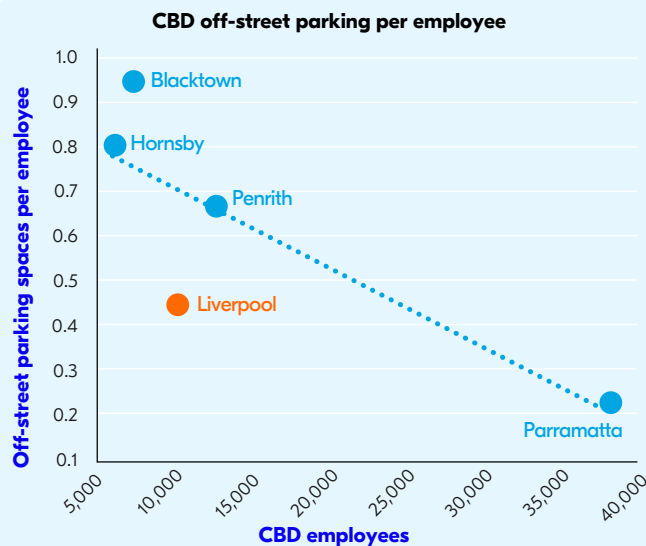## Optimising parking in Liverpool CBD

Liverpool CBD is poised for significant growth. Recent initiatives, including the rezoning of 25 hectares to promote mixed-use development, aim to transform Liverpool into Sydney's third CBD, centred around its existing strengths in health, education, innovation and research.[14] However, Liverpool's parking infrastructure has not kept pace with demand, with high on-street parking occupancy and a shortage of off-street spaces creating congestion and accessibility challenges. As the region prepares to welcome thousands of residents in the coming years, inadequate parking risks deterring major employers and visitors, limiting Liverpool's potential as a thriving commercial, educational and cultural hub.

In Liverpool CBD, our study identified significant parking challenges, including high on-street parking occupancy exceeding the recommended 85% threshold. This often forces drivers to circulate, leading to delays, congestion and increased emissions.[15]
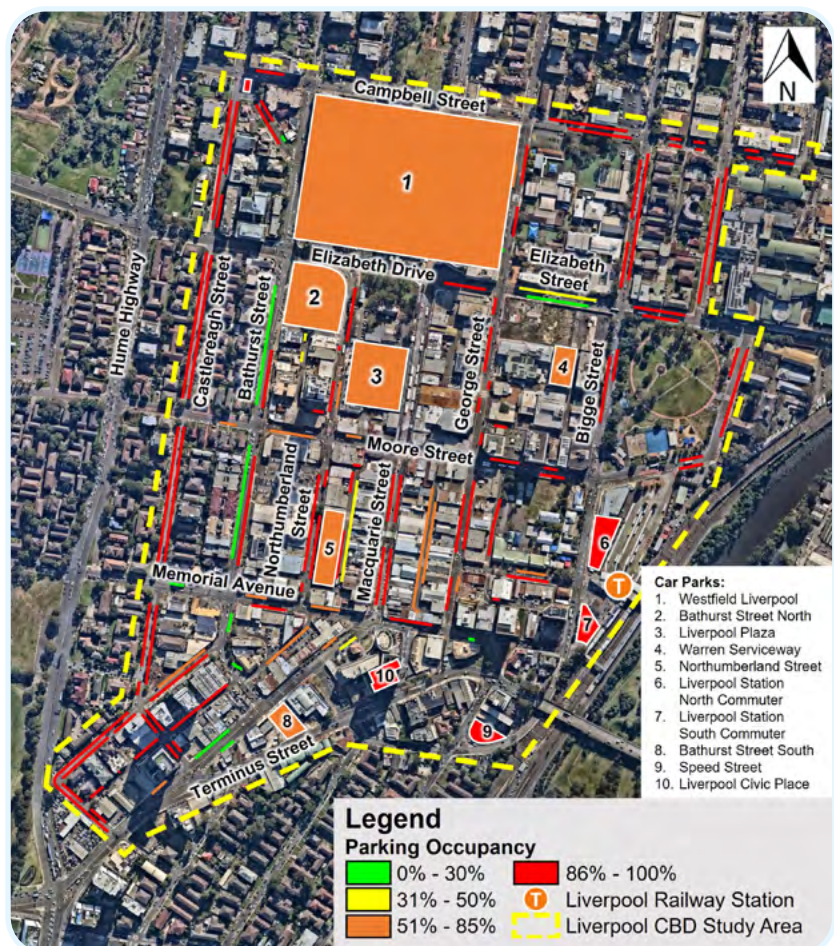
14   Sydney's Third CBD, Liverpool Council Website, Accessed @ https://www.liverpool.nsw.gov.au/development/major-projects/sydneys-third-cbd
15   Parking in the Liverpool CBD: Parking Challenges and Influencing Factors, Bitzios Consulting, 2024

CBD off-street parking per employee

The lack of adequate public off-street parking also presents issues. Liverpool CBD has one of the lowest ratios of off-street parking spaces per employee compared to similarly-sized Sydney CBDs. This limits accessibility for both staff and long-stay customers. During midday peaks, off-street parking sees 51% to 85% occupancy, indicating an urgent need for additional capacity.[16]

While larger CBDs can sustain reduced reliance on parking due to high foot traffic, Liverpool's dispersed activity pattern and limited pedestrian volumes mean that short-stay parking remains essential to attract customers to street-facing businesses. Without easy parking access, customers may choose alternative centres with more abundant parking options.

Addressing these challenges through strategic investment in parking capacity, improved wayfinding and better drop-off zones will be crucial to support the city's economic and social vibrancy.

CBD	Spaces	Employees[1]	Space/employees
Hornsby	4,915[2]	6,110	0.80
Blacktown	7,058	7.470	0.94
Liverpool	4,651[3]	10,233	0.45
Penrith	8,672[4]	12,924	0.67
Parramatta	8,948[5]	38,524	0.23

1   2016 Census TableBuilder (ABS)
2   Hornsby (Parkopedia)
3   Liverpool CBD Car Park Map (Liverpool City Council)
4   Penrith City Centre Parking Map (Penrith City Council)
5   Parking Finder (City of Parramatta Council) / Parramatta (Parkopedia)

Findings

- **On-street parking shortages**
  In Liverpool CBD, most on-street parking achieves an 85% occupancy rate, leading to drivers circulating to find spaces, causing delays, congestion and increased emissions.

- **Off-street parking deficiency**
  Liverpool CBD has a lower off-street parking supply per employee (0.45 spaces/employee) compared to similar CBDs, leaving long-stay customers and staff underserved.

- **Customer diversion risks**
  Limited parking availability and high occupancy rates push customers to centres with ample parking, impacting businesses in Liverpool CBD.

Solutions

- **Stronger parking enforcement**
  Increase ticketed enforcement to reduce overstays, especially on streets serving multiple small businesses.

- **Dynamic parking guidance**
  Implement a dynamic parking information system via apps or digital signage to guide drivers to available spaces efficiently.

- **Boosting spaces**
  Encourage integration of publicly accessible off-street parking into new major developments to increase supply and accessibility.

A unified technological parking solution

As Sydney's parking needs become increasingly complex, the fragmented approach to parking solutions where different councils adopt separate systems and apps, creates a disjointed and frustrating experience for users.

Adopting a "Government as a Platform" (GAAP) model offers an innovative solution by enabling the collaborative development of digital public services through a community of partners.[17] A unified app based on this model is crucial to deliver a seamless and user-friendly parking experience across Sydney.

Park'nPay: transforming Sydney's parking experience

Launched by the NSW Government in early 2019, the Park'nPay app was designed to simplify parking by allowing users to pay directly from their smartphones, eliminating the need to visit physical meters. With features such as advance payment, expiration notifications, and real-time information on parking availability, Park'nPay quickly gained traction across the state.[18] It is currently available in over 40 suburbs, including The Rocks, Ryde, Double Bay and Liverpool.[19] Users can also suggest additional suburbs for future rollout through the app's website.[20]

Park'nPay is appreciated by its users for its convenience and efficiency, as it not only improves accessibility by providing information on disabled parking availability in real-time, but also supports emerging mobility needs, such as identifying electric vehicle charging stations. The app also enables visitors to national parks, for example, to conveniently purchase their vehicle entry fee online. As such, it has lots of potential to enhance visitor experience to tourism destinations and culturally significant institutions.[21] Nevertheless, recent discussions about potential budget cuts threaten the app's future, stirring public backlash from users who have come to rely on its streamlined service.[22]

Challenges with fragmented systems

Despite its success, Park'nPay is not universally adopted across Sydney's councils under a GAAP model, resulting in a fragmented parking experience. While many councils have integrated the app to enhance convenience, some have opted for alternatives, creating issues for motorists.

For instance, North Sydney Council's recent $2 million investment in a cashless system operated by PayStay has been met with criticism for its 8.25% transaction fee on each payment.[23] This surcharge, which is not prominently displayed, has sparked consumer complaints, with residents arguing that such fees obscure the true cost of parking and may violate Australian Consumer Law.

Alternative apps like EasyPark and CellOPark offer pay-as-you-go options but charge service fees ranging from 5–12% per transaction.[24] The NRMA is opposed to transaction fees being passed on to motorists by councils, who should ideally absorb the costs.
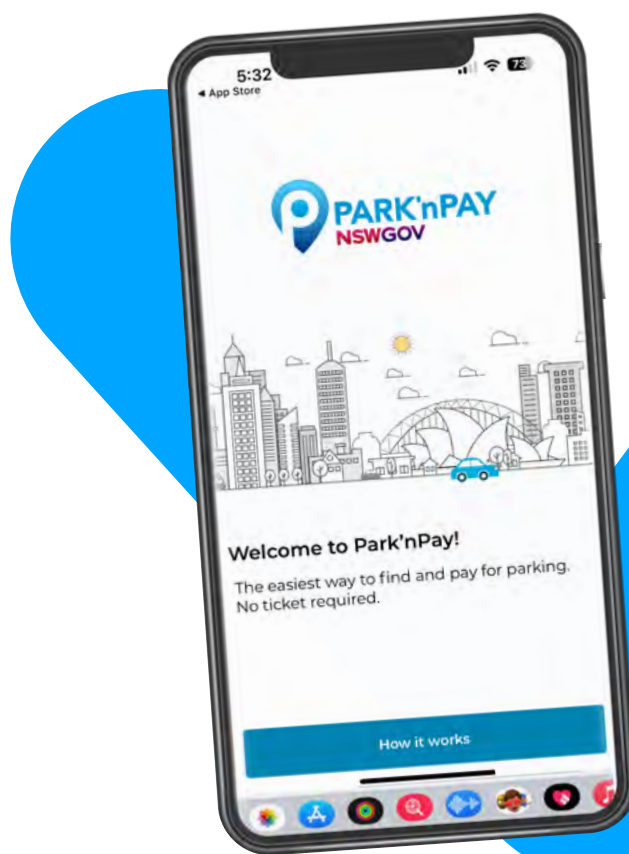
17   European Location Interoperability Solutions for e-Government Glossary, Accessed @ https://interoperable-europe.ec.europa.eu/collection/elise-european-location-interoperability-solutions-e-government/glossary/term/government-platform
18   Northern Beaches Council Park'nPay webpage, Accessed @ https://www.northernbeaches.nsw.gov.au/services/parking/parknpay
19   Press Release: Park'nPay Goes Live in Waverley, 2 December 2022, Accessed @ https://donate.nswliberal.org.au/news/park-npay-goes-live-in-waverley
20   Park'nPay Suggest Suburbs webpage, Accessed @ https://parknpay.nsw.gov.au/suggest-suburbs
21   NSW NPWS Day Passes webpage, Accessed @ https://www.nationalparks.nsw.gov.au/passes-and-fees/day-passes#:~:text=Available%20in%20select%20NSW%20national,pay%20again%20with%20Park'nPay.
22   Park'nPay app on NSW budget chopping block but FuelCheck spared, Sydney Morning Herald, September 13, 2023, Accessed @ https://www.smh.com.au/politics/nsw/park-npay-app-on-nsw-budget-chopping-block-but-fuelcheck-spared-20230912-p5e3xj.html
23   The man who took on North Sydney's parking meters and the 8.25% service fee, Sydney Morning Herald, October 22, 2024, Accessed @ https://www.smh.com.au/national/nsw/the-man-who-took-on-north-sydney-s-parking-meters-and-the-8-25-percent-service-fee-20241021-p5kjv1.html
24   Parking apps are sweeping Australia's cities. Here's what you need to know about them, ABC News Online, Jan 31, 2025, Accessed @ https://www.abc.net.au/news/2024-01-31/what-you-need-to-know-about-parking-apps/103405850
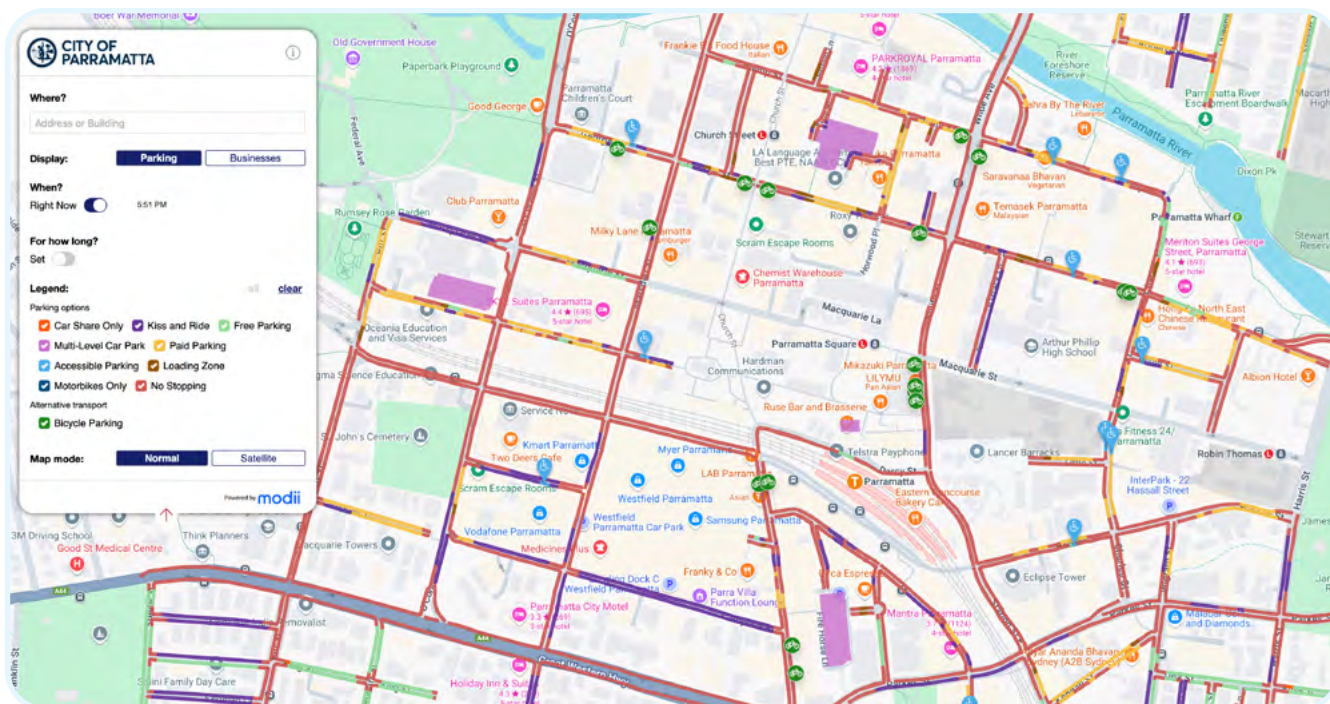
These apps also lack key features. The Parramatta Parking Finder app for example is limited to council-owned car parks, excluding many private ones like Westfield and Wilson Parking. It provides only approximate data for on-street parking due to unmarked bays and lacks historical usage data. The app is not integrated with other platforms like Park'nPay or Live Traffic and does not account for temporary parking changes of under a month, reducing its overall utility.[25]

The implications of these disjointed solutions extend beyond mere convenience, cost of living impacts or lack of features. Data privacy concerns arise, as these multiple apps collect sensitive user information as motorists travel around Greater Sydney and park at different spots. This danger has been highlighted by recent data breaches such as EasyPark's in Europe.[26]

A unified approach

Ideally, a unified app like Park'nPay, under a GAAP model, adopted across all Sydney councils, would streamline the parking experience by creating a consistent, motorist-friendly solution with no hidden fees and robust features. However, some councils may find this approach less suitable for their unique circumstances and operational needs.

While councils should retain the flexibility to employ any app technology that suits their needs, it is recommended that all platforms ultimately integrate into a unified system like Park'nPay, ensuring the best user experience for motorists. Although previous legislative efforts to implement this solution faced challenges, the NSW Government should continue to encourage a collaborative approach to achieve this goal and deliver a cohesive parking solution for the city.

25   Parking Wayfinding in the Parramatta CBD, Bitzios Consulting 2024
26   Hackers steal customer data from Europe's largest parking app operator, The Guardian, Dec 27, 2023, Accessed @ https://www.theguardian.com/technology/2023/dec/26/hackers-steal-customer-data-europe-parking-app-easypark-ringgo-parkmobile

Findings

- **Fragmented parking solutions**
  Sydney's parking experience is disjointed due to varying apps and expensive solutions adopted by different councils, creating frustration for motorists.

- **Data privacy concerns**
  Fragmented systems lack useful features and increase data privacy risks due to sensitive user information being shared across multiple apps.

Solutions

- **Unified app**
  A Greater Sydney wide adoption of a GAAP model app like Park'nPay, to streamline parking, eliminate hidden fees, address data privacy issues, and create a consistent, user-friendly parking system for Sydney.

- **Integration with Park'nPay**
  If full adoption is not feasible, feed real-time data from individual council apps, such as Parramatta Parking Finder, into a unified platform like Park'nPay to create a reliable citywide parking information system.

- **Enhance data coverage**
  Incorporate private car park information, temporary changes and real-time occupancy data to assist motorists.

Bitzios Consulting is a leading independent, specialist traffic engineering and transport planning consultancy with offices in Sydney, Brisbane and Gold Coast offices. They undertake projects for public and private sectors across Australia and internationally. In terms of parking expertise, Bitzios Consulting has delivered parking policies and strategies for local governments across QLD and NSW over the past 20+ years.