

Draft Parramatta CBD Parking Strategy

May 2021

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1. Executive Summary

'Parramatta is growing into Sydney's Central City – a strategic centre of services and infrastructure which will drive employment and growth for the whole Western Sydney Region.'

Parramatta Community Strategic Plan

As the Parramatta CBD grows, the strategic approach to parking needs to adapt to reflect the significant change contemplated in the Community Strategic Plan and evident through the current scale of development activity in the City.

The required adaptation in the parking strategy is influenced by the supply and demand factors arising from the CBD's growth and the City's strategic planning objectives detailed in the CBD Planning Proposal and Integrated Transport Plan.

Modelling using 2019 as the 'base year' (2020 is distorted by COVID19) adopting a 'do nothing' approach, indicates that the supply and demand factors create a parking deficit in future years. The investment (land and capital) required to maintain the 2019 level of parking, in future years, in the context of the CBD's growth, is significant and would require an additional five large multi-level car parks to be delivered by 2024/25.

Additional modelling on a post-COVID19 basis, with the same 2019 'base year' assumptions, but with reduced office occupancy arising from ongoing working from home (70% office occupancy) indicates a parking surplus out to 2024. Therefore, there is currently some uncertainty in respect to supply and demand factors which will become more apparent as business work/ staffing strategies are better understood.

The approach adopted in the draft CBD Parking Strategy is multi-faceted and recommends a combination of options to support the provision of parking in the Parramatta CBD. An important consideration in formulating the recommendations is the existence of two distinct parking markets:

- Short stay visitor parking (< 4 hours): supporting the visitor economy, local retailers and service businesses,
- Long stay commuter parking (> 4 hours): office workers driving to work.

2. Draft Parramatta CBD Parking Strategy – Objectives

The objectives of the Draft Parramatta CBD Parking Strategy are:

1. That the draft strategy support the objectives and strategic context of Council's Integrated

Transport Plan (Existing Situation and Future Direction, September 2020), in particular a balanced approach to modal shift:

Strategic response to Objective 1

- Taking a whole of CBD approach to parking to understand and influence the efficient/ effective use of private and public parking as a City-wide resource;
- Develop the optimum parking capacity and pricing strategy which supports reasonable availability, encourages modal shift and drives a higher level of utilisation of Council's parking infrastructure;
- Increase capacity, if required, through partnerships with owners of private parking assets where additional demand can be accommodated.
- 2. That the draft strategy supports Council's vision and priorities to create a City that is liveable, productive, sustainable and leading:

Strategic response to Objective 2

- Adopt technologies and applications that facilitates innovation and best practice management of existing parking infrastructure;
- Ensure the adequate availability of short stay parking to support the visitor economy, local retail and service industries.
- 3. That the overall customer experience in Council's multi-level car parks is improved:

Strategic response to Objective 3

- Develop a program of capital works to improve the aesthetics, functionality and customer experience of Council's assets.
- 4. That Council's approach to the management and provision of public parking reflects domestic and international best practice:

Strategic response to Objective 4

- Benchmark public parking supply and pricing to other major suburban Sydney CBDs to inform decision making in the context of the City's future growth trajectory;
- Understand current global trends in the innovative management of public parking, adopting those that will benefit the City and are appropriate in a local context.

5. That Council maximises the use of its parking infrastructure:

Strategic response to Objective 5

- Increase utilisation levels of Council's multi-level car parks, increasing the occupancy level to 90% (from 65% in 2019), through the introduction of smart parking technology.

3. Recommendations – Summary

The recommendations of this paper are detailed in Section 11, in summary they include:

Short term - 12 months

- Let the Smart Parking tender, including the multi-level car parks, accelerating the program from six to three months:
- Replace CBD directional parking signage;
- Car park management prepare a strategy to increase utilisation rates in the multi-level car parks to 90%:
- Progress negotiation with Parramatta Leagues Club and Rosehill Racecourse to secure an agreement to utilise spare capacity;
- Investigate further secondary sites that could provide supplementary parking;
- Initiate a whole of CBD approach to parking, to ensure an overall understanding of the occupancy and usage of all parking is understood;
- Convert Eat Street multi-level car park to visitor parking only (< 4 hours);
- Remain flexible and responsive to medium term impacts of COVID19.

Medium term - 12 to 24 months

- Increase the on-street metered parking on the City fringe to increase all day parking capacity;
- Reinvest capital in Eat Street, Parramatta Station and Justice to improve utilisation levels, functionality and customer experience. Incorporating electric vehicle charging stations in each multi-level car park as part of the capital upgrade;
- Install shade structures on the exposed upper decks of Eat Street, Parramatta Station and Justice, to facilitate use of these spaces. Incorporating photovoltaic cells in the shade structures at each of the multi-level car parks;
- Investigate the merits of introducing dynamic parking to determine the benefits of demand based pricing;
- Increase the price structure of long stay parking, consistent with other major suburban CBDs.

Long term - 24+ months

 Develop a feasibility for the redevelopment of Fennell Street as a commercial development, including public parking.

4. 2019 Base Year operational data - 2018/19 Financial year data

2019 Base Year operational data has been used in the analysis together with 2018/19 financial year data, with the impact of COVID19 on the operation and use of the car parking infrastructure from March 2020, distorting more current data.

2019 Parking supply

There are four providers of publicly accessible parking in the CBD:

- 1. Council owned multi-level car parks (MLCP):
 - Eat Street (Erby Place);
 - City Centre (Horwood Place)
 - Parramatta Station (Wentworth Street);
 - Justice (Hunter Street);
 - Riverbank (Phillip Street) this is now closed
- 2. Council on-street metered parking;
- 3. Westfield Parramatta;
- 4. Other privately owned public car parks across 21 locations.

The following table lists the static supply of publicly available parking in the CBD and relative control weighting:

Parking	# Spaces	% Controlled
On-street metered parking	2,208	
MLCP	3,622	
Council Total	5,830	42%
Westfield	4,661	34%
Private public parking	3,418	24%
Total public parking supply	13,909	100%
Private commercial office parking	13,000	
Total CBD public and private parking	26,909	

In addition to the publicly accessible parking there are approximately 13,000 car spaces in commercial office buildings.

a. 2019 use and occupancy of Council's controlled parking

The average weekday occupancy of the MLCP was approximately 65% (13% on weekends) with capacity within all MLCP.

Car park	Number of	Weekday	Weekend					
	spaces	Occupancy	Occupancy					
On-street metred parking	2,208							
Multi-Level Car Parks (MLCP):								
Eat Street	560	65%	19%					
City Centre	805	85%	17%					
Parramatta Station*	1,145	55%	8%					
Justice	516	73%	15%					
Riverbank	596	46%	7%					
Total MLCP	3,622							
Total Meters and MLCP	5,830							
		65%	13%					
* inclusive of Council staff who park in Parramatta Station on weekdays								

The function of the MLCP in accommodating short stay (visitor < 4 hours) and long stay (worker > 4 hours) is important in the context of the future loss of Riverbank (closed in February 2021) and City Centre car parks and the primary user that will be displaced on weekdays following their closure:

Car Park	% short stay (< 4 hours)	% long stay (> 4 hours)	Comment on role / function of the car park
Eat Street	72%	28%	Predominantly caters for visitors and supports local restaurants / business
City Centre	51%	49%	Evenly caters to visitors and workers
Parramatta Station	41%	59%	Caters more heavily to workers
Justice	38%	62%	Predominantly caters to workers
Riverbank	72%	28%	Predominantly caters for visitors and supports local restaurants / business
Average	56%	44%	

b. Car park utilisation and capacity

The actual number of available car spaces is influenced by the occupancy of the car park and the average number of times a car space is utilised (turned over) in a day. The following table illustrates the number of parking events per day of spaces utilised when:

■ The actual occupancy in 2019 and car space turnover rate is applied to derive the parking events per day ((Parking events per day = static parking number x occupancy %) x turnover per space per day):

2019 car park utilisation and capacity								
	Static parking numbers	Car park occupancy	Turnover/ space/ day avg.	Parking events/ day				
Eat Street	560	65%	1.85	673	377			
City Centre	805	85%	1.54	1,054	590			
Parramatta Station	1,145	55%	0.82	516	289			
Justice	516	73%	0.96	362	203			
Riverbank	596	46%	1.29	354	198			
On-street metered parking	2,208	80%	2.34	4,133	2,315			
Westfield - visitor	3,781	75%	3.00	8,507	4,764			
Westfield - casual permanent	880	100%	1.00	880	493			
*O'Connell Street	500	**80%	1.23	492	276			
*Other public parking	2,918	**80%	1.23	2,871	1,608			
Total public parking	13,909			19,843	11,112			
Available private office parking	13,000	100%	0	13,000				
T. (1000 1)	22.22							
Total CBD parking stock	26,909			32,843				
* No car space turnover data available applied Council average daily turnover of 1.23 times/ space								
		turnover or 1.23 till	103/ 3µa0 c					
** No occupancy data available, estimate used								

c. Use and function of on-street metered parking vs MLCP

The network of on-street parking spaces serves a variety of functions supporting business and visitors to the CBD:

- Time-limited short stay parking (< 4 hours) in the CBD core;
- Metered long stay parking (> 4 hours) in CBD fringe locations, including at-grade car parks;
- Accessible parking;
- Loading zones;
- Taxi zones.

Of the 2,208 on-street parking spaces 717 are metered 10 hour spaces on the CBD fringe that cater to long stay/ worker market. Of the remaining 1,491 on-street spaces, they are time limited from 30 minutes to 4 hours. Based on the time limits on these spaces, it is assumed they cater to the visitor/ short stay market.

Occupancy data indicates that the on-street network operates at around 80%. The MLCP network caters to the short stay/ visitor (< 4 hours) and long stay/ worker (> 4 hours) at a proportionate utilisation level of 56% and 44% respectively.

d. Mode of travel to the CBD

The preferred mode of travel by workers into the CBD in 2019 was private vehicle at 46% (REMPLAN data extrapolated from the 2016 census). This is reducing at each Census, having decreased from 54% in the 2011 Census (averaging circa 1% per annum).

Modal shift from private vehicle use to public transport, walking, riding to journey to work is fundamental to achieving Council's transport planning objectives of reducing peak hour congestion, creating an attractive and amenable CBD and supporting sustainable modes of travel.

The following table illustrates the progressive decrease in private vehicle use as the primary means of travelling to work.

Private vehicle as preferred mode of travel to work - Parramatta CBD							
2011 2016 REMPL							
Method of travel to work	Census	Census	2019				
Car as driver	54%	51%	46%				
% Variance to prior update		5.6%	9.8%				
Average variance per annum to prior update		1.1%	1.1%				

REMPLAN Economy Workforce

Industry Sector by Method of Travel to Work Work in region

Method of Travel to Work	Work in Parramatta CBD (2019 Release					
	Jobs	%				
(One method) Car, as driver	22,558	46.12%				
(One method) Train	8,783	17.96%				
Did not go to work	3,978	8.13%				
(One method) Bus	3,841	7.85%				
(One method) Car, as passenger	1,974	4.04%				
(Two methods) Train and Car as driver	1,821	3.72%				
(One method) Walked only	1,810	3.70%				
(Two methods) Train and Bus	1,748	3.57%				
Worked at home	591	1.21%				
(Two methods) Train and Car as passenger	431	0.88%				
(Two methods) Bus and Car as driver	305	0.62%				
(One method) Bicycle	174	0.36%				
(Three methods) Train and other two methods	172	0.35%				
(One method) Motorbike/scooter	172	0.35%				
Method of travel not stated	143	0.29%				
(Two methods) Bus and Car as passenger	90	0.18%				
(One method) Truck	90	0.18%				
(Two methods) Train and Other	62	0.13%				
(Two methods) Car and Other	61	0.12%				
(One method) Other	56	0.11%				
(One method) Taxi	26	0.05%				
(Three methods) Bus and other two methods (excludes train)	8	0.02%				
(Two methods) Train and Ferry	8	0.02%				
(One method) Ferry	4	0.01%				
(Two methods) Train and Tram	4	0.01%				
(Two methods) Taxi and Other	3	0.01%				
Total	48,911	100.00%				
Source: ABS 2016 Census of Population and Housing (Sci						

e. Future demand and supply impacts on public/ private parking

There are several factors that will progressively influence the demand and supply of public and private parking in the CBD over the next five years.

- 1. Parramatta Light Rail reduces parking supply:
 - Reduction of on-street parking, by permanently removing approximately 400 CBD locations along the length of the light rail network;
 - Parramatta Light Rail's use of the Fennell Street on-grade car park as a staging area, temporarily removes the Fennell Street on-grade car park (121 spaces) from the parking network until completion of construction in 2023.
- 2. Parramatta Light Rail reduces parking demand:
 - Adds another mode of public transport to the network from 2023. A very high-level estimate is that it could take 200 cars off the road network in the am. peak.

- 3. MAAS construction reduces parking supply:
 - Riverbank multi deck closed permanently to facilitate the construction of MAAS (8 February 2021), resulting in the loss of 596 car spaces, that predominantly served the short stay market.
- 4. Metro West station construction reduces parking supply:
 - City Centre multi deck will close permanently to facilitate the construction of the Metro station (October 2021), resulting in the loss of 805 car spaces, that equally service the short and long stay markets;
 - Removal of 26 on-street Ticket Parking Machines with the closure of Horwood Place.
- 5. Current and future office developments increases demand:
 - Delivery of approximately 385,000 square metres of additional commercial GLA progressively to the end of 2024 (construction commenced/ approved DAs), increasing worker numbers in the CBD.
- 6. The opening of the 189 Macquarie Street public car park increases parking supply:
 - The opening of 189 Macquarie Street provides an additional 715 publicly accessible car spaces
- 7. 3 Parramatta Square increases parking supply:
 - 80 additional public car spaces are dedicated to Council.
- 8. Organic growth in tourist visitation to the CBD increases parking demand:
 - Annual growth in tourist visitation to the CBD for leisure, recreation and cultural activity.
- 9. Increase in resident population increases parking demand:
 - Forecast increase in residential market of 2.97% average per annum (id Economics).

f. What is the 'right' amount of parking for the future?

Parramatta had provided one car space for every 1.8 workers in 2019, conversely Sydney CBD provides one car space for every six workers. We need a committed strategy on Sydney's part to manage CBD congestion, preserve amenity and meet sustainability objectives.

There is not a ratio or formula that is used to calculate the 'right' amount of parking for a CBD. Multiple factors come in to play:

- Access to public transport and the quality of the services provided;
- Quality networks to support cycling and walking;
- The availability of land for car park development;
- The access to capital for car par development and commercial hurdles;
- The urban design priorities;
- Land use planning objectives;
- Road network capacity and existing congestion;
- Traffic and transport priorities;
- Residential growth;
- Commercial growth.

The growth of the Parramatta CBD office market would require an additional five large multi-level car parks by 2024/25 to meet historical parking supply levels, primarily to accommodate the increase in office workers. This is impractical and unfeasible and inconsistent with planning, traffic and transport objectives.

The question becomes one of priorities, with the visitor/ tourist market most affected by a lack of parking. With these groups supporting the visitor economy and local business adequate availability of parking for their use is viewed as a priority.

Commuter parking is important but lower on the scale of priority. Parramatta has a high-quality public transport network which will be enhanced with light rail and the new Metro in future years to support access to the CBD.

5. Parking - supply and demand side impacts 2020 – 2024

Supply side impacts

The following table indicates the effect on the actual number of car spaces as the supply side is impacted from the factors identified in section 1e.

Council on-street metered parking / MLCP and other forecast supply							
	2019	2020	2021	2022	2023	2024	
	Car park numbers						
On-street metered parking	2,208	1,808	1,808	1,808	1,923	1,923	
Eat Street	560	560	560	560	560	560	
City Centre	805	805	805	0	0	0	
Parramatta Station	1,145	1,145	1,145	1,145	1,145	1,145	
Justice	516	516	516	516	516	516	
Riverbank	596	596	0	0	0	0	
189 Macquarie Street	0	715	715	715	715	715	
3 Parramatta Square	0	0	80	80	80	80	
Total	5,830	6,145	5,629	4,824	4,939	4,939	
Change to 2019		315	-201	-1,006	-891	-891	
% Change to 2019		5.4%	-3.4%	-17.3%	-15.3%	-15.3%	
% Change year on year		5.4%	-8.4%	-14.3%	2.4%	0%	

Demand side impact

CBD workers

The CBD worker population will increase progressively as commercial developments are completed, increasing the demand side for parking. REMPLAN estimated (section 1d) the CBD had a working population of 48,911 in 2019.

Knight Frank research estimated the office supply in the CBD in January 2020 was 768,400 square metres. The following table identifies the increase in commercial space as developments currently under construction are completed:

Forecast increase in CBD GLA										
	Knight Frank (Jan 2020)	2020	2021	2022	2023	2024*				
Increase in GLA (m²)	764,800	81,710	55,831	66,228	118,456	62,854				
Cumulative GLA (m²)		846,510	902,341	968,569	1,087,025	1,149,879				
Additional car spaces added annually		686	621	1.004	477	720				
* 2024 developments approved but not started / estimated additional car space										

To calculate the additional number of potential workers in the CBD as the office supply increases the following assumptions were adopted:

- An office vacancy of 3.2% (Property Council Office Market report January 2020 for the prior 6 months);
- 14 square metres per office employee (Cushman and Wakefield worker: area ratio range);
- 15% of workers were not in the office on any given day (estimate considering working from home, leave, illness, full week not worked).

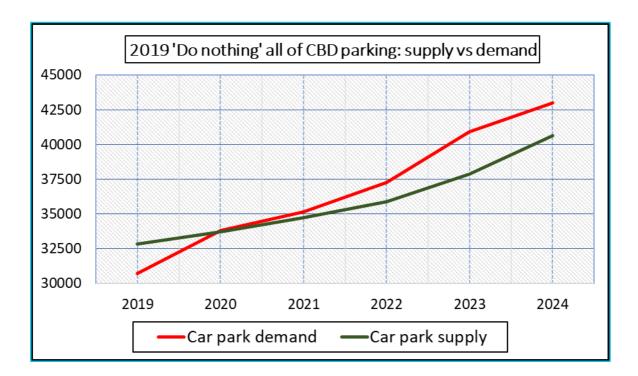
Adopting these assumptions on the increased CBD GLA, the increase in office workers would equate to:

Forecast increase in office workers										
	REMPLAN 2019	2020	2021	2022	2023	2024*				
Increase in CBD office workers	48,911	5,075	3,468	4,114	7,358	3,904				
Cumulative increase workers		53,986	57,454	61,568	68,926	72,830				
Annual % increase		10.38%	6.42%	7.16%	11.95%	5.66%				
	* 2024 developments approved but not started									

The potential increased demand for parking based on REMPLAN's assessment that approximately 46% of workers drive to the CBD is:

Forecast increase in parking demand									
REMPLAN 2019 2020 2021 2022 2023 2024*									
Increase in CBD office workers	48,911	5,075	3,468	4,114	7,358	3,904			
46% of workers drive to work		2,341	1,599	1,897	3,394	1,801			

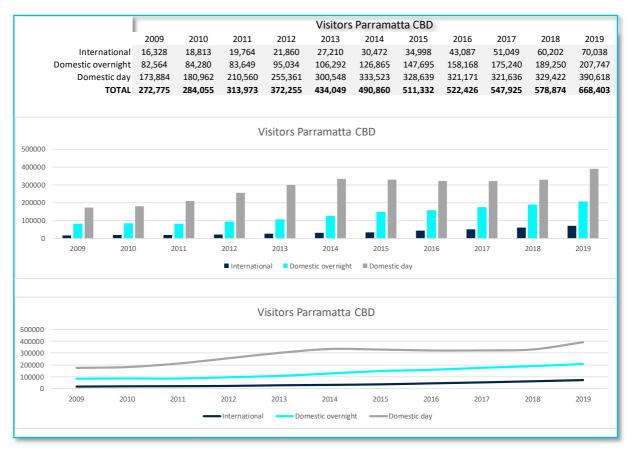
The following illustrates this growth graphically, indicating demand versus supply under a whole of CBD parking 2019 'do nothing' scenario:

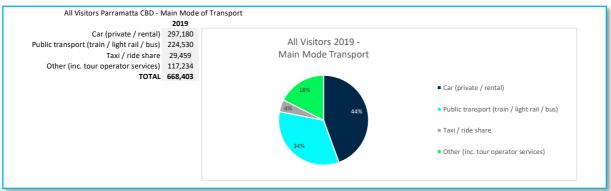


It is important to note the forecast increase in parking demand is a 'straight-line' extrapolation of the 2019 base year, it does not account for the impact of parking options and opportunities discussed later in this paper or the continued contribution of a modal shift from private vehicle use to public transport.

Tourists and Visitors to the CBD

REMPLAN estimated 1,831 tourist related visitations (International, domestic overnight and day trippers) per day to Parramatta in 2019 with 44% driving (806/day).





General non-work/ non-tourist related daily visitation numbers to the CBD during the weekday, excluding evening trade, is not a statistic that is captured in census, demographic or economic analysis of the CBD. To arrive at an estimate of 7,345 people per weekday general visitations to the CBD, excluding evenings, a few assumptions were made in respect to evening trade, late night trade on Thursdays and Fridays at Westfield Parramatta, Parramatta CBD, extended supermarket trade within Westfield Parramatta and other convenience-based businesses that trade outside core business hours.

The base assumption is that 56% of car park usage is by visitors based on data from Council's MLCP where the length of stay is < 4 hours, this is then adjusted to account for:

- Actual % visitation after 5pm on weekdays to Council's MLCP;
- Westfield Parramatta trades extended hours on Thursdays and Fridays with the supermarkets and discount department stores trading outside weekday business hours;

- O'Connell Street is assumed to cater 50:50 to short stay and long stay;
- It was assumed 'other public parking' was utilised 20% after 5pm.

These assumptions are represented in the following table:

2019 Car park visitor ut	2019 Car park visitor utilisation adjusted for evening trade, late night and extended trade and all day worker parking								
		-				Adjustment to	Estimated		
	Static parking numbers	Car park	Turnover /	Actual	Visitors @	account for	visitor numbers		
		occupancy	space / day	spaces	56% (as per	visitation after 5pm,	weekdays		
		occupancy	av.	utilised / day	CoP data)	extended trade, all	(excludes visits		
						day parking	after 5pm)		
Eat Street	560	65%	1.85	673	377	26%	279		
City Centre	805	85%	1.54	1,054	590	11%	525		
Parramatta Station	1,145	55%	0.82	516	289	6%	272		
Justice	516	73%	0.96	362	203	2%	198		
Riverbank	596	46%	1.29	354	198	12%	174		
On-Street metered parking	2,208	80%	2.34	4,133	2,315	50%	1,137		
Westfield - visitor	3,781	75%	3.00	8,507	4,764	70%	3,335		
Westfield - casual permanent	880	100%	1.00	880	-	100%	-		
*O'Connell St	500	**80%	1.23	492	276	50%	138		
*Other public parking	2,918	**80%	1.23	2,871	1,608	20%	1,286		
Total public parking	13,909			19,842	10,619	33%	7,345		
Available Private office parking	13,000	100%	0	13,000					
Total CBD parking stock	26,909			32,842					
* No car space turnover data av									
** No occupancy data available, estimate used									

Surplus parking supply / deficit 2020 – 2024 on Base Year 2019 data

Based on 2019 data and assuming no COVID19 (covered in section 4) as a 'do-nothing' scenario, a parking supply deficit arises in 2021 and continues in the following years, primarily because of the growth in CBD workers.

The demand pressure on parking under this 'do nothing' scenario is somewhat mitigated by the adoption of the options and opportunities in section 10.

	DO-NOTHING' SCENARIO							
Future parking supply surplus	deficit wit	h future su	pply and d	emand imp	acts - usin	g 2019 Bas	e Year	
		2019						
Demand side impacts:	Total / day	%driving	# driving	2020	2021	2022	2023	2024
CBD workers	48,911	46%	22,558	24,899	26,498	28,395	31,788	33,589
Tourism related visitation	1,831	44%	806	822	838	855	872	889
General weekday daytime visitation estimate by car	7,345	100%	7,345	7,563	7,788	8,019	8,257	8,502
Total driving	58,087	53%	30,708	33,284	35,124	37,269	40,917	42,981
Annual growth in total driving				8.4%	5.5%	6.1%	9.8%	5.0%
Total demand for parking			30,708	33,284	35,124	37,269	40,917	42,981
Total parking spaces utilised			32,843	32,843	32,843	32,843	32,843	32,843
Parking capacity at 2019 occupancy			2,135	- 441	- 2,281	- 4,426	- 8,074 -	10,138
Supply side impacts:								
Loss of metered parking				-400	-400	-400	-400	-400
Loss of Fennell Street				-121	-121	-121		
Return of Fennell St							121	121
189 Macquarie St car park online				715	715	715	715	715
Loss of Riverbank					-596	-596	-596	-596
Loss of City Centre						-805	-805	-805
Loss of Horwood Place meters						-26	-26	-26
3 Parramatta Square public parking					80	80	80	80
Cumulative Increase in commercial office parking			·	686	1,307	2,311	2,788	3,508
PLR reduction in a.m peak car use							100	200
Net supply impacts				880	985	1158	1977	2797
Potential overall surplus / deficit in parking n	umbers		2,135	439	- 1,296	- 3,268	- 6,097 -	7,341

To accommodate demand at historic parking levels a further five multi-level car parks would be required by 2024/25. This is neither practical from a land availability perspective or commercially viable.

7. COVID19

We are currently experiencing the short-term impact from COVID19 with businesses in the CBD operating at 20% to 40% of pre-COVID19 worker capacity, depending on the industry and specific individual workplace strategies.

Post COVID19, the likely permanent changes that will occur include:

- An increase in workers electing to work from home on a more regular basis, reducing trip volume into the CBD (indicative estimates of 1 to 3 days from home);
- The ratio of office worker to gross floor area is likely to increase to maintain social distancing protocols:
- A potential increase in the number of people choosing private vehicles over public transport to journey to work;
- A potential change in travel patterns, with workers travelling outside traditional am/ pm peaks,
 could change the historical demand pattern for public parking.

The table below considers a COVID19 scenario where 50% of office space (current and future) is occupied and public transport use decreases by 50% and transfers to private vehicle use. This indicates there is significant surplus parking with the current parking infrastructure.

		2019						
Demand side impacts:	Total / day	% driving	# driving	2020	2021	2022	2023	2024
CBD workers - pre COVID19	48,911	46%	22,558	24,899	26,498	28,395	31,788	33,589
CBD workers - post COVID19				19,637	20,437	21,386	23,083	23,983
Tourism related visitation	1,831	44%	806	822	838	855	872	889
General weekday daytime visitation estimate by o	7,345	100%	7,345	7,563	7,788	8,019	8,257	8,502
Total driving		53%	30,708	28,022	29,063	30,260	32,212	33,375
Annual growth in total driving				-8.7%	3.7%	4.1%	6.5%	3.6%
Total demand for parking			30,708	28,022	29,063	30,260	32,212	33,375
Total parking spaces utilised			32,843	32,843	32,843	32,843	32,843	32,843
Parking capacity at 2019 occupancy			2,135	4,821	3,780	2,583	631 -	532
Supply side impacts:			T					
Loss of metered parking				-400	-400	-400	-400	-400
Loss of Fennell Street				-121	-121	-121		
Return of Fennell St							121	121
189 Macquarie St				715	715	715	715	715
Loss of Riverbank					-596	-596	-596	-596
Loss of City Centre						-805	-805	-805
Loss of Horwood Place meters						-26	-26	-26
3 Parramatta Square public parking					80	80	80	80
Cumulative Increase in commercial office				686	1,307	2,311	2,788	3,508
PLR reduction in a.m peak car use							100	200
Net supply impacts				880	985	1158	1977	2797
Potential overall surplus / deficit in parking	numbers		2,135	5,701	4,765	3,741	2,608	2,265

a. Post COVID19

Working from home post COVID19 is expected to continue for most organisations. On the assumption that office occupancy reduces to 70% (from around 85% pre-COVID19) and the use of public transport returns to pre-COVID19 numbers, the following table indicates the CBD's parking surplus/ deficit on a reduced office occupancy. It indicates a deficit in 2023 onwards, assuming growth continues at 2019 forecasts.

POST COVID19 potential impact: 70%				fice occupa	ncy			
		2019						
Demand side impacts:	Total / day	%driving	# driving	2020	2021	2022	2023	2024
CBD workers - pre COVID19	48,911	46%	22,558	24,899	26,498	28,395	31,788	33,589
CBD workers - driving post COVID19					23,042	24,691	27,642	29,208
Tourism related visitation	1,831	44%	806	822	838	855	872	889
General weekday daytime visitation estimate by car	7,345	100%	7,345	7,563	7,788	8,019	8,257	8,502
Total driving		53%	30,708	33,284	31,668	33,565	36,771	38,600
Annual growth in total driving				8.4%	-4.9%	6.0%	9.6%	5.0%
Total demand for parking			30,708	33,284	31,668	33,565	36,771	38,600
Total parking spaces utilised			32,843	32,843	32,843	32,843	32,843	32,843
Parking capacity at 2019 occupancy			2,135	- 441	1,175	- 722	- 3,928	5,757
Supply side impacts:								
Loss of metered parking				-400	-400	-400	-400	-400
Loss of Fennell Street				-121	-121	-121		
Return of Fennell St							121	121
189 Macquarie St				715	715	715	715	715
Loss of Riverbank					-596	-596	-596	-596
Loss of City Centre						-805	-805	-805
Loss of Horwood Place meters						-26	-26	-26
3 Parramatta Square public parking					80	80	80	80
Cumulative Increase in commercial office parking				686	1,307	2,311	2,788	3,508
PLR reduction in a.m peak car use							100	200
Net supply impacts				880	985	1158	1977	2797
Potential overall surplus / deficit in parking r	numbers		2,135	439	2,160	436	- 1,951	- 2,960

The occupancy statistics of the Parramatta office market will become clearer as the vaccine is widely administered and provide a more definitive insight to the impact on parking demand.

The Property Council of Australia's recent office market vacancy rates, which shows a 1.8% increase in the Parramatta CBD (4.6% to 6.4%) in the six months to January 2021 does not reflect the underlying issue in the office market, with multiple institutional tenants, committed to long term leases, actively seeking to sublease multiple floors (in some instances up to 15,000 square metres).

8. Council parking financial overview

The financial contribution of on-street meters and MLCP to Council's income is detailed in the following table. The assumed timing of the impact of the loss of metered income, Riverbank and City Centre car park income is consistent with the long-term financial plan forecast, but, subject to program confirmation from MAAS and Metro West, may occur earlier.

Revenue

In the long-term financial forecast revenue is impacted in the following periods:

- Metered income: decreasing 2019/20 and 2020/21. Increasing 2021/22 and beyond;
- Riverbank: income is impacted in the 2020/21 Budget and no income is forecast in the 2021/22 Budget;
- City Centre: income is impacted in Q4 2020/21 financial year and no income is forecast in the 2021/22 Budget.

	Car park revenue and expenses: Actual & Budget					
	2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024
	Actual	Actual	Budget	Budget	Budget	Budget
Revenue	\$17,818,979	\$15,570,649	\$8,903,131	\$15,185,374	\$13,571,506	\$13,684,838
Expenditure	\$4,134,489	\$4,073,077	\$4,334,425	\$3,885,425	\$3,148,293	\$3,168,493
Net operating income	\$13,684,490	\$11,497,572	\$4,568,706	\$11,299,949	\$10,423,213	\$10,516,345

Depreciation and amortisation for the metered parking is included in the annual expenditure. This base revenue forecast will benefit from the introduction of options and opportunities that increase the utilisation of existing assets and expansion of the on-Street metered parking network, covered in the options and opportunities section 10.

Capital

A capital expenditure allowance has been made in the long-term financial plan for life cycle management, risk and compliance works in the MLCP. The current and forecast budgets include \$250,000 for 2020/ 2021 (with approximately 91% committed); \$250,000 for 2021/ 2022; \$200,000 in both 2022/23 and 2023/24.

9. Parking price structure in the CBD

Pricing of parking is a key consideration as supply reduces and demand increases. Particularly in a growing CBD with private vehicle being the predominant means of travel to work for CBD office workers (46% of office workers in 2019 + 4% as a passenger). Having a long stay-parking rate that encourages use of public transport is important to ensure there is sufficient short stay parking available to support the visitor economy, local retailers and service businesses.

Council's multi-level pricing structure is largely consistent across its assets in the 1-4 hour short stay visitor period, and generally slightly less than privately operated public car parks.

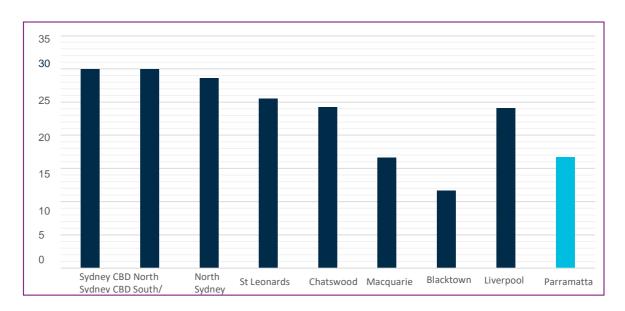
The rate varies significantly for 5 - 12 hour long stay commuter parking, primarily office workers, with a range of \$14/day to \$21/day across Council's multi-decks. The higher rate is generally consistent with privately operated public car parks, which typically range from \$21 to \$26/day.

	Со	uncil car park charges	- weekday	
Hours	Eat Street	Parramatta Station	Justice	City Centre
0 -1	\$3	\$3	\$3	\$3
*1 - 2	\$6	\$6	\$6	\$6
*2 - 3	\$10	\$9	\$9	\$10
*3 - 4	\$13	\$12	\$12	\$13
*4 - 5	\$17		\$15	\$17
*5 - 6				
*5 - 12	\$21			\$21
*4 - 18		\$14		
*5 - 18			\$18	
*12 - 24	\$26			\$26
*18 - 24		\$25	\$25	

Parramatta Westfield offers two hours free parking for general visitors, four hours free for Westfield members. After the free parking period rates increase incrementally each half hour, to a maximum of \$50 per day.

By comparison to other major Sydney suburban CBDs, Council's early bird (long stay) multi-level rates are significantly lower, with Chatswood and North Sydney charging \$24 to \$28 per day respectively.

The following table (prepared by Jacobs for the Integrated Transport Plan) illustrates the variance in charges for long stay parking across Sydney business hubs:



The daily public transport rate cap for Greater Sydney (Opal card) is \$16.10. Council's early bird parking charge of \$14/day in Parramatta Station multi-level makes driving an attractive option over public transport, in some instances.

Parking pricing / Parking demand elasticity:

Elasticity is the percentage change in consumption that results from each 1% change in price.

Recent studies (*Victorian Transport Policy Institute, Understanding Transport Demands and Elasticities, Todd Litman, March 2019*) indicates the price of parking has an elasticity range of -0.3 to -0.6 on parking demand.

On this range:

- -0.6: a 10% increase in price = 6% reduction in parking demand
- -0.3: a 10% increase in price = 3% reduction in parking demand

Parking pricing / Parking demand elasticity is influenced by socio demographic factors, travel distances, industry type, employment base and cost of public transport relative to cost of parking. Parramatta is likely to sit at the higher end (-0.6) of the scale.

Using price as a lever to encourage long stay (office workers) to use public transport has a minimal impact unless the price is increased significantly. If the price of long stay parking increased to \$21 across Council's multi-level car parks the reduction in cars using the car parks is around 100 per day.

Increasing the long stay rate in line with other suburban CBDs to \$24/day has the effect of reducing office worker use of parking by around 250 per day (across Eat Street, City Centre, Parramatta Station, Justice). As the working population increases in future years it is appropriate to increase the long stay (> 4 hours) pricing structure to manage the demand pressure on the existing multi-level car parks.

The pricing of short stay visitor parking (< 4 hours) across the CBD is largely consistent, except for Westfield which has 2 hours free parking (4 hours for members). Short stay visitor parking is critical to support the visitor economy, local retailers and service businesses, we recommend no change to the current pricing structure, with annual incremental increases in line with inflation.

10. Opportunities and Options

With the future supply and demand side impacts to parking in the CBD, several opportunities and options have been identified that cater to potential future demand shortfalls and better utilise existing parking infrastructure.

a. Increased utilisation of existing MLCP

2019 average occupancy across the MLCP was 65%, with Parramatta Station 55%, Eat Street 65% and Justice 73%. There is capacity in each of these three MLCP to increase utilisation. Increasing the occupancy in these MLCP to 90% (at current turnover rates) delivers an additional 670 spaces per day and approximately \$2.340 million in revenue per annum (based on 2019 actuals).

There are some constraints to driving utilisation levels that need to be addressed:

The top decks of the MLCP are exposed to the elements, deterring patronage, particularly in hotter months (October to March). There are approximately 350 spaces that are not utilised on these top decks. Providing a form of shade structure will be necessary to encourage use. This will require capital investment to progress this option.

Top Deck images:

Justice



Eat Street



Parramatta Station



- The current MLCP technology platforms are unable to provide information to users at entry on car space availability, location of available spaces and number of available spaces. This level of information is critical to increase patronage to a targeted 90% occupancy, particularly to fill upper levels;
- The current MLCP technology platforms are incapable of providing real time data to the operators to understand overall occupancy, occupancy by level, usage patterns, peak demand and. Real time information that is important to the management of and driving performance of the assets.

b. Introduction of current technology (on-street and MLCP)

The current technology used to manage the on-street and MLCP is outdated and lacks the functionality of modern parking facilities. Council has prepared a tender to engage a contractor(s) to deliver an integrated smart parking system across its on-street and off-street parking network, to leverage current technologies to improve the delivery of parking services in the CBD. The tender will be issued to the market.

The tender process is planned to run for six months, from commencement of the process to implementation of the preferred tenderers technological platforms. The tender document sets out the technological capabilities of the smart parking system to be capable of:

- Providing real time occupancy data;
- Offer predictive modelling functions to determine parking availability across on and off-street locations;
- The ability to monitor car park data in real time, to accurately understand parking behaviour and efficiency;
- Dashboard capability to display historical data and trends for a pre-determined (hour, day, week, month) or chosen duration of time (specific date or date range) at one, several or all geographic areas (street, precinct or entire CBD);
- Dynamic pricing (or real-time pricing) capability to more efficiently use parking spaces within the Parramatta CBD, to leverage captured real-time data across Council's on and off-street parking environments to implement parking fees based on a range of conditions;
- Payment systems that include web link, app based, handheld or desktop devices;
- Payment systems that include the ability to accommodate pre-booked and/or pre-paid parking and provide a remote top-up function;
- The payment system must be capable of 'next day' payment of revenue to City of Parramatta.

The most current car park technology is critical to maximising the operation and performance of the onstreet and off-street car parking infrastructure.

To compliment the improved operational outcomes from current technology in the day-to-day operation of the car parking infrastructure, electronic/ dynamic way finding signage is required on approach to the CBD and within the MLCP, to direct parkers to available parking and communicate availability of parking within the MLCP.

c. Continued modal shift to public transport and away from private vehicle use

The continuation in modal shift to public transport and other means of sustainable transport from private vehicles reduces parking demand and is a key objective of Council's Integrated Transport Plan (targeting 40% of office workers using private vehicle as the primary means of travelling to work by 2036 versus the current 46% of workers).

Modal shift can be accelerated through pricing of the long stay (> 4 hours) parking utilised by office workers. The current long stay parking rates are significantly less than major suburban CBDs across

Sydney. The current range in long stay rates ranges from \$14/day to \$21/day in Council's multi-level car parks. A rate of \$24/day is more in line with comparable suburban CBDs.

Adoption of this rate increase based on parking elasticity contributes to a marginal reduction of around 250 cars per day.

d. Capital upgrade to MLCP assets

Reinvestment in the physical assets to compliment a technological upgrade is important to address safety perceptions, appearance/ aesthetics, lighting, line marking, vertical transportation and way finding to drive occupancy levels.

A comprehensive scope of works is required for Eat Street, Parramatta Station and Justice to support a business case for a capital upgrade to improve the level of amenity, appearance and functionality of these assets.

An estimated \$10 million would be required to deliver a comprehensive capital upgrade to the multi-level car parks. A funding source could include allocation of capital from the sale of the City Centre car park post compulsory acquisition. The car park experience is often the first impression visitors to the CBD have of the City.

The current physical experience is poor, with the following photos illustrating this:









e. Whole of CBD approach to parking

Council has control of and insight into 42% of the public/ public private parking in the CBD. It is important to understand demand, pricing, trends, occupancy, usage across the entire CBD parking network (including commercial office), to understand parking from a whole of CBD perspective.

Westfield Parramatta control 34% of the public/ public private parking in the CBD. They advise their multideck in under-utilised on weekdays (approximately 75% occupancy). Centre Management have indicated they would be prepared to commit resourcing to analyse their parking surplus with a view to increasing the current 880 spaces allocated daily to all day casual parkers.

A whole of CBD approach to parking would include private operators (for example, Wilsons and Secure), private operators of public parking, public operators of public parking (Parramatta Park Trust), large commercial operators (for example Jones Lang La Salle, CBRE) and technology companies that currently provide parking via apps (for example DIVVY).

There is the potential for this review to make additional public private parking available to CBD workers.

f. Secure CBD fringe sites to cater to increased demand

There is potential to utilise the spare capacity of privately operated car parks on the City fringe, particularly Parramatta Leagues Club and Rosehill Racecourse.

The Parramatta Leagues car park (pictured below) has 860 car spaces. In meeting with the Leagues Club CEO, he indicated a willingness to make available 200 spaces for commuter parking, in the upper decks. They have the technology to regulate the use by commuters and manage collection of fees. The specifics of how the arrangement would operate could be pursued if this option is supported.



The Rosehill Racecourse has significant surplus parking (highlighted in red in the below map) along the James Ruse Drive boundary of the site, potentially 600 spaces. The GM of Venue Operations has indicated that they would support use of the surplus parking by CBD commuter parkers.

There is some detail to be resolved, in respect to their 2021 forward bookings that occasionally occupy these car parks and the cost of logistics to transport commuters from these carparks. Further discussion around management and operations will be required if this option is supported.



Additional secondary sites are under investigation, including Sydney Olympic Park, Westmead and Western Sydney University, that could provide supplementary parking capacity.

g. Dynamic pricing of MLCP

The introduction of current technology provides an opportunity to align the price paid for parking with parking demand versus the current model where the pricing is static, irrespective of demand.

Dynamic parking has been implemented in North America (Washington DC and Los Angeles are examples). Real time data is required to determine if this strategy is valid, until the existing technology is updated it is not possible to determine the positive and negative benefits of this approach.

Further evaluation of this option is required, post the introduction of a Smart Parking system, which will provide real time data to understand fluctuation in demand by time of day, day of week and time of year, to assess the merit and effectiveness of this approach.

Car park pricing structure

The current pricing structure for the short stay (< 4 hours) is generally consistent across the CBD (Council and privately operated multi-level car parks), as this supports the visitor economy, local retail and service businesses, it is recommended that the rates be indexed annually to CPI.

The rates for long stay (> 4 hour) commuter parking vary between Council and privately operated multilevel car parks (\$14/ \$21 vs \$21/ \$26 respectively). When benchmarked against other major Sydney suburban centres Council's rates are significantly lower, and in the case of Parramatta Station are below the daily OPAL card cap of \$16.10. There is an opportunity to increase the long stay rates, progressively in 2022, to encourage the use of public transport and provide additional parking for short stay visitor parking.

h. Convert the Eat Street MLCP to short stay parking to cater to visitors only

The predominant use of Eat Street is by short stay/ visitor parking with 72% of its weekday usage less than 4 hours. This suggests many patrons of the Eat Street multi-level are supporting the visitor economy, local retailers and service businesses.

The loss of Riverbank displaces circa 255 short stay/ visitor users. Converting Eat Street to < 3 hour parking only, gives it the capacity to absorb the visitor parking from Riverbank. Capacity in Parramatta Station and Justice could accommodate the long stay/ workers currently using Eat Street.

The price structure to convert Eat Street parking to 3 hour short stay is identified in the table below.

Hours	Current Price	Proposed 3P prices
0-1 Hrs	\$3.00	\$3.00
1-2 Hrs	\$6.00	\$6.00
2-3 Hrs	\$10.00	\$10.00
3-4 Hrs	\$13.00	\$20.00
4-5 Hrs	\$17.00	\$25.00
5-12 Hrs	\$21.00	\$35.00
12-24 Hrs	\$26.00	\$45.00
Lost Ticket	\$27.00	\$50.00

Implementing this option will require a considered communications plan and management strategy to redirect workers to other parking options (187 Macquarie, Justice, Parramatta Station and O'Connell Street).

i. Introduce additional long stay metered parking on the City fringe

Capacity exists on the City fringe to increase the number of +10 hour parking areas for worker parking.

An additional 200 – 250 on-street metered spaces could be introduced to the road network. Refer to attached updated plan that provides additional car-parking street locations.

j. Consider adding three levels of parking to Eat Street

An option exists to add additional parking levels to the Eat Street multi deck, accommodating up to 1,000 additional cars.

Hyder undertook a technical investigation of this option in 2018 concluding that it was structurally feasible. The additional decks are illustrated in 'red' below.



Long term it is not the highest and best use of the site. Under the 2011 LEP the potential, with Design Excellence, is to develop the site with a GLA of 52,900 square metres to a height of 138 metres (under the CBD Planning Proposal the height is only limited by the sun access plane, potential GLA of circa 92,000 square metres).

Further considering the disruption to the CBD car parking network and capital out lay in the order of \$15m, impacts the viability of the project.

k. Redevelop Fennell Street as a car park/ commercial development

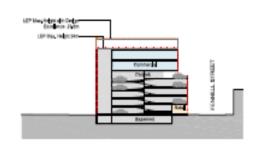
Council's Fennell Street on-grade car park has the potential to be redeveloped as a multi-level car park and commercial development. The sites location on the Northern City fringe and proximity to a light rail stop makes it a feasible location for public parking.

Based on the 'do nothing' pre-COVID19 modelling a parking deficit arises in future years that may support a decision to increase the provision of public parking. However, a decision should be deferred until a more complete understanding of the post-COVID19 CBD office market and usage patterns is established

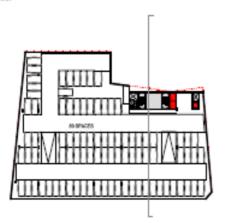


	2011 LEP	2011 Uplift for Design	2019 CBD Planning	2019 PP uplift for Design
		Excellence	Proposal	Excellence
Site Area	3,317	-	3,317	-
Maximum	2:1+3:1=2.44:1	+15% =	2:1+3:1=2.44:1	+15% = 6.9:1
FSR		2.81:1	Incentive to	
			6:1	
Maximum	15m / 24m	+15% =	15m / 24mk	+15% =
Height		17.25m /		17.25m /
		27.6m		27.6m
Land Use	B4 Mixed Use	-	B4 Mixed Use	
Zoning	+ SP2		+ SP2	
	Infrastructure		Infrastructure	
Maximum	8,079	9,291	19,902	22,887
FSA				
Target GBA	35,238	40,524	22,362	25,716



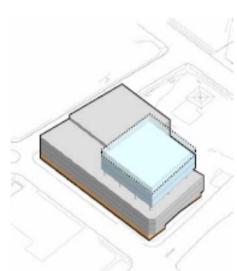


Typical Commercial Floor Section



Typical Podium Floor







11. Recommendation

It is recommended that the opportunities and options be prioritised based on:

- 1. Short term (12 months) Can be progressed immediately;
- 2. Medium Term (12 24 months) Require additional planning to facilitate delivery;
- 3. Long term (+ 24 months) Require significant planning, design development, financial analysis and project feasibility.

In respect to funding the recommendations, it is recommended that \$10 million from the property reserve be allocated for their implementation, subject to comprehensively scoping the works and relevant capital approval processes.

Short term - 12 months

- Let the smart parking tender, to deliver the latest technology to improve the management, control and operation of the on and off-Street parking infrastructure. The tender process currently envisages an initial trial of on-Street parking. The tender should incorporate the multi-level car parks and the current tender program compressed from six to three months.
- Install an electronic/ dynamic car park way-finding and directional signage system in the CBD that provides directional signage on approach to the CBD to identify parking availability on a whole of City parking basis (and remove the existing wayfinding signage that refers to City Centre car park);
- Car Park Management prepare a strategy to drive the utilisation rates of the MLCP from 65% weekday occupancy to 90%, in consultation with Secure Parking in readiness to implement the strategy when the smart parking tender is let;
- Progress negotiations with Parramatta Leagues Club and Rosehill Racecourse to secure an agreement to utilise spare parking capacity for commuters at their facilities;
- Investigate further secondary sites with the capacity to provide additional supplementary worker parking, including Sydney Olympic Park, Western Sydney University and Westmead;
- Initiate a whole of CBD approach to parking, partnering with Westfield, Secure and Wilsons parking and other major operators of public parking with the intention of better utilising the City's overall parking assets;
- Convert Eat Street to visitor parking only (< 3 hours), relocating commuter parking to Parramatta Station and Justice multi-level car parks.

Medium Term - 12 - 24 months

 Increase the on-street metered parking network, on the streets identified to have capacity, to provide additional long stay parking on the CBD fringe;

- Reinvest capital in Eat Street, Parramatta Station and Justice car parks to improve utilisation levels, functionality, aesthetics and presentation. Incorporate electric vehicle charging stations in each multi-level car park as part of the capital upgrade;
- Install shade structures on the exposed upper decks of Eat Street, Parramatta Station and Justice car parks to facilitate use of these spaces. Incorporate photovoltaic cells in the shade structures at each of the multi-level car parks;
- Investigate the merits of dynamic pricing and car park pricing structure for Council's on and offstreet CBD parking to determine the benefits and risks associated with demand based pricing;
- Progressively increase the pricing structure for long stay (> 4 hours) office worker parking in the multi-level car parks from circa \$21/ day to \$24/ day.

Long term - 24+ months

- Develop a feasibility for the redevelopment of the Fennell Street on-grade car park for a commercial development, including public parking;
- Investigate the potential to amalgamate Fennell Street with TfNSW adjoining site for redevelopment, inclusive of public parking.

Resourcing recommendation

To implement the recommendations dedicated Council staff will be required to;

- Develop design, briefs and scopes of work;
- Develop programs and staging plans;
- Undertake financial analysis;
- Prepare business cases and PRC reports;
- Develop and implement communications plans;
- Prepare contracts;
- Negotiate contracts;
- Prepare and let tenders;
- Manage the delivery of capital works.

12. Draft Implementation Plan

Delivery of the short, medium and long-term recommendations will require:

- Identification of the source of capital and allocation;
- An allocation and dedication of Council staff (intensively for 12 months) to:
 - Develop design, briefs and scopes of work;
 - Develop programs and staging plans;
 - Undertake financial analysis;
 - Prepare business cases and PRC reports;
 - Develop and implement communications plans;
 - Prepare contracts;
 - Negotiate contracts;
 - Prepare and let tenders;
 - Manage the delivery of capital works.

The following is a high-level implementation plan to deliver the short, medium and long-term recommendations:

Short term: 12 months

Smart Parking Tender

- Progress the tender and Stage 1 evaluation process to finalise Smart Parking (on current program by June 2021);
- Prepare a business case for review by the PRC for the additional capital required to deliver the recommended Stage 2 (currently unbudgeted) of the Smart Parking tender (incorporating the MLCP);
- Develop an implementation plan and program, in conjunction with the external car park manager, for the coordinated implementation of the Smart Parking tender;
- Dedicate Council delivery resources (and request external manager dedicate resources) for implementation of the Smart Parking infrastructure;
- Prepare a communications plan to progressively inform car park users of the proposed changes.

Electronic / dynamic wayfinding signage

- Develop a brief, scope of works and budget for the installation of electronic/ dynamic signage (that can be integrated with the smart parking software) on approach to the CBD and within the MLCP;
- Prepare a business case for review by the PRC, to approve capital for the installation of the electronic/ wayfinding signage and removal of existing wayfinding signage;
- Prepare a tender for the electronic/ dynamic wayfinding signage;

- Let a contract for electronic/ wayfinding signage tender;
- Dedicate Council resourcing to manage the electronic/ dynamic wayfinding installation.

Management focus on increasing occupancy from 65% to 90%

- Develop a management and communications plan to utilise the upper decks for long stay/ commuter parking and lower decks for short stay visitor parking;
- Develop a brief, scope of works and budget to install additional hardware on the upper decks to manage and regulate long stay/ commuter parkers on these levels;
- Prepare a business case for the PRC to allocate capital for the installation of the additional hardware;
- Prepare a tender for the additional hardware;
- Let a contract for additional hardware;
- Dedicate Council resourcing to manage the additional hardware installation
- Implement the communications plan to facilitate long stay / commuter parkers to the upper decks.

Secure agreements for the use of supplementary parking

- Council staff to prepare a logistics and management strategy for the implementation of a supplementary parking arrangement:
 - Operating parameters;
 - Transport to and from the CBD to supplementary car parks;
 - Communications plan;
 - Budget;
 - Management framework (internally or externally managed);
 - Capital required to make Rosehill Racecourse feasible (boom gates, line marking, security etc);
 - Implementation plan;
 - Additional Council resources to implement and ongoing management;
 - Pricing structures;
 - Analysis of financial implications;
 - Timing for implementation;
 - Insurance implications;
 - Legal implications;
 - Viability analysis;
 - Form of agreement and extent of obligation;
 - Recommendation for ET approval.
- Progress discussion with Parramatta Leagues and Rosehill Racecourse on the terms of use and logistics of utilising their spare parking capacity;
- Finalise a licence agreement to formalise the use of the supplementary parking;
- Implement supplementary parking arrangement consistent with the logistics and communications strategy.

Investigate the potential for additional supplementary parking within the LGA

Investigate the potential to secure additional supplementary parking at Sydney Olympic Park,
 Western Sydney University and Westmead;

 Initiate discussion with relevant executives to determine the viability of the additional supplementary parking locations.

Initiate a whole of CBD approach to parking

- Define the objectives and benefits of a whole of CBD approach to parking;
- Identify the relevant stakeholders that could contribute to the benefits of a whole of CBD approach to parking;
- Draft a MOU for the relevant stakeholders:
- Initiate discussion with the stakeholders and execute MOUs.

Convert Eat Street to short stay visitor parking only

- Establish a transition plan to convert Eat Street to short stay;
- Establish a communications plan to transfer long stay worker parking to Parramatta Station and Justice car parks.

Medium term: 12 - 24 months

Increase on-street metered parking on the CBD fringe

- Finalise the plan of streets with the capacity to accommodate on-street meters;
- Prepare a business case to support the logistics, resourcing, capital and operating costs associated with additional meters;
- Submit the business case for the consideration of the PRC;
- Prepare a communications plan for Council, for consideration of the proposal;
- Prepare a community consultation plan for consideration of the proposal;
- Prepare an installation and management plan;
- Proceed with the installation of the additional meters.

Capital reinvestment in Parramatta Station, Eat Street and Justice car parks

- Define the scope of works and indicative budget for the proposed works;
- Document the scope of works and design brief;
- Commission the design of the proposed scope of works;
- Prepare a business case defining the scope of works, capital requirements, program, resourcing and benefits from a capital reinvestment in the MLCP;
- Submit the business case for the consideration of the PRC:
- Prepare a tender for the works and issue for contract pricing;
- Let the tender and commission the works.

Investigate the merits of dynamic pricing and car park pricing structure

- Further investigation of demand management for on and off-street parking is required to determine
 if implementing a dynamic parking model is suitable in the management of the CBD parking
 infrastructure;
- There are international examples (San Fransisco and Los Angeles) that require further analysis as
 to their effectiveness in improving the efficient use of on and off-street parking infrastructure;

• Further analysis of pricing structures and price-timing bands is to be undertaken to determine appropriate pricing for on and off-street parking.

Progressively increase long stay commuter rates in the multi level car parks:

- Establish the appropriate rate increase to include in Council's annual rate increase;
- Prepare a communications plan for implementation.

Long term: + 24 months

- Prepare a feasibility for the redevelopment of Council's Fennell Street site to determine merits of the proposal, including:
 - Planning matters;
 - Design options;
 - Market demand;
 - Capital cost;
 - Investment metrics;
 - Program.
- Evaluate the merits in recommending progression of the development opportunity
- Initiate discussion with TfNSW for the adjoining site to determine the merits in a combined development opportunity.

13. Conclusion

Future demand for public parking, in particular office worker parking, cannot be met by a pro-rata increase in supply based on 2019 data. The current rate of office worker growth would require an additional five multi-level car parks by 2024/25, on a 2019 'do nothing' approach.

A solution to the provision of public parking to accommodate growth relies on a multi-faceted approach outlined in sections 10 (Opportunities and Options), 11 (Recommendation) 12 (Draft Implementation Plan) together with the allocation of capital to support implementation.

The Draft CBD Parking Strategy will remain a 'live' document to be updated and amended as the market recovers from the impact of COVID19 and any ongoing consequences on the demand for parking in the CBD are understood. If working from home were to continue, as anticipated, post COVID19 and office occupancy levels were 70%, the CBD parking infrastructure has the capacity, in the short term, to accommodate future parking demand (Table section 4a), taking into consideration the supply and demand impacts.

14. Consultation

Internal and external consultation was undertaken with the following to seek their input and insights in the preparation of the draft strategy.

External:

Ken Kanovski – traffic and parking consultant (peer review of draft strategy)

Local Member for Parramatta – Geoff Lee

Parramatta Chamber of Commerce – Schon Condon

Economic Planning Committee – attending members (9 September 2020)

Westfield Parramatta Centre Manger - Adam Dillon

Jones Lang La Salle - Margaret Bolshinsky

Secure Parking - Tony McMahon

Australian Turf Club - Matt Sharman

Parramatta Leagues Club - Bevan Paul

Metro West - David Hobart

Parramatta Light Rail - Tim Dewey

Transport for NSW - Lara Kirchner

Internal:

Executive Team

City Strategy

Corporate Services

City Assets & Operations

City Planning and Design

Property & Asset Services Unit

Property & Place - Place Services

15. Appendices

a. Source data

The following table is a summary of the statistics, data and source of information used in the preparation of the draft CBD parking strategy:

Statistics, data and	Source	Data used
information		
CBD worker numbers	REMPLAN Economics	48,911 (2019) 46.12% drive: 22,558
CBD tourist visitation mode of travel	REMPLAN (2019 International, domestic overnight, day tripper)	1,831 average per day - 44% travel by car = 806 / day (grown at 2%pa)
CBD visitors arriving by car (weekday only, to 5pm excluding evening trade)	No statistical data is collected on general weekday visitation to the CBD. Assumptions made having regard to evening visitation to restaurants, extended trade at Westfield, extended Westfield supermarket night trade. Using Council base data that 56% of car park usage is < 4hours visitor usage 1. Council MLCP data indicates entry after 5pm as follows: a. Eat Street 26% b. City Centre 11% c. Justice 2% d. Parramatta Station 6% e. Riverbank 12% 2. Meters excludes all day parking, assumed worker utilisation 3. Westfield adjusted by 30% to account for late night trade and extended supermarket trade and utilisation by workers using the 4-hour free opportunity 4. O'Connell Street is predominantly long stay and was adjusted by 50% 5. Other private public parking assumes 80% of use is daytime	7,345

Posidontial growth rate	id Economics	2.97%pa
Residential growth rate	la Economics	2.97%pa
(adopted CBD visitor growth rate)		
Workers mode of travel to work in	REMPLAN Economics	46.12% (2019) car as driver
the CBD		
	Council approved DAs – adjusted to	2020: 81,710 sqm
Increase in office GFA to calculate	reflect GLA, vacancy, proportion of	2021: 55,831 sqm
increase in workers	workers not in the office (working from	2022: 66,228 sqm
	home, leave, etc) worker to space ratio	2023: 118,456 sqm
		2024: 62,854 sqm (DAs)
		Total: 385,079
	Applying the Property Council	Additional office workers – 46.12%
Increase in office workers resulting	2019 vacancy rate of 3.2%	driving:
from increase in GLA	2. 15% of office not occupied due to	2020: 2,341 (5,075 total)
	work from home, leave, not	2021: 1,599 (3,468 total)
	working full time	2022: 1,897 (4,114 total)
	3. GLA/ 14 square metres per	2023: 3,393 (7,358 total)
	employee – Cushman &	2024: 1,801 (3,904 total)
	Wakefield	
	Council approved DAs	2020: 686
Additional office car parking	2. 2024 adopted 2011 PLEP:	2021: 621
associated with additional GLA	'Maximum of 1 space / 100	2022: 1,004
	square metres of GFA'	2023: 477
		2024: 720 estimate
Total Commercial Market size	Knight Frank Research March 2020	768,421 sqm as at January 2020
2019 Office vacancy rate (all grades)	Property Council of Australia Office	3.2% (6 months to January 2020)
	Market report January 2020	
	Council paid parking	3,622: Multi Level car parks 2019
Public car park numbers		2,208: on-street meters 2019
		Council total: 5,830
		8,079: privately owned public parking
		2019
		(Westfield 4,661 spaces)
Total Public Car Park numbers	Council paid parking	13,909
% Council managed public parking	5,830 / 13,909 = 41.92%	42%
% Westfield public parking	4,661 / 13,909 = 33.51%	34%
Westfield car park occupancy and	Westfield Parramatta Centre	Weekday occupancy 70% - 80% (75%
usage	Management	used). 660 spaces allocated to staff,
ū	Ŭ.	200 spaces allocated to permanent
		casual parkers, 160 allocated to valet.
		, , , , , , , , , , , , , , , , , , , ,

Commercial office parking	Council paid parking	13,000
Car park net income	Council Finance (Karen Asanza)	Net income: 2018/19: \$13,684,490 A 2019/2020: \$11,497,572 A 2020/2021: \$4,568,706 B 2021/2022: \$11,299,949 B 2022/2023: \$10,423,213 B 2023/2024: \$10,696,345 B
Amendment to Staff Parking policy	Council paid parking	Forecast impact to revenue and car park utilisation not included.
Increases/ decreases in parking numbers	Metro West – City Centre / PLR – on- street meters / MAAS - Riverside / 189 Macquarie – actual / Commercial parking – DA approvals	Market information on actual and proposed impacts.
Car park turns	Council Paid Parking Westfield Parramatta Centre Management	Number of cars that entered the car park/ number of available spaces