

ALICE SPRINGS
Central Activity District

Parking Evaluation and Recommendations

November 2009



This Document has been prepared for
The Northern Territory Government
Department of Planning and Infrastructure

Level 1 Cavenagh House
Cavenagh Street
DARWIN
NT 0801

This Document has been prepared by

Design Urban Pty Ltd

77 Wattle Road
Hawthorne
MELBOURNE
Vic 3122



INTRODUCTION AND BACKGROUND

This document has been prepared in response to the Alice Springs Urban Design Audit prepared by the City of Melbourne and Design Urban in February 2009. In this audit it was stated that, *“The coherence of the public realm is in danger of being lost and irreparable damage done to the quality of the townscape as a direct result of the demolition of buildings in favour of surface car parking. An audit of the amount of parking provided relative to the amount required is urgently needed to establish the reality of the parking requirement.”* The characteristics of parking in Alice Springs were identified as threats to the social, economic performance of the centre and the quality of experience and attraction of the CAD, and stated that, *“If more surface car parking is created within the Alice Springs Central Activity District, the coherence of the town centre and its streetscape is likely to be lost. At the moment the town centre is finely balanced and the amount of surface parking needs to be clawed back.”*

The purpose of this document therefore is to evaluate whether the number and character of parking spaces in the Alice Springs CAD are sufficient and are contributing to the social and economic prosperity of the town centre.

This parking study follows in a line of previous studies. While most of these were focussed on numbers of parking spaces relative to growth of the town centre and occupancy of parking spaces, few are focussed on the urban design impacts of the provision of parking.

The most recent parking audit of Alice Springs was conducted in December 2004 by Cardno Willing for the Alice Springs Town Council. The study concluded that, *“The parking occupancy surveys have demonstrated that sufficient overall parking is available within the CBD, however, some modifications are required to improve the usage of these spaces”*. This audit discussed future parking arrangements and recommended that, *“the construction of a multi storey car park on Council’s Hartley Street Car Park is considered the most appropriate location for additional public parking. Previous studies have also recommended this location. The timing of construction of the facility is dependent on the future growth of the town. It is likely that such a facility is required in the 5-10 year period”*.

The Urban Design Audit of 2009 identified this central parking area as a key opportunity to create a new public open space with associated buildings. While this proposal and the concept of a multi-deck car park may appear to be in conflict, they are in fact mutually compatible and the development may provide the financial viability to create a new underground public parking area, a new public space and adjacent development to grow the town centre in a sustainable manner.

During September 2009, staff from Design Urban conducted an on-site audit of the number, type and location of parking lots throughout the Central Activity District (CAD). This report summarises the findings and recommendations following that audit.

PARKING SURVEY METHODOLOGY

The Alice Springs CAD was divided into street segments and blocks as shown in Figure 2. below. On-street and off-street parking bays, either on the surface or in parking structures were counted and assigned to each block and street.

In parallel, land uses and number of building storeys were recorded for later desktop analysis and measurement from an AutoCAD base to determine the “fit” between the existing land uses, parking requirements of the Northern Territory Planning Scheme, and the amount of parking actually provided. It should be noted that the measured building areas are gross areas and not net floor areas. This distorts the figures by approximately 20% and areas have been adjusted accordingly.

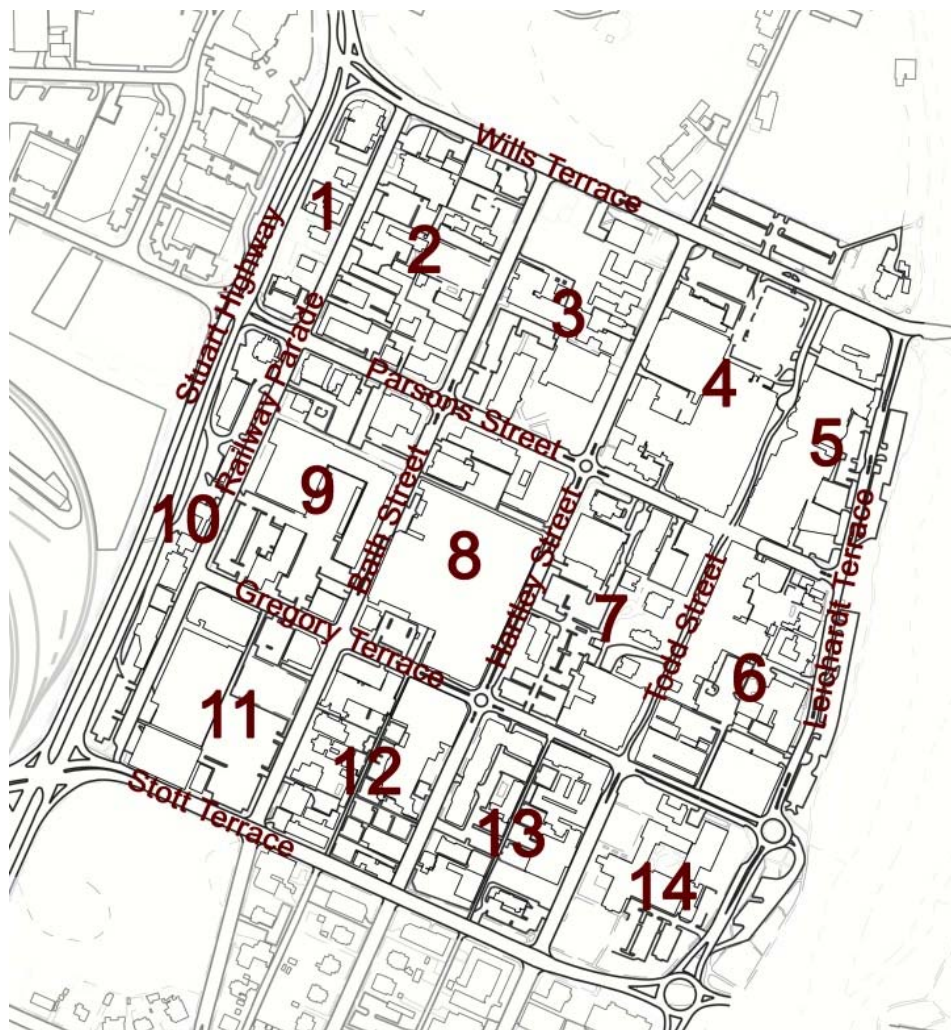


Figure 1. - Alice Springs CAD, Streets and Blocks

Alice Springs Parking Audit

Parking Numbers

Location	On Street Parking	Surface, On-Site Parking	Parking Structure	Total Parking	Percent
Block 1		43	0	43	1.06%
Block 2		207	37	244	6.00%
Block 3		129	54	183	4.50%
Block 4		202	255	457	11.24%
Block 5		104	0	104	2.56%
Block 6		172	30	202	4.97%
Block 7		248	0	248	6.10%
Block 8		106	310	416	10.23%
Block 9		370	0	370	9.10%
Block 10		123	0	123	3.03%
Block 11		314	0	314	7.72%
Block 12		183	33	216	5.31%
Block 13		264	0	264	6.49%
Block 14		98	0	98	2.41%
Leichhardt Tce	9	207		216	5.31%
Todd St	32	0		32	0.79%
Hartley St	88	0		88	2.16%
Bath St	57	0		57	1.40%
Railway Pde	82	0		82	2.02%
Wills Tce	2	186		188	4.62%
Parsons St	61	0		61	1.50%
Gregory Tce	60	0		60	1.48%
Stott Tce	0	0		0	0.00%
Stuart Highway	0	0		0	0.00%
		393			
Totals	391	2956	719	4066	100.00%
Percent	9.62%	72.70%	17.68%		

Figure 2. – Table of Parking Space Location and Type

Land Use

Land Uses and associated parking ratios derived from the NT Planning Scheme have been identified and recorded in the following categories:

Retail & Restaurants	6 bays per 100m ² net floor area.
Commercial Office	2.5 bays per 100m ² net floor area.
Commercial (Light industry)	2 bays per 100m ² net floor area plus 1 per 25m of the area used for offices.

Government Office	2.5 bays per 100m ² net floor area
Short term Accommodation	1 bay per room plus 16 per 100m ² for the area used as a bar.
Residential	2 bays per residence
Places of Worship	5 per 100m ² floor area
Education	1 bay per classroom plus 2 additional bays plus pick up area
Entertainment	1 per 4 seats for cinemas, 16 per 100m ² area for area used as a lounge, 50 per 100m ² area for areas used as a bar

While these land use categories do not exactly match the wide range of land use categories in the Northern Territory Planning Scheme, they have been used to determine whether the overall number of parking bays is sufficient for the land use mix in the Alice Springs CAD.

Gross Floor Areas and Land Use										Parking Req'd
Retail Area	Office Area	Com'c'l Area	Gov't Office Area	Accmdn (units)	Dwelling (units)	Church Area	Educ'n (Bays)	Entertn Bays		
Block 1	220	165	933	0	0	3	0	0	0	42
Block 2	1213	200	738	3010	77	30	525	15	0	346
Block 3	0	0	0	6944	60	0	1147	40	0	331
Block 4	7840	2445	1674	12009	0	0	0	0	32	897
Block 5	1894	2606	0	2235	0	0	0	0	167	402
Block 6	3513	4770	0	2580	134	0	0	0	0	529
Block 7	3696	3256	0	432	0	4	303	0	0	337
Block 8	4632	1832	0	6960	0	0	0	0	0	498
Block 9	5080	4390	0	0	0	0	0	0	0	415
Block 10	264	1312	248	0	0	0	0	0	0	54
Block 11	7680	400	256	0	0	0	0	0	0	476
Block 12	984	4980	200	3115	49	0	0	3	0	317
Block 13	3280	2110	662	385	69	0	0	0	0	341
Block 14	0	1608	0	336	0	0	0	0	0	49
Total										5033

Figure 3. – Land Uses and Areas per Block and Parking Required

PARKING PROVISION IN THE ALICE SPRINGS' CENTRAL ACTIVITY DISTRICT

Is there Sufficient Parking?

The Cardno Willing Traffic Management and Parking Study, (December 2004) concludes that, "*parking occupancy surveys have demonstrated that sufficient overall parking is available within the CBD.*" A distinction was made in that report between private parking (not available to the public) and public parking (which may be on private land but is available to the public). This distinction makes comparison between this report and the Cardno Willing Traffic Management and Parking Study difficult. Despite this the Cardno Willing Study identified that when floor space and land use were calculated for the Alice Springs CBD, and the parking rates of the Alice Springs Town Plan were applied, there was a shortfall of 2,185 parking spaces. This is relative to a planning requirement and not parking demand.

The recent parking audit conducted in September 2009 found that a total of 4,066 parking spaces had been provided within the Alice Springs CAD. From the areas measured and shown in Figure 3 above, it appears from the application of the parking ratios contained in the Northern Territory Planning Scheme that there is a short fall of parking bays. This short fall is of the order of approximately 970 parking bays in the CAD. It should be noted that many buildings were constructed prior to the introduction of the Northern Territory Planning Scheme and therefore do not meet the parking ratios contained therein.

A study to determine occupancy rates is required to determine whether the supply of parking is meeting current and projected demand.

What is clear from the audit is that since December 2004 the shortfall of parking relative to the planning scheme has been significantly reduced, from 2,185 spaces to 970 spaces. This is partially due to the change from the parking ratios contained in the Alice Springs Town Plan to those in the Northern Territory Planning Scheme.

Are the Parking Ratios Appropriate?

To judge the parking ratios contained in the Northern Territory Planning Scheme they can be compared to parking ratios in other non-metropolitan planning schemes. The following table compares the parking ratios required by a number of non-metropolitan jurisdictions for general retail and office development.

Jurisdiction	Office Parking Bays per 100m ²	Retail Parking bays per 100m ²
Mt Barker, South Australia	4	5.5
Port Stephens, NSW	2.5	5
Bendigo, Victoria	3.5	8
Shellharbour, NSW	2.5	4.2
Wollondilly, NSW	3	3
Northern Territory	2.5	6

Figure 4. – Comparison of Parking Ratios

This shows that the Northern Territory Planning Scheme parking ratios are relatively low for office development, but relatively high for retail.

Recommendation: Future consideration for reducing parking required for retail development is recommended.

What is the Nature of Parking in Alice Springs?

Alice Springs CAD has 4,066 parking spaces. Of these, almost 73% are provided in off-street surface parking lots. This is a high percentage for a town centre and especially for a maturing town centre which is expanding the range and scale of land uses it accommodates. Only 17.7% of parking is in parking structures, while only 9.6% is provided on-street.

The street kerbs in the CAD total approximately 6,610m in length (excluding intersection setbacks and crossovers), yet there are only 391 on-street parking bays. At 6m in length parking bays occupy only 2,346m or only 35 percent of the kerb side.

The Urban Design Audit (City of Melbourne, Design Urban, 2009) highlighted the fact that the visual intrusion of parking lots on the public environment and lack of continuity of built form along streets is having a negative impact on streetscapes, the Public Realm and potentially on the social and economic performance of Alice Springs CAD.

The CAD will continue to evolve and grow as the primary commercial and retail centre. If the emerging trend to develop housing in and around the CAD continues, (which is good for meeting sustainability objectives) and commercial and retail space continues to expand, further damage to the town centre environment would occur if additional parking was provided as surface parking.

For the next stage of growth it will be essential to reduce the percentage of on-site surface parking in favour of parking in structures, either above or below ground level. Recent developments of the Yeperenye Centre and the new Target store as well as the increasing cost of land indicate that this is a direction in which the market is moving. Both the Target development and the Yeperenye Centre development include parking structures, both below and above ground.

Recommendation: It is recommended that any future public parking should be provided on-street or in parking structures, either below ground or above ground floor level in buildings “sleeved” by other development.

Where does Parking have a Negative Impact on Streetscapes?

From the parking survey it appears that certain blocks are well served by parking while others are not. This can be compared to the quality of the urban environment as identified in the Urban Design Audit of 2009. Where there is quality in the urban environment there is attraction. This is often associated with the demand for the

provision of public seating and pedestrian weather protection. These two factors were mapped during the Urban Design Audit and are reflected below in Figures 5 and 6. From these maps it is clear that some streets and blocks enjoy a more urban quality than others. This relates to the degree of spatial enclosure as well as the amount of “active frontage” achieved in those locations. Spatial enclosure is indicated by the Figure Ground map (Figure 7), while Figure 8 shows the quality of active frontage.



Figure 5. – Weather Protection



Figure 6. – Public Seating

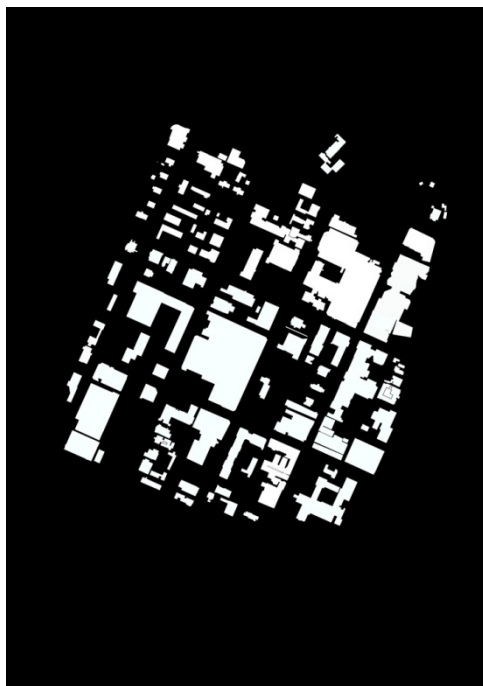


Figure 7. – Figure Ground Map

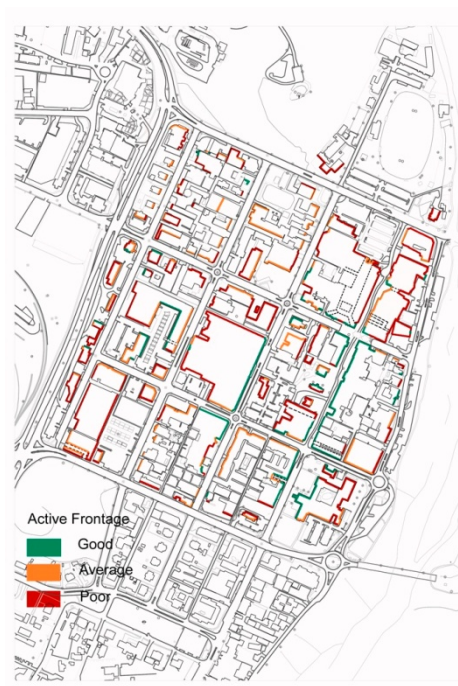


Figure 8. – Active Frontages

(Source, Urban Design Audit, City of Melbourne, Design Urban, September 2009)

From the above maps it becomes clear that quality urban environments can be identified. These are indicated on Figure 9 below.

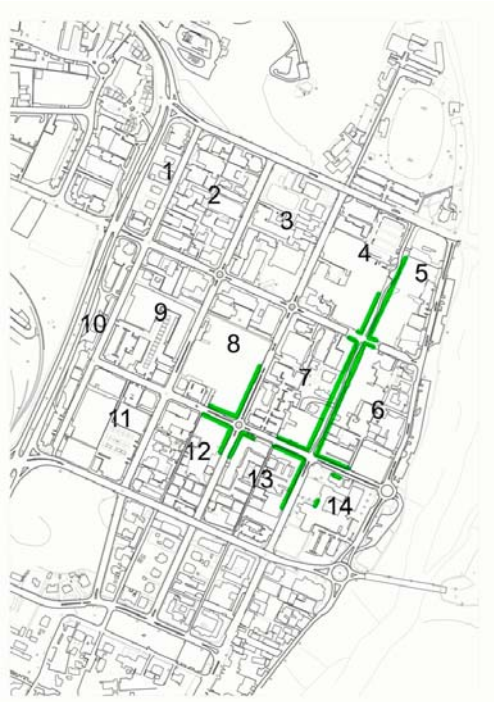


Figure 9. – Urban Quality

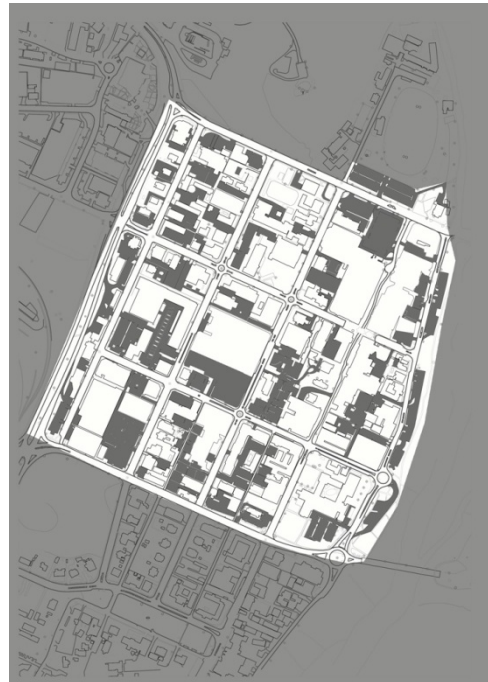


Figure 10. – Parking Location

From Figures 3 and 10 it is possible to identify those blocks which are well served by parking. These are blocks 1, 8, 10, 12 and 14. Blocks where there is a significant shortage of parking are blocks 4, 5 and 6. It appears that there is an inverse relationship between the provision of a high level of surface parking and the achievement of attractive, quality urban environments. This provides lessons for the future provision of parking in the Alice Springs CAD.

It should be noted that the urban revival of the Melbourne CAD was commenced in 1985 with a ban on surface car parking areas. This was enshrined in the 1985 Strategic Plan and landowners were required to have an approved planning and building permit before demolition of existing buildings was permitted. This was to prevent the practice of demolishing of buildings for parking. It is recommended that similar restrictions be introduced in the Alice Springs CAD.

Future Parking in Alice Springs

A number of parking typologies are available for evaluation. Many of these have already been introduced into the Alice Springs CAD. There are however a number of parking typologies which would serve a growing Alice Springs CAD better and help contribute to a superior public environment where parking capacity is achieved without diminishing the quality of streetscapes.

A. On-Street parking

Highly desirable within the CAD as not only is parking volume increased but the “*barrier of steel*” effect of parked cars creates a better pedestrian environment. In addition parked cars have a traffic calming effect on moving traffic. Opportunities for on-street parking should be increased in Alice Springs.



B. On-Site Surface Parking

Surface parking on sites has a major disrupting effect in urban areas, whether covered or open. They create visual blight as well as disrupt the continuity and quality of the pedestrian environment.





C. Upper Level Structures

This form of parking is an improvement on surface parking lots as they maintain active frontage at ground floor level, however, they are visually intrusive and diminish the quality of the public environment.



D. Basement Parking

Basement parking reduces the visual impact of parking dramatically. It is however an expensive option owing to the cost of excavation. Care at street level should be taken to avoid significant disruption to streetscapes and the pedestrian environment.

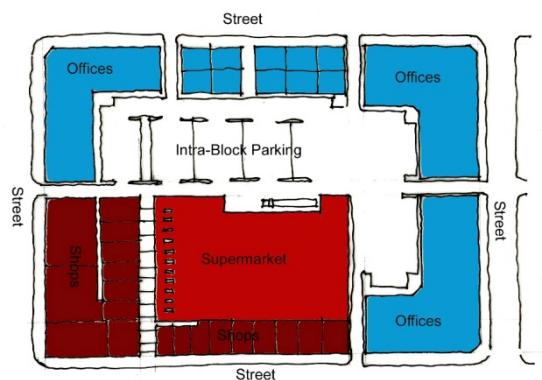


E. “Sleeved” Structures

Parking structures developed above ground should be “sleeved” by other development. “Sleeving” refers to the development of buildings which front streets and have parking to the rear. This form of parking ensures that activation of streets is achieved, and that high quality streetscapes result, while increasing parking capacity.



Parking can also be sleeved within a block through the use of “intra-block” parking lots.



Location of Future Parking in Alice Springs CAD

Several locations lend themselves to the provision of future public and private parking structures. It is important to reduce the amount of parking in the Todd River precinct and along the eastern side of Leichardt Terrace. The Todd River precinct has important cultural and tourism value which should be realised once parking is removed.

Locations for providing additional parking are shown in Figure 11 below. The prime opportunity is below the existing Hartley Street public car park. If required, additional parking could be constructed below the lawns at the corner of Hartley and Parsons Streets, with these lawns reinstated above the basement.

In addition there are opportunities on private land to construct above ground parking structures which should be “sleeved” by other buildings to ensure quality streetscapes. These are indicated in Figure 11 below.



Figure 11. – Possible Locations for new Parking Structures

CONCLUSION AND RECOMMENDATIONS

Alice Springs is in a precarious position, poised between creating more parking capacity with new development and losing more quality in the public environment. The Urban Design Audit of September 2009 identified key issues and challenges regarding the maintenance of a quality public environment. One of these was the continued reduction of coherent and continuous good urban form through the continued creation of more surface car parking lots.

This study has demonstrated that the gap between parking numbers required by the NT Planning Scheme and the number of parking lots created has diminished since the Cardno Willing parking study of December 2004. In the interim a number of significant environments have been negatively affected by new surface car parking lots. These include the Todd River environment and many of the streets of Alice Springs. Certainly the pedestrian environment is not totally supportive of high amenity for pedestrians except in a few places which are identified in this report.

Alice Springs will continue to grow and develop. It is important that it grows in a sustainable manner, and most important that it supports pedestrian amenity. For this reason future parking provision should be limited to on-street parking, basement parking, and sleeved parking structures which maintain active frontages and a high level of surveillance of the public environment, including streets, squares, parks and the Todd River.

The following is therefore recommended that:

1. Consideration is made for reducing the parking ratio for retail development in the Alice Springs CAD.
2. It is recommended that the practice of creating more surface parking lots which are exposed to the street be stopped in the area in and around the Alice Springs CAD.
3. It is recommended that permits to demolish buildings be withheld until planning and building permits are approved for replacement buildings.
4. It is recommended that any future public parking in the CAD should be provided in parking structures, either below ground or above ground floor level, or in buildings "sleeved" by other development.
5. It is recommended that a parking occupancy study should be carried out to determine overall capacity.
6. It is recommended that a new public parking facility be constructed in conjunction with the creation of a new public space and surrounding buildings in Hartley Street, between Gregory Terrace and the existing Post Office.