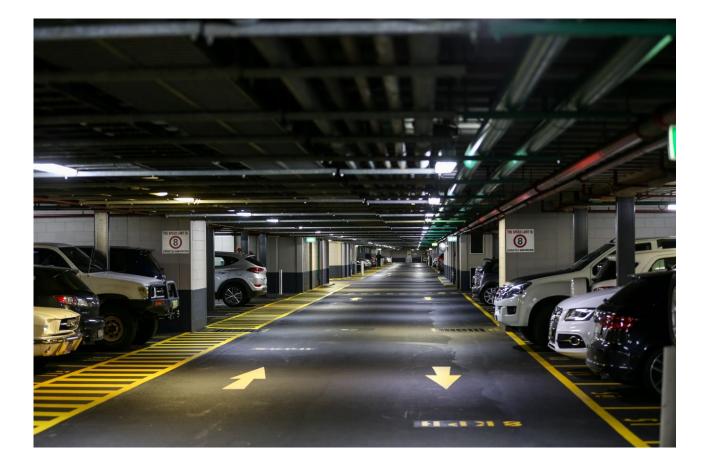


Appendix C – Parking Rates Update



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Executive Summary

The City is updating the maximum parking rates in Sydney Local Environmental Plan 2012 (the LEP) that apply to new development. The new rates incorporate updated car ownership and usage data, and respond to changes in this data since the rates were last updated.

This report documents the data and methodology used to develop the new parking rates. It is intended to be exhibited alongside the new rates.

This report deals with the maximum amount of parking that can be provided in off-street, on-site parking facilities within new commercial, retail, hotel, residential, industrial and other development. It does not deal with on-street parking.

The new parking rates do not apply to existing developments, only for new development applications lodged after the LEP is made.

Parking rates for dwellings should be reduced

The report finds car ownership rates in the city are lower than the current maximum rates of provision for parking in residential development, and recommends they be reduced accordingly.

The reduced rates are focused on high accessibility areas and smaller apartments, as they are where the biggest discrepancies between ownership and current rates are. Larger apartments and apartments in low accessibility areas are less affected. Single dwellings are unchanged.

Parking rates for businesses in high accessibility areas should be reduced

The report finds people who work in Sydney CBD are half as likely to drive to work than they were for the 2011 census, when the current rates were developed. Public transport improvements associated with the City and South East Light Rail and the new Sydney Metro will further reduce the need to drive into the city for work or services.

The report recommends creating a new location category for non-residential development in Central Sydney, and setting lower parking rates for the category. It also recommends reducing maximum parking rates for commercial development in high accessibility areas outside Central Sydney, and hotel development in medium and high accessibility areas.

Parking rates for industrial, warehouse, retail and commercial development in medium and low accessibility areas is recommended to remain unchanged.

Background

The City's current parking rates were developed in 2010 and implemented as part of Sydney LEP 2012. The City is updating the maximum parking rates that apply for different types of new development as part of an update to Sydney LEP and DCP 2012.

The City's parking control is a maximum parking rate. That means the rates in the local environmental plan are the maximum a development can provide. A development may provide fewer parking spaces than the maximum, including no parking.

This report is positioned within a general understanding in contemporary transport planning that accommodating private cars encourages private car usage, and that unnecessary private car usage should be avoided due to its adverse traffic congestion, environmental, health and social impacts. Providing parking is one of the primary ways in which private cars are accommodated within the urban environment.

This update is to ensure parking provision in new developments reflects the community's current rates of private car ownership and car usage, and that there is not an overprovision of parking that would result in excess private car usage. This report uses the latest reliable data from the Census and other sources to match car ownership and usage with different development and dwelling types. Where possible, the City sets parking rates at slightly below current ownership levels, recognising that the overall trend is downward over time.

The 2016 Census has been used as the basis for this analysis. The 2021 Census was not used, as it was taken during the height of international border closures for Covid-19, which significantly skewed the demographic makeup of the City of Sydney and made the car ownership data unreliable for use.

Acknowledging that accessibility is not evenly distributed across the local area, the City's parking controls refer to accessibility categories. Broadly, parking rates are higher in lower accessibility areas. In the planning controls these are referred to as Land Use and Transport Integration (LUTI) for residential, and Public Transport Accessibility Levels (PTAL) for everything else. PTAL maps accessibility to and frequency of public transport services, while LUTI also includes walking accessibility to nearby services. In the controls LUTI is graded as A, B and C, and PTAL is graded as D, E and F. In this report they will usually be referred to as high, medium and low accessibility areas. Current maps are available on the City's Planning Controls Viewer at: https://geomap.cityofsydney.nsw.gov.au/gxe/?viewer=Planning

Updating the accessibility area mapping to reflect new public transport infrastructure is the subject of a separate but related review of the planning controls.

Residential parking

Existing framework

Sydney LEP 2012 sets parking rates for residential apartment buildings by apartment type, based on the number of bedrooms.

To calculate the total maximum number of parking spaces an apartment building may provide, take the number of studio, 1 bedroom, 2 bedroom and 3+ bedroom apartments, multiply them by their respective maximum rates, and add the results together. The total amount of parking spaces can be allocated to apartments in any way the developer chooses.

The example at Table 1 demonstrates how parking rates are calculated, using the current maximum parking rates for LUTI A.

Apartments	Parking spaces
Studio: 15	15 x <mark>0.1</mark> = 1.5
1 bedroom: 50	50 x <mark>0.3</mark> = 15
2 bedroom: 118	118 x 0.7 = 82.6
3+ bedroom: 18	18 x 1 = 18
Total	117.1, rounded to 117

Table 1. Example of calculating car parking

Case for change

When supply of parking in new residential developments is higher than car ownership it has many detrimental effects. Basement car parking is expensive to deliver and adds to the cost of new housing, and lighting and air circulation adds to the energy demands and operational expenses of apartment buildings. Owners are also incentivised to rent out car spaces they do not use, which can become commuter parking for people working in the local area and contributes to peak hour trip generation and congestion, undermining the maximum parking controls for commercial office and business premises, and controls restricting new commercial car parks.

To understand whether the current maximum parking rates represent an oversupply compared to car ownership, data from the 2016 Census was analysed to show car ownership by apartment type in each accessibility area. The results are shown in Table 2 below.

Appendix C - Parking Rates Update

LUTI A	Car ownership (average)	LEP 2012 maximum rates
0bd	0.12	0.1
1bd	0.31	0.3
2bd	0.56	0.7
3bd+	0.75	1
LUTI B		
0bd	0.18	0.2
1bd	0.48	0.4
2bd	0.77	0.8
3bd+	1.08	1.1
LUTI C		
0bd	0.36	0.4
1bd	0.71	0.5
2bd	1.00	1
3bd+	1.31	1.2

Table 2. Car ownership rates per accessibility area and apartment type compared with LEP 2012 maximum rates

The current rates differ from car ownership by approximately +/- 30% of standard deviation from the mean.

Where the current LEP parking rate is about equal or less than current car ownership, the rates are proposed to be kept the same. The instances where the rate is similar or higher than car ownership for that category warrant further investigation, and a decrease may be recommended.

If there is a reason to anticipate growth in necessary car ownership then a parking rate category may be maintained above existing car ownership rates. For example, the City supports families living in apartments in the inner city, so the rate for 3+ bedroom apartments in LUTI A is proposed to be kept unchanged even though it is significantly higher than current ownership rates.

Where existing ownership is higher than the current LEP parking rates, the new rates have not been increased to align with ownership, and where rates are similar, a small reduction is proposed. This is because the Census captures all existing dwellings including a significant stock of old apartment buildings with generous parking provision. The new parking controls are future-focused and are intended to build on the 2012 controls and support a broad trend towards reducing car ownership.

Recommended rates

The recommended rates for residential flat buildings, dual occupancies and multi dwelling housing are shown below at Table 3. Where they are proposed to change the existing rate is crossed out, where they are not changing there is only one number shown.

	LUTI A	LUTI B	LUTI C
Studio	0.1	0.2 0.15	0.4 0.3
1 BD	0.3 0.25	0.4	0.5
2 BD	0.7 0.5	0.8 0.7	+ 0.9
3+ BD	1	1.1 1	1.2

Table 3. Recommended maximum parking rates for multi-dwelling housing

Apartments with 3 or more bedrooms in LUTI A are being kept at 1 parking space per apartment. This is the existing rate and is slightly generous compared to car ownership rate of 0.75 cars per household in that category. The rate is recommended to support and encourage a shift to inner city apartment living among families. This demographic may have a higher requirement for parking than existing residents of large inner city apartments.

Houses

In Sydney LEP 2012 maximum parking rates for dwelling houses, attached dwellings and semidetached dwellings are one or two per dwelling, depending on LUTI accessibility category and the size of the dwelling (in bedrooms). All houses in LUTI A have a maximum one per dwelling, and all houses in LUTI C have a maximum of two per dwelling. Houses in LUTI B with one or two bedrooms have a maximum of one per dwelling, whereas larger houses with more than two bedrooms have a maximum of two per dwelling. This is illustrated in table 4.

Houses	LUTI A	LUTI B	LUTI C
2 bedrooms or less	1	1	2
3 or more bedrooms	1	2	2

Table 4. Current maximum parking rates for houses

As a result of changes to the extent of the LUTI categories, some houses may change categories and as a result have a lower maximum parking rate. While the planning controls do not affect existing development, substantial renovations requiring a development application would trigger assessment against the new parking controls and could result in a loss of parking. This is not intended as part of the review.

Unlike apartment buildings built after 1996, many houses are eligible for two on-street parking permits under the Neighbourhood Parking Policy. While the loss of parking from two to one space may result in some reduction in car ownership, the availability of parking permits means the reduction could also spill over into additional demand for on-street parking.

To avoid this outcome and simplify the parking controls for houses, the proposed new rate is a flat maximum of two parking spaces per dwelling. This is shown at Table 5.

While the proposed rate results in an increase in potential parking rates for houses in the LUTI A category and small houses in the LUTI B category, the City does not expect any significant growth of new housing stock to be in the form of detached, semi-detached or attached dwellings, so the traffic implications from the increased maximum parking rate are very minor. Because the rate is a maximum, for practical reasons of site size and lot layout, renovations and rebuilds of properties with one or no parking spaces will likely elect not increase the amount of parking.

Houses	LUTI A	LUTI B	LUTI C
2 bedrooms or less	4 2	42	2
3 or more bedrooms	42	2	2

Table 5. Proposed maximum parking rates for houses

Business parking

Existing framework

Sydney LEP 2012 sets maximum parking rates for business premises and office premises, using NSW Standard Instrument definitions for commercial development.

The maximum amount of parking for office premises and business premises is calculated in two ways, depending on the size of the development. For small developments the amount is calculated based on the amount of floor space, and for large developments the amount is calculated based on the site area of the development. The rates, and the trigger for large development, differ according to accessibility category. The existing rates for smaller developments are shown at Table 6.

PTAL D	PTAL E	PTAL F
for buildings under 3.5:1 FSR:	for buildings under 2.5:1 FSR:	for buildings under 1.5:1 FSR:
1 per 175 sqm	1 per 125 sqm	1 per 75 sqm

Table 6. Current maximum parking rates for business premises and office premises

For developments larger than the respective floor space ratio cut off in each accessibility category, a formula applies. That formula is the same for each accessibility area, and equates the maximum number of car spaces to the proportion of site area used for businesses and offices divided by 50. The formula is shown below.

$$M = \frac{(G \times A)}{(50 \times T)}$$

where -

M is the maximum number of car parking sapces, and

G is the gross floor area of all office premises and business premises in the building in square metres, and

A is the site area in square metres, and

T is the total gross floor area of all buildings on the site in square metres.

The equation takes into account mixed use buildings. The part of the equation where A is divided by T gives the proportion of total GFA being used for offices and businesses. If a development is exclusively offices and businesses, then the A over T section cancels out, and the equation works as shown below.

$$M = \frac{G}{50}$$

Or in words, the site area divided by 50.

The equation keeps the amount of parking steady as floorspace increases above the FSR cut off. This is illustrated in Table 7.

Floor space (GFA in sqm)	Site area (in sqm)	FSR X:1	PTAL F 1 per 75sqm	PTAL E 1 per 125sqm	PTAL D 1 per 175sqm
500	1000	0.5	8	4	3
750	1000	0.75	10	6	4
1000	1000	1	13	8	6
1250	1000	1.25	17	10	7
1500	1000	1.5	20	12	9
			Site area/50		
1750	1000	1.75	20	14	10
2000	1000	2	20	16	11
2250	1000	2.25	20	18	13
2500	1000	2.5	20	20	14
				Site area/50	
2750	1000	2.75	20	20	16
3000	1000	3	20	20	17
3250	1000	3.25	20	20	19
3500	1000	3.5	20	20	20
					Site area/50
3750	1000	3.75	20	20	20
4000	1000	4	20	20	20

Table 7. Relationship between per square metre rate and site area rate

Case for change

To determine whether a change to office and business car parking is necessary, the transport context of people driving to work in the local area has been analysed. This is distinct from car ownership, and because the City of Sydney is an employment centre for Greater Sydney, must account for transport behaviours of people who do not necessarily live in the local area. There are a few key areas to examine in this regard including Census Journey to Work data, and the changed context of recent and planned public transport projects.

Low and medium accessibility areas

The City has a broad objective of encouraging growth of employment floorspace in strategic locations outside Central Sydney, including Green Square Town Centre and the Southern Enterprise Area.

These areas do not benefit from being the centre of Greater Sydney's radial transport network, so public transport access for workers from diverse parts of Sydney, including within the local area, is not as reliable.

Therefore, there is no proposed change to the parking rates that apply within the low and medium accessibility categories.

Census Journey to Work data

The Census asks how people travel to their place of work, and what area they work in. Taking the answers involving a private vehicle (both as driver and passenger) for those who work in Central Sydney provides a reliable, big picture modal split figure for workers in the city, regardless of where they live.

The office and business parking rates in Sydney LEP were developed prior to 2010, when the 2006 Census would have been the most up to date data available. Comparing the modal split from 2006 to 2016 provides a useful trend to understand broader shifts in travel patterns.

The comparison in the Journey to Work data is shown in Table 8. It shows a 26 per cent increase in public transport (all modes), a 14 per cent increase in active transport, and a 50 per cent reduction in private vehicle usage.

Mode	Place of Work: Sydney (C) – Inner 2006	Place of Work: Sydney, Haymarket, The Rocks SA2 2016	Change
PT (all modes)	56.32%	70.91%	+26%
Vehicle (driver and passenger)	26.85%	13.47%	-50%
Active (walk and cycle)	5.96%	6.77%	+14%
Other	1.56%	0.35%	-78%
WFH/Didn't go to work	8.57%	7.73%	-10%
Not stated	0.74%	0.77%	+4%
Total	230,575	320,828	

Table 8. Comparison of modal split for Inner Sydney workers between 2006 and 2016

Changed transport context

Central Sydney has seen a markedly changed transport context with the completion of the George Street light rail in late 2019, and the opening of Sydney Metro through Central Sydney in 2024.

Changes to parking rates

The existing parking rates for businesses and offices in high accessibility areas do not reflect these changes to modal split in recent years, both as a result of public transport improvements and behaviour change.

To ensure the planning controls continue to discourage non-essential private vehicle usage, the City is proposing reduced maximum rates of parking provision in high accessibility areas.

A new area category for Central Sydney is proposed, taking into account the area's unique concentration of transport connectivity and high level of competition for street space from active transport, economic functions and essential private vehicle use. The proposed new parking rates for the new Central Sydney area are shown at Table 9, and work out to be approximately half the existing rate of parking provision when using real world examples.

PTAL D (existing)	Central Sydney (proposed)
for buildings under 3.5:1 FSR: 1 per 175 sqm	for buildings under 3:1 FSR: 1 per 300 sqm
for buildings over 3.5:1 FSR: $M = \frac{(G \times A)}{(50 \times T)}$	for buildings over 3:1 FSR: $M = \frac{(G \times A)}{(100 \times T)}$

Table 9. Comparison of existing and proposed maximum parking rate for business premises and office premises in Central Sydney

In high accessibility areas outside Central Sydney the parking rate for offices and businesses is proposed to decrease by a lesser extent. The proposed new parking rates for offices and businesses in the PTAL D area are shown at Table 10, and work out to be approximately two thirds the existing rate of provision when using real world examples.

PTAL D (existing)	PTAL D (proposed)
for buildings under 3.5:1 FSR: 1 per 175 sqm	for buildings under 3:1 FSR: 1 per 225 sqm
for buildings over 3.5:1 FSR: $M = \frac{(G \times A)}{(50 \times T)}$	for buildings over 3:1 FSR: $M = \frac{(G \times A)}{(75 \times T)}$

Table 10. Comparison of existing and proposed maximum parking rate for business

premises and office premises in PTAL D area

These rates are consistent with the changes in modal split shown in the 2016 Census and more recent TfNSW data, and will help ensure development is not creating unnecessary trip generation and traffic impacts on local roads.

The proposed new rates will also ensure the forecast growth of commercial floor space in Central Sydney and in City Fringe areas will be supportable and sustainable. Increased development capacity for commercial and employment uses unlocked by the Central Sydney Planning Strategy and other precinct planning proposals will enable significant growth of new floor space for office and business premises. The proposed readjustment of maximum parking rates in line with the latest data will ensure the anticipated growth does not cause unsustainable traffic impacts.

The proposed new rates are designed to work within the existing parking rates structure for business uses. This is illustrated in Table 11 below. This table also shows the reduction in parking for PTAL D and Central Sydney for development over the FSR cap when compared to PTAL F and E, which was not a feature of the previous parking controls.

Floor space (GFA in sqm)	Site area (in sqm)	FSR X:1	PTAL F 1 per 75sqm	PTAL E 1 per 125sqm	PTAL D 1 per 175sqm	Central Sydney 1 per 300sqm
500	1000	0.5	7	4	2	2
750	1000	0.75	10	6	3	3
1000	1000	1	13	8	4	3
1250	1000	1.25	17	10	6	4
1500	1000	1.5	20	12	7	5
			Site area/50		0	0
1750	1000	1.75	20	14	8	6
2000	1000	2	20	16	9	7
2250	1000	2.25	20	18	10	8
2500	1000	2.5	20	20	11	8
				Site area/50	0	0
2750	1000	2.75	20	20	12	9
3000	1000	3	20	20	13	10
					Site area/75	Site area/100
3250	1000	3.25	20	20	13	10
3500	1000	3.5	20	20	13	10
3750	1000	3.75	20	20	13	10
4000	1000	4	20	20	13	10

Appendix C – Parking Rates Update

Table 11. Relationship between per square metre rate and site area rate (proposed)

Retail parking

Existing framework

Sydney LEP 2012 sets out maximum parking rates for retail premises.

In the low and medium accessibility areas, the maximum amount of parking spaces is calculated according to gross floor area. In the lowest accessibility area that is a maximum of one space per 50 square metres of retail floor space, and in the medium accessibility area a maximum of one space per 60 square metres.

In the highest accessibility area the rate is one space per 90 square metres, unless it is within a building with a floor space ratio of over 3.5:1. For these buildings, the rate is calculated the same as office and business premises, with a site area-based formula equating to the proportion of site area used for retail premises divided by 50.

Case for change

For the highest accessibility area, the floor space ratio cut off of 3.5:1 is intended to align with the parking controls for office and business premises. As shown in **Error! Reference source not found.** 12, it is proposed to change this to 3:1, and the rate of provision to site area divided by 75, in line with proposed changes to office and business parking rates in PTAL D. This will reduce the amount of parking permissible for retail developments in large buildings in the highest accessibility area. Research into parking provision for retail in Central Sydney and the highest accessibility areas outside Central Sydney has shown very little to no parking is typically provided for retail premises, so the impact of this reduction is limited.

There is not proposed to be a new rate for Central Sydney, so the PTAL D rate will continue to apply in Central Sydney. The PTAL D rate is shown at **Error! Reference source not found.**.

PTAL D	PTAL E	PTAL F
for buildings under 3.5:1 3:1 FSR: 1 per 90 sqm	1 per 60 sqm	1 per 50 sqm
for buildings over 3.5:1 3:1 site $M = \frac{(G \times A)}{(50 \ 75 \times T)}$		

Table 12. Proposed maximum parking rates for retail development

Hotels and serviced apartments

Existing framework

Sydney LEP 2012 sets a maximum rate of parking provision for developments with 'serviced apartments' and 'hotel or motel accommodation', using NSW Standard Instrument definitions.

The maximum amount is one car parking space per four bedrooms, for the first 100 bedrooms. After the first 100 bedrooms, the rate is one space per five bedrooms. The rate is the same across the local area, without differences for accessibility.

Case for change

Rates based on accessibility category are necessary to recognise the different roles of hotels in different parts of the local area. Hotels in Central Sydney rarely provide parking, but if they were to provide at the existing rate it would represent a large provision compared to the demand from guests, and there is the potential to commercialise the parking spaces with adverse impacts on peak hour traffic. However, hotels outside Central Sydney with reduced access to public transport and the airport may have guests who have arrived by car and require the use of a car during their stay.

Analysis of hotel developments over the past decade in the local area shows they typically provide very little or no parking, however those that do provide parking deliver the maximum available. Therefore it is important to verify the maximum rate available is still suitable and would not encourage unnecessary private vehicle trips if delivered in full.

The controls use the terminology of "bedrooms", rather than hotel rooms. This terminology has been the subject of some misunderstanding and has been applied inconsistently in development applications. The distinction is less evident in hotels and motels, but creates significant distortions when applied to serviced apartments, which typically have larger dwelling sizes.

The "stepping down" of the parking rate at 100 bedrooms has also been the source of some misunderstanding and inconsistent application.

New hotel parking rates

The proposed new rates for hotels and serviced apartments are shown at Table 13. The proposed maximum parking rates include distinctions for Central Sydney and the three accessibility categories outside Central Sydney. The rates are per key (or hotel room) not bedroom. Finally, the proposed rates are flat regardless of scale, ending the step-down after 100 bedrooms.

Central Sydney	PTAL D	PTAL E	PTAL F
1 per 10 keys	1 per 5 keys	1 per 5 keys	1 per 4 keys

Table 13. Proposed maximum parking rates for hotel development

The combination of the lower rates and only counting room keys delivers about a 50% reduction in parking spaces for hotels in Central Sydney, and a one third reduction in other areas.

