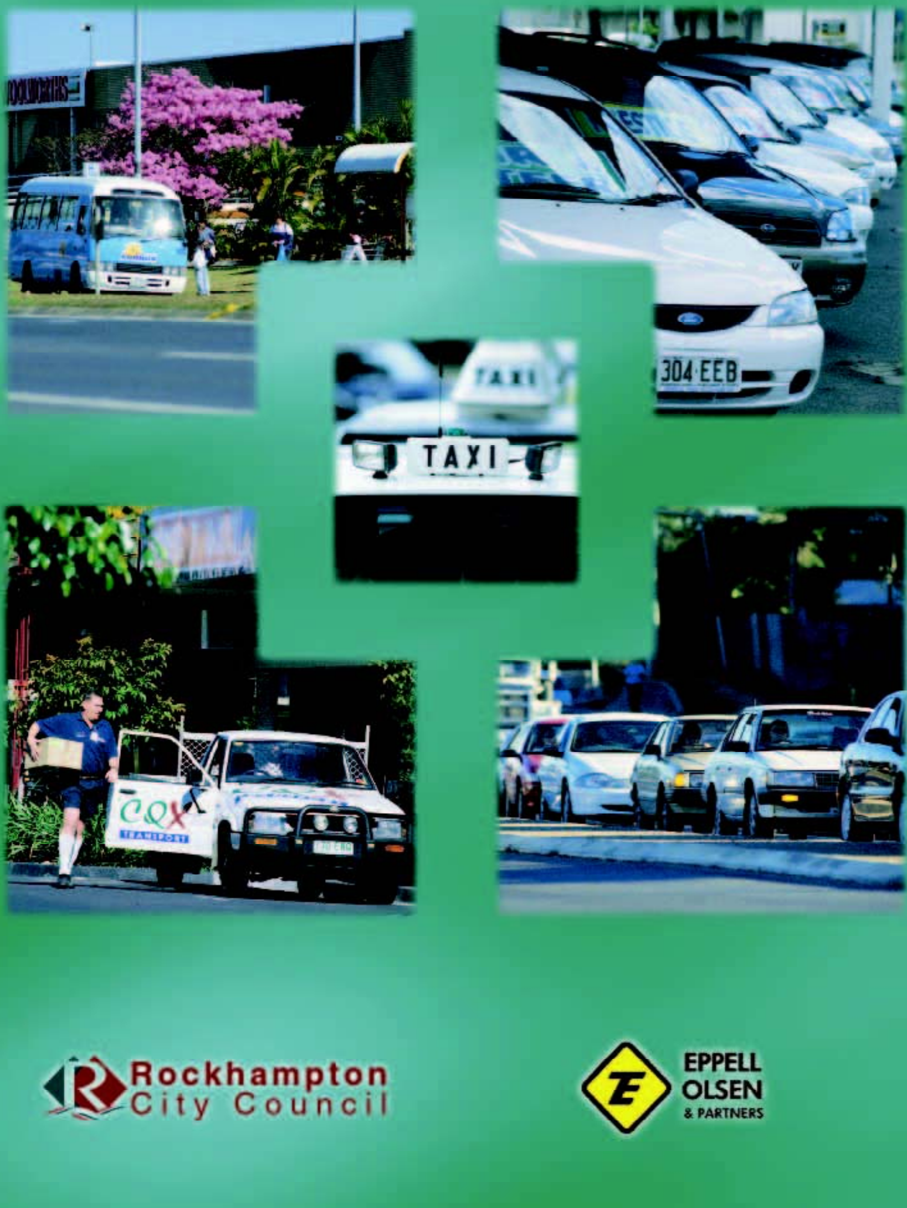
Rockhampton
CARPARKING STRATEGY

STRATEGY REPORT



Rockhampton City Council

EPPELL OLSEN & PARTNERS

This strategy forms part of the Rockhampton City Plan project.

July 2003

ROCKHAMPTON
CARPARKING
STRATEGY

Prepared for

Rockhampton City Council

June 2003

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1.0 INTRODUCTION

Eppell Olsen & Partners, in association with Urban Economics and Humphreys Reynolds Perkins, have been commissioned by Rockhampton City Council to develop the Rockhampton Carparking Strategy.

The need for a carparking strategy has been generated as a result of the current and predicted growth in Rockhampton, the preparation of the City's new planning scheme and an identified need to review current and future carparking requirements and management to enable Council to more adequately assess future development in the area.

The purpose of the strategy is to not only examine parking supply and demand but to review existing carparking rates, parking relaxations and in lieu parking development contributions. The result of this will be to provide Council with a preferred future direction in relation to these issues, and in particular provide clear guidelines to developers, the community and the public sector.

The following tasks have been undertaken as part of this strategy:-

- consultation with stakeholders on parking issues in Rockhampton – issue surveys, individual discussions/meetings and workshops;
- demand surveys of carparking in the CBD and other centres;
- land-use carparking generation surveys;
- review of Council's existing carparking provisions against other relevant local governments;
- detailed analysis of the survey results to understand parking surplus and deficiencies;
- analysis of future carparking demand; and
- the development of strategies to address carparking requirements in the City.

1.1 Carparking Surveys

Abacus Surveys undertook on and off-street parking demand surveys in the CBD and eight suburban centres in September 2002. These CBD surveys were supplemented by off-street parking survey data collected by Council in 1999/2000 and 2003 (zones 11 and 17 only). The surveys provided an understanding of the current supply of parking in each of these centres as well as the existing demands, thereby allowing Eppell Olsen & Partners to analyse the overall adequacy of the existing supply of parking in the CBD and suburban centres. Future carparking demands were also estimated based on potential future development growth. Existing and future deficiencies and surpluses where then identified. The results of this analysis are discussed in the following sections.

1.2 Centres' Strategy

The Carparking Strategy has been undertaken in parallel with the Centres' Planning Strategy. The Centres' Planning Strategy has reviewed the network of commercial and activity centres in Rockhampton and developed a framework from which to maximise the City's capacity to continue to service the needs of those within its bounds and its role as a service and administration centre for the surrounding region. The findings of the Centres' Planning Strategy have been a key influence in the development of carparking strategies in Rockhampton, and in turn, the approach to carparking in this report will support the recommendations of the Centres' Planning Strategy. The Centres' Planning Strategy has been developed by Urban Economics, in association with Eppell Olsen & Partners and Humphreys Reynolds Perkins.

The Centres' Planning Strategy recommends a hierarchy of centres as follows:-

- Central Business District – Rockhampton CBD;
- Specialist Sub-regional Retail Centre – Rockhampton Shopping Fair/Kmart Plaza;
- District Centres – Allenstown;
- Local Neighbourhood Centres – Park Avenue, Richardson Road, Glenmore Village, Dean Street, Elphinstone Street and Wandal;
- Highway Business – Gladstone Road, Musgrave Street (incorporating Northside Plaza) and Yaamba Road; and
- Other Centres – Specialist centre – Red Hill, General stores/service stations.

The outcomes of the surveys and potential solutions are summarised in the following sections according to the recommended centre hierarchy. Further detail regarding the survey analysis can be found in the “Rockhampton Parking Strategy – Survey Analysis Report” (June 2003).

2.0 CENTRAL BUSINESS DISTRICT (CBD)

The Rockhampton CBD and surrounding area, has generally been defined as the area bound by the Fitzroy River to the north, Albert Street to the west, Campbell Street to the south and South Street to the east. This area has been divided into 44 individual zones based on city blocks as shown on Figure 2.1.

Whilst these 44 zones comprise the overall CBD and surrounding area, many zones on the fringe of this area have very low intensity uses (including conventional residential lots). Since these fringe areas are not currently critical to the parking demand in the CBD, complete parking and/or land-use data and analysis has not covered the entire 44 zones. Instead, we have focused on a "survey area" which comprises 17 zones plus two additional zones (3A and 6A which provide off-street parking sites only). This "survey area" is shown on Figure 2.1 and is bound by the Fitzroy River, Derby Street, Denison street, Fitzroy Street, Alma Street and Cambridge Street.

2.1 Existing CBD Carparking

Abacus Surveys Pty Ltd collected an inventory of the available on-street parking in each of the survey zones as at September 2002. The on-street carparking spaces and six off-street parking areas were surveyed by Abacus Surveys Pty Ltd on Friday 20 September 2002 between the hours of 8.00a.m. and 4.30p.m. Note that at the time of these surveys, part of the East Street mall was still in place, however, it has subsequently been removed. Consequently, some changes in parking supply and demand has occurred in this location.

Rockhampton City Council collected an inventory of off-street parking within the CBD in 1999/2000. On advice that the off-street parking supply has not significantly changed since then, a complete off-street inventory has not been compiled in 2002, however, off-street parking in zones 11 and 17 was surveyed by Council in May 2003. This parking is identified in each of the 17 zones of the "survey area".

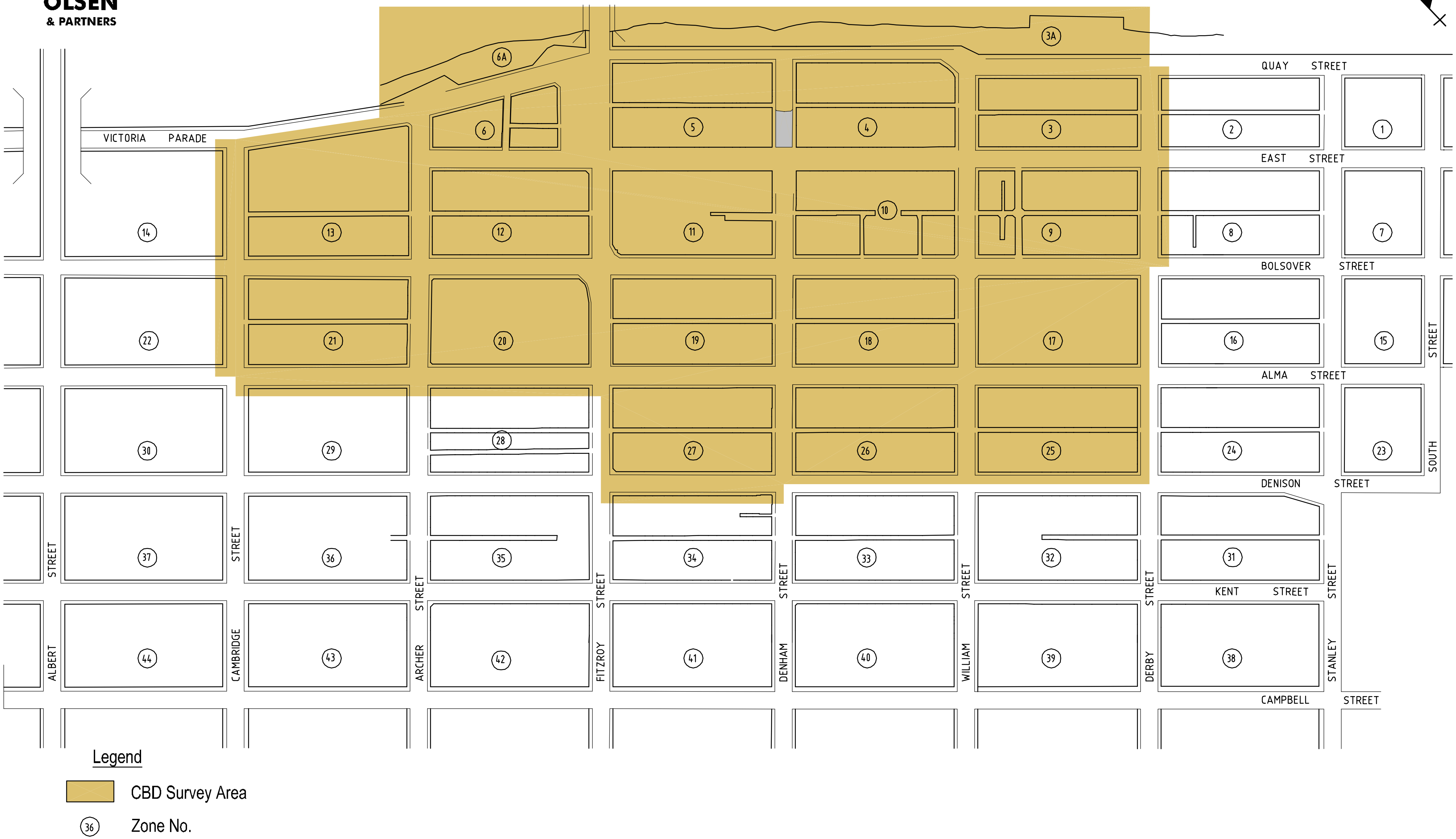


Figure 2.1
CBD Survey Area

Six significant off-street carparks (which weren't included in Council's 1999/2000 surveys) were surveyed by Abacus Surveys Pty Ltd at the time of the on-street surveys. The details and locations of these carparks are as follows:-

- a multi-storey carpark on Bolsover Street, within Zone 10, which comprised 300 spaces;
- a rooftop carpark off Bolsover Street, also within Zone 10, which comprised 88 spaces;
- a carpark on the corner of William and Bolsover Streets, in Zone 9, which comprised 54 spaces;
- the Riverbank Carpark, located adjacent to Zones 6 and 13. The carpark comprised 187 spaces (Zone 6A);
- the Riverbank Carpark, located adjacent to Zone 3, which comprised 157 spaces (Zone 3A);
- the Pilbeam Theatre Carpark located in Zone 14, which comprised 117 spaces.

The on and off-street carparking supply, provided within each of the zones, is demonstrated in Table A1 within Appendix A. This is assumed to represent the existing available on and off-street parking at September 2002.

The carparking surveys discussed above have also assisted in determining the extent of carparking demand (and spare space availability) in the CBD. It must be stressed that whilst these survey results are assumed to represent the peak parking demand (for the purpose of this strategy) it is recognised that some locations will experience greater parking demand at other times. As such, conservativity is applied throughout the assessment herein.

The on-street parking surveys (September 2002) have also identified duration of stay information. From this data the on-street parking in each zone is quantified as short-term (four hours or less) or long-term (more than four hours). Similarly, the off-street parking inventory has been quantified to distinguish between the surveys carried out by Council in 1999/2000 and 2003, and the survey carried out by Abacus Surveys Pty Ltd in 2002. Whilst the on-street surveys have assembled information in relation to duration of stay, it has not been the intention of this strategy to develop specific short or long-term parking strategies.

Table A2 in Appendix A provides a summary of the peak carparking occupancy in each of the zones of the survey area. Note that some parking in Zones 14 and 22 has also been surveyed and whilst this is reported in the relevant tables it is not included in the "TOTAL" results of that table, nor the summary results herein. The parking in these zones has not been included because they are outside the overall survey area.

The survey results in Table A2 of Appendix A are compared with the carparking inventory in Table A1 to produce the occupancy levels in the CBD survey area (refer Table A2). A summary of the existing demand vs existing supply is provided in Table A3, which highlights the number of spare spaces available in each zone at the time of survey.

Zone 20 represents the Stockland Plaza shopping centre. It must be stressed that whilst the survey results from 1999/2000 report that there are 252 spare spaces in this location, it is recognised that these may not be "used" by the general public visiting other zones.

From the results tabulated in Appendix A, the following key points are identified for the CBD survey area (based on the peak surveyed period):-

- there are currently 4,218 carparking spaces (1,866 on-street and 2,352 off-street);
- total occupancy of carparking spaces is 66% (73% occupancy on-street and 61% occupancy off-street);
- there are 512 unused on-street spaces and 913 unused off-street spaces;
- 80% of on-street parking is short-term (four hours or less).

The average and peak parking occupancies for the on and off-street parking locations within the survey area indicate that:-

- the on-street parking areas which had the highest peak and average occupancies included:-
  - East Street, Bolsover Street, Denham Street and William Street between Zones 3 - 6 and 9 - 12;
  - the on-street parking surrounding Zone 20 (Stockland City Centre Plaza) and Zone 21;
- the on-street parking locations which demonstrated low average and peak occupancies included:-
  - the parking on Victoria Parade to the north of Zones 13 and 14;

  - the parking on Quay Street to the north of Zone 3;
  - parking on Cambridge Street beside Zones 13, 14 and 22;
  - most of the parking around Zones 25, 26 and 27.
- the off-street parking locations with the highest utilisation on the day of the survey included:-
  - the carpark located within Zone 9;
  - the Riverbank off-street carpark (Zone 3A), adjacent to Zone 3;
  - off-street parking in Zones 4, 6, 11, 25 and 27;
- the remaining off-street parking locations had reasonably low utilisation on the day of the survey. The three level carpark located within Zone 10 (Bolsover Street) had an overall poor occupancy, explained by the poor utilisation of Levels 2 and 3 of the carpark.

On a zone by zone basis the following points are noted for the CBD survey area (based on the peak surveyed period):-

- Zones 11, 12 and 20 have on-street parking occupancy 90% or greater;
- Zones 4, 5, 9, 10 and 21 have on-street parking occupancies between 80% and 90%;
- Zones 4, 6, 25 and 27 have off-street parking occupancy greater than 80%;
- Zones 4 and 11 have total occupancy greater than 80%;
- Zones 3A, 5, 6, 9, 12, 19, 21 and 27 have total parking occupancies between 70% and 80%.

The parking analysis has revealed that a significant surplus of parking spaces (approx.1,400 spaces in the survey area – see Table A3) was present in the Rockhampton CBD at the time of the surveys. In approximate terms, significant spare parking spaces appear to exist at the following locations (rounded to multiples of 10 for convenience):-

- 280 spaces within Zone 10. The most off-street parking spaces of all the zones exists within Zone 10 and this result appears to reflect underutilisation of the multi level carparks and the rooftop carpark;

- 250 spaces within Zone 20, particularly in the undercover carpark. This zone comprises Stockland City Centre Plaza, which is predominantly retail in nature. The peak parking times for retail land-uses is around Christmas (December). Therefore, the peak parking demand of this plaza may not have been demonstrated during the surveys. As such these spaces may not practically be available all year round;
- 80 spaces within Zone 3, mainly on-street. This zone comprises mainly entertainment and residential land-uses. As the surveys were undertaken on a weekday during normal business hours, the peak demand of this zone would not have been demonstrated during the time of the September surveys;
- 80 spaces within Zone 17. This zone comprises the Council offices and a number of the spaces reported as "spare" were unavailable at the time of the survey due to construction work at the Council building;
- 80 spaces within Zone 13 representing mostly on-street spaces;
- 90 spaces within Zone 14 including 50 spare spaces in the carpark adjacent the Pilbeam Theatre.

In considering the surplus of spaces it is important to understand that parking spaces available in one zone are likely to be used by visitors to adjacent zones (particularly long-term stays). Accordingly, when doing the future parking assessment it is important to consider how far people are prepared to walk from their parking space to their destination. The parking assessment results appear to indicate that the Riverside carparks (Zones 3A and 6A) are utilised for long-term parking and are being used by visitors to more than just the immediate zones (3, 4, 5, 6 and 13). Nonetheless, in the future parking assessment we need to be cautious about how far (i.e. how many blocks) it is assumed that patrons will walk. For the purposes of this assessment it was assumed that patrons would walk on average half to one block.

The parking surveys and analysis have indicated that over 1,400 car spaces were unused in the CBD survey area. Whilst it is clear that a surplus of spaces currently exists, it is recognised that there are some possible anomalies in the survey data. In addition, there are many off-street spaces within each zone that are not readily accessible to the general public (e.g. private parking areas at the rear of a building) and a number of the off-street parking areas within each zone are an amalgamation of many small areas. As such it could be assumed that any unused spaces in these situations are "unavailable".

Taking the above into account, the practical number of spare spaces is estimated as 760 throughout the survey CBD area as follows (note that surpluses of 20 spaces or less in a zone have also been ignored on the assumption that the survey day may not be a peak day in the CBD):-

- 60 on-street in Zone 3;
- 30 off-street in Zone 3A;
- 70 off-street in zone 6A;
- 270 off-street in Zone 10;
- 50 on-street in Zone 13;
- 30 on-street in Zone 14;
- 50 off-street in Zone 14;
- 40 on-street in Zone 17 (a number of unused spaces are likely to be spaces that are designated for caravans and cars only);
- 60 on-street in Zone 18;
- 50 on-street in Zone 25;
- 50 on-street in Zone 26.

Figure 2.2 illustrates these spare spaces in the CBD.

2.2 Existing CBD Land-uses

In each of the individual zones of the survey area, an inventory of the floor area by land-use type has been assembled by Urban Economics. This is reported in Table B1 in Appendix B. Land-use has been classified as retail, office, commercial, accommodation, entertainment, special (e.g. educational facilities) and vacant/undeveloped. To understand the land-use categories the following examples are given:-

- retail – contains shops, Stockland City Centre Plaza;
- office – contains private business and government offices;
- accommodation – contains motels or apartments. Individual residential dwellings or units have been excluded from the relevant floor area tables;
- cultural/entertainment – contains hotels, night clubs, restaurants and an arts centre;

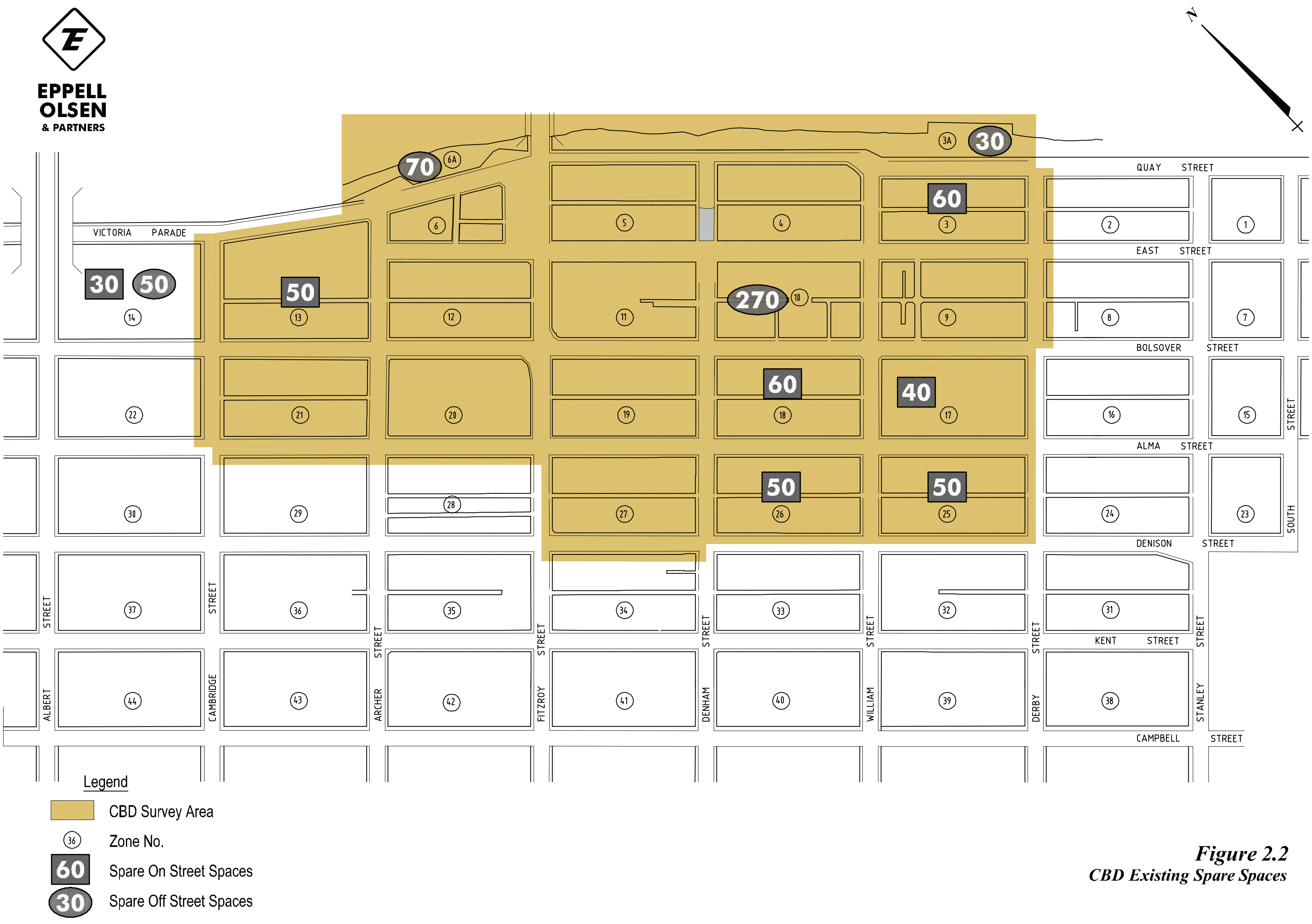


Figure 2.2
CBD Existing Spare Spaces

- commercial (or services) – contains banks, post office and private commercial practices (e.g. real estate offices, travel agencies);
- special – specific uses quantified in Table B1.

Note that the purpose of this categorisation by land-use type is only for carparking analysis within this strategy. It is not intended to represent zoning or future land-use intention. The survey area in the CBD had a total floor area of 209,839m² occupied in September 2002, with a further 37,728m² vacant. This represented an overall occupancy of 85%.

2.3 Future CBD Land-uses

For the purpose of future carparking analysis, two future land-use development options have been considered.

Table B2 in Appendix B (Option 1) shows the potential development scenario for land-use areas in the survey area. This assumes that all buildings that are currently identified as vacant will be occupied. The land-use type for these vacant premises is allocated in similar proportions to the land-uses in that zone (i.e. if the zone is predominately retail, the vacancies have been converted predominately to retail).

Table B3 in Appendix B (Option 2) shows a similar situation to Table B2, however, the vacancies are added to the primary land-use types compatible with the “precinct” planning strategy identified in the coincident Centres’ Planning Strategy (by Urban Economics). This strategy defines particular land-use types as the main focus in particular areas, as follows:-

- retail precinct – East Street between Fitzroy Street and William Street;
- dining precinct – William Street between Quay Street and Alma Street;
- recreation precinct – along Quay Street;
- office – typically near Bolsover Street (Archer – Derby) and Fitzroy Street (Quay – Alma).

The data in these tables is used for analysis of future parking demands, as is the data in Appendix C and D, which provide the demand rates used in the assessment and calibration process undertaken.

2.4 Future CBD Carparking

The future land-use composition of the CBD survey area has been considered in the two options described above. These options have been developed as a result of the outcomes of analysis and recommendations of the Centres' Planning Strategy.

For each land-use option the parking demand rates occurring in the CBD survey area have been considered in three scenarios:-

1) the parking demand rates occurring at present within the core area apply in the future;
2) the parking demand rates in the future increase by 25% over and above that being experienced at present;
3) the parking demand rates in the future increase by 50% over and above that being experienced at present.

As a comparison of parking demand rates in these three scenarios, the following provides observations related to parking demand rates found in a similar study in Cairns in 1991:-

- retail – current Rockhampton rates are approximately 50% of the Cairns rates. Scenario 3 above, therefore, represents 80% of the Cairns rates;
- office – current Rockhampton rates are similar to Cairns rates;
- accommodation – only minimal floor areas are included in the survey area, hence these rates are not significant and have not been considered in detail;
- entertainment - current Rockhampton rates are approximately 20% greater than the Cairns rates;
- commercial - current Rockhampton rates are approximately 65% of the Cairns rates. Scenario 3 above represents the equivalent of the Cairns rates.

The increases in parking demand rates are considered appropriate since the current observations appear to suggest that retail uses are not trading as strongly as the centres outside the CBD and one of the economic objectives is to improve this. Similarly, the office uses are currently considered to be underutilised as a result of the quality of stock, as such, an increased tenancy rate is one of the objectives for the office precinct.

The analysis of parking demand versus supply for the various scenarios are provided in Appendix D. A summary of the results/conclusions is provided below. It is important to note that in deriving the conclusions below (from the Appendix D results) consideration has been given to how far people may be prepared to walk to a parking space. As such, there are some spare parking spaces (in each scenario) that remain unused because they are not located close to the zones of parking demand.

The analysis of the first future land-use option (all vacancies filled in proportion to existing land-use) allows the following conclusions to be drawn in terms of parking supply:-

- at existing demand rates (scenario 1) there is a need for an additional 80 spaces near Alma Street/Denham Street (zones 26 and 27);
- at 25% increased demand rates (scenario 2) there is a need for an additional 150 spaces near Alma Street/Denham Street (zones 26 and 27) and an additional 40 spaces near East Street/Fitzroy Street (zones 5, 6, 11 and 12);
- at 50% increased demand rates (scenario 3) there is a need for an additional 220 spaces near Alma Street/Denham Street (zones 26 and 27), an additional 50 spaces near the Council building (zone 17) and an additional 520 spaces near Bolsover Street, between Denham Street and Fitzroy Street (zones 10, 11, 12 and 19).

Based on the second future land-use option (all vacancies filled to suit the recommended precinct plan for land-uses) the following conclusions are drawn in terms of parking supply:-

- at existing demand rates (scenario 1) there is a need for an additional 60 spaces near Alma Street/Denham Street (zones 26 and 27);
- at 25% increased demand rates (scenario 2) there is a need for an additional 190 spaces near Alma Street/Denham Street (zones 19, 26 and 27) and an additional 40 spaces near Bolsover Street/Fitzroy Street (zones 11 and 12);
- at 50% increased demand rates (scenario 3) there is a need for an additional 470 spaces near Alma Street/Denham Street (zones 18, 19, 26 and 27), an additional 60 spaces near the Council building (zone 17) and an additional 440 spaces near East Street/Fitzroy Street (zones 5, 6, 11 and 12).

Potential strategies to achieve these required spaces in the future are discussed in the following sections.

2.5 CBD Land-use/Economic Strategies

The CBD currently operates as a regional commercial and administrative centre with supporting retail and service facilities. The CBD has a prominent professional service sector as well as a significant public sector presence. Historically the CBD also operated as a regional retail centre. However, since Rockhampton Shopping Fair opened in 1984, the CBD's role in higher order retail facilities has reduced. There are opportunities to continue and consolidate the existing role of the CBD as well as encourage further development into the centre through a range of actions. These actions have been identified in the Centres' Planning Strategy and key recommendations include:-

- CBD to function as the highest order business, community and cultural heart of the region;
- redefine the physical boundaries of the CBD to encourage a compact CBD with a clearly defined core and frame area;
- the core area is defined as that area bound by Quay Street, William Street, Bolsover Street and Fitzroy Street (see Figure 2.3);
- the frame area is defined as that area bound by the Fitzroy River, Derby Street, Denison street, Archer Street, Alma Street and Cambridge Street (see Figure 2.3);
- remainder of existing CBD area to be a transition area with an eclectic mix of residential and "clean" service trades activities;
- develop key activity areas or precincts within the CBD as follows (see Figure 2.3):-
  - East Street, between Fitzroy and William Streets – specialist retail precinct;
  - William Street, between Quay and Alma Streets – alfresco dining precinct;
  - Quay Street – riverside recreation precinct;
  - Stockland City Centre Plaza – retail centre;
- encourage residential development within CBD, including conversion of heritage buildings to residential uses and mixed-use developments incorporating residential;
- fund a Town Centre Manager for the CBD responsible for management, marketing, promotion, advocacy and business attraction to the CBD;
- mobilise a business contribution scheme to common areas in the CBD;
- encourage public sector expenditure in the CBD;
- develop a pedestrian friendly environment in the CBD.

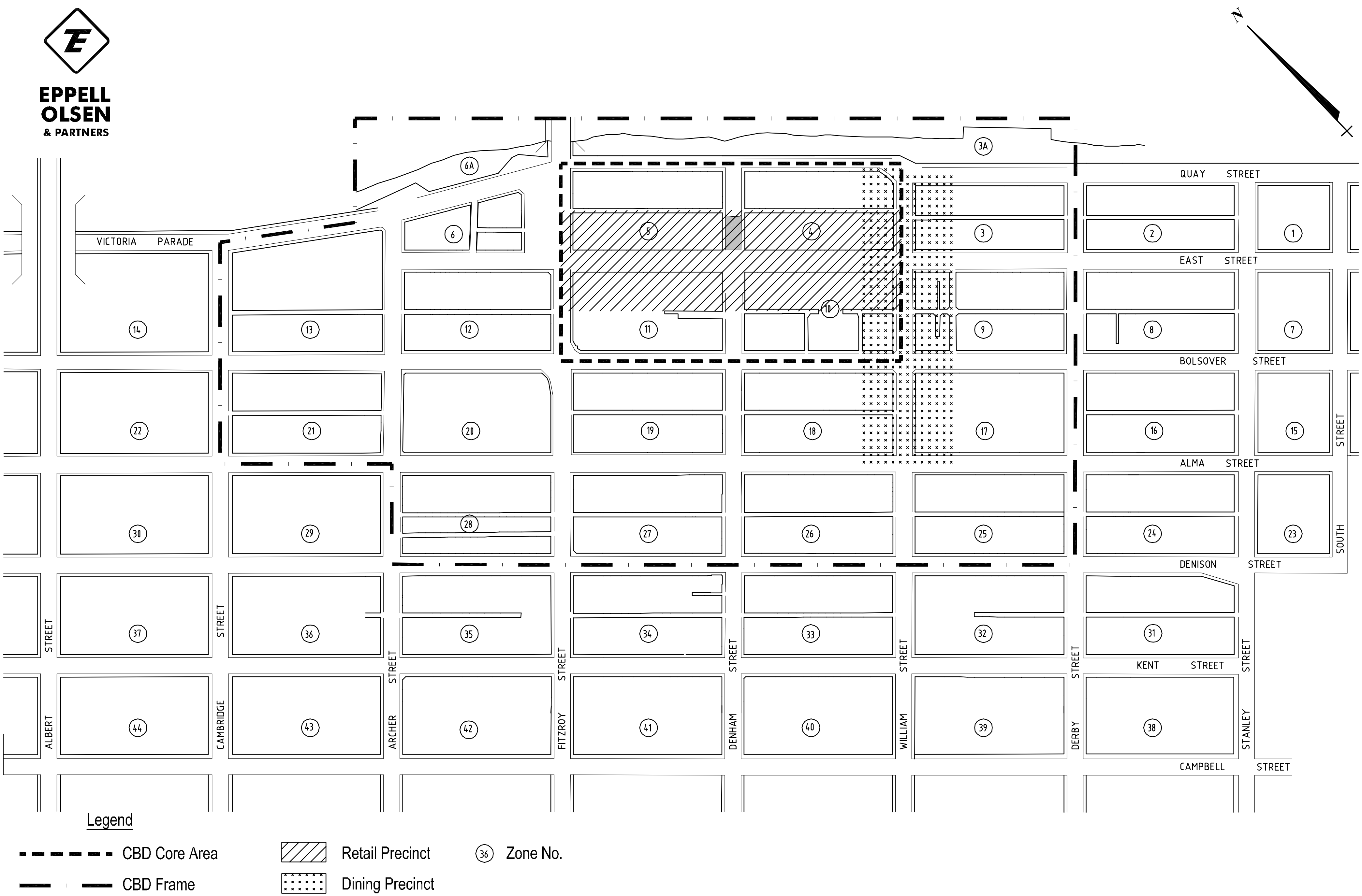


Figure 2.3
CBD Precincts

2.6 CBD Carparking Strategies

Carparking can play an important role in consolidating the CBD and encouraging further development. It is also recognised that the encouragement of public transport, walking and cycling are other driving factors, however, these require appropriate infrastructure and supporting strategies in order to be effective. Accessibility of a centre is a vital component to its success and provision of adequate carparking is fundamental. Incentives to development in the CBD (e.g. to reduce or waiver carparking requirements) could also assist in revitalising and increasing existing development in the centre.

The carparking strategies proposed in this report ensure that a balance is achieved between adequate supply of carparking whilst still encouraging development in the centre. The key carparking strategies recommended for the Rockhampton CBD are discussed below.

1. **Use a standard rate of carparking provision for all land-use types in the CBD**. The standard rate is intended to represent a discount from the conventional requirement due to the extent of multi purpose trips to the CBD (i.e. the cross usage of a single parking space for a number of activities). This would also assist with longer-term strategies of discouraging private car usage in favour of public transport. The aim is to provide incentives to development in the CBD. The results of our analysis indicate that a suitable rate for appropriate CBD related uses would be in the order of two spaces per $100m^2$ GFA. Specific developments comprising large floor areas (e.g. shopping centres) and accommodation related developments should be assessed on the basis of planning scheme rates with appropriate relaxations (see Section 7.0 and 9.0).

2. **Allow "contribution in lieu" relaxations as developer incentives**. To assist in developing smaller sites, and particularly those in the core area where footpath crossovers should be minimised, the required parking contribution should be met by an appropriate contribution in lieu. The amount of this contribution is discussed in Section 8.0. The contributions received via this scheme should be used by Council to develop parking areas (on or off-street) and/or to improve pedestrian connections to/from other existing parking areas. The latter may include streetscaping works (see strategy 4 and 5 below). Where appropriate, on-street parking and/or streetscape works (to the value of the monetary contribution) could be undertaken by the developer to fulfil this contribution in lieu requirement.

3. **Ensure existing parking supply is used efficiently and effectively**. The existing and future parking analysis in the CBD indicates that there is currently enough parking spaces to meet the overall needs of the CBD with some spare capacity for additional development into the future without the need for additional carparking. There are, however, some specific locations of parking in the CBD, which are not readily accessible to the general public and/or are not in easy/convenient walking distance to the desired destinations. To make more efficient use of the existing parking supply the following strategies should all be considered:-

   - provide high quality pedestrian connections through city blocks (where possible) to allow easier access to parking in adjacent blocks (see further discussion below);
   - amalgamate (where possible) small off-street carparking areas and allow/encourage public usage (e.g. improved signage);
   - encourage use of the Bolsover Street multi-storey carpark. This carpark represents an underutilisation of over 200 spaces. Increased usage could result from improved aesthetics, removal of charges, better directional signage, improved pedestrian connections (including from upper levels) and better integration with major facilities;
   - define parking time limits to better suit the users in that precinct (e.g. majority of parking in core area to be one to two hours to encourage higher turnover).

   It is noted that there is currently a broad mix of land-use types in the CBD (including tertiary education sites). Some of these result in demand for long-term parking in close proximity to a number of significant sites. It is recommended that specific investigations be undertaken to determine the appropriate time limits, costs and location of short and long-term parking to facilitate this strategy.

4. **Develop more on-street centre parking**. There are a number of wide streets in the Rockhampton CBD, which have the opportunity to provide increased on-street parking. It is suggested that the provision of centre parking be considered to assist in providing on-street parking in close proximity to adjacent land-uses. Typical streets for consideration include sections of East Street, Bolsover Street (where it doesn't compromise access to existing bus stops), Alma Street, William Street and Derby Street. Provision of centre parking also has the advantage of improving the overall streetscape as it reduces the width of the "hot black road". This may also assist in discouraging heavy vehicle traffic through particular city streets. Landscaping and/or shade shelters could also be incorporated within the centre parking.

5. **Improve the environment for pedestrians in the CBD**. Many streetscapes in the CBD are unattractive to pedestrians as they are wide, traffic dominated and hot. The "appeal" to pedestrians as a comfortable, convenient and safe walking place is currently limited. If streetscaping works are undertaken to improve the pedestrian environment, there may be more people willing to walk, and/or walk further, between their destination and the car space. This would better utilise the existing supply of parking (both on and off-street). These streetscaping works should occur on all streets in the designated core CBD and can tie in with centre parking locations. Examples of works that can be undertaken include provision of shade/shelter, encouraging active frontages, reducing road crossing distances by providing medians/pedestrian refuges mid-block, the provision of pedestrian priority crossing locations, and widening footpaths and landscaping.

6. **Provide Carparking incentives for Heritage Buildings**. There are many heritage buildings in the CBD that are currently vacant or underutilised, particularly above ground floor level. Provision of adequate, or any, carparking on these sites may be difficult to achieve and appears to be a deterrent to redevelopment. It is proposed that the reduced CBD parking rate (strategy 1) and the opportunity to provide contribution in lieu relaxations (strategy 2) be applied to these buildings if being redeveloped in accordance with the provisions of the Planning Scheme. Many of these buildings may be suitable for conversion to residential uses, however, market expectations would determine whether an absence of parking is acceptable. In such cases, specific off-site areas may need to be allocated in close proximity. It is recognised that incentives in areas other than carparking may be required to encourage redevelopment of such facilities.

All the above strategies should be pursued by Council. Strategies 3 and 5 above relate to better use of the existing parking supply and these should be pursued in the short-term. Strategies 1, 2 and 6 aim to encourage development in the CBD, and, therefore, should happen in the short-term but have a long-term outcome. Strategy 4 should occur as a reaction to strategies 1, 2 and 6 being achieved.

3.0 SPECIALIST SUB-REGIONAL RETAIL CENTRE

Rockhampton Shopping Fair/Kmart Plaza, nominated as a specialist sub-regional retail centre, provides comparison shopping and some entertainment facilities to service the higher order shopping needs of the regional population. This centre is bound by Moores Creek Road, Musgrave Street and High Street.

Rockhampton Shopping Fair and Kmart Plaza are currently disconnected by Moore Creek, however, we understand that there are long-term plans to integrate the two sites. These plans may include a proportion of bulk retail (showrooms) as part of the development.

It is understood that Rockhampton Shopping Fair has a total Gross Lettable Area (GLA) of 37,793m². Total Gross Floor Area (GFA) is 46,130m² (on advice from site owners). Kmart Plaza has a GLA of 14,778m² and a GFA of 18,362m². The sub-regional retail centre (i.e. both sides), therefore, has a floorspace of 56,367m² GLA (64,492m² GFA on advice from site owners) consisting of approximately 82% retail plus cinemas and supporting services. Only 1.5% of this floorspace has been recorded as vacant.

It is also understood that there are 1,947 carparking spaces on the Rockhampton Shopping Fair site (including those at the cinema and Sizzler restaurant). On the basis of this, the current parking provision represents a rate of approximately 5.1 spaces per 100m² GLA (or 4.2 spaces per 100m² GFA).

Carparking surveys of the site were undertaken in January 2003 on both a Thursday evening (16 January) and a Saturday morning (18 January). These surveys showed a peak parking demand of 1,015 cars on Thursday evening and 1,558 cars on Saturday morning.

The peak surveyed parking rates for Rockhampton Shopping Fair (Saturday) represents 4.1 cars per 100m² GLA. It is noted that these parking surveys include the cinema complex on the site, as does the latter result. It is recognised that the cinema operation would not be at its peak at peak demand time for the shopping centre. If the cinema floor area is excluded, the peak surveyed demand on Saturday represents 4.5 cars per 100m² GLA.

Other similar centres surveyed in Mackay in December 2002/January 2003 produced peak demand rates of 4.6 and 4.8 cars per 100m² GLA.

Peak parking demand for retail showroom (e.g. bulky goods) type developments indicated results ranging from 0.8 to 3.1 cars per 100m² GFA. It is obvious that the intended land-use types (eg. conventional retail or retail showrooms) for the ultimate developed site (Shopping Fair plus Kmart) will be a key factor in determining the appropriate carparking provision. Nonetheless, it would be appropriate to define a minimum carparking requirement for the conventional retail component of the sub-regional centre. Any variations in the land-use type (e.g. retail showrooms) should be reassessed at the time of application.

It is recognised that the potential amalgamation of the two sites may enable cross usage of the parking supply on either site, subject to good pedestrian and vehicle connections. Appropriate consideration should be given to this issue when considering submissions in relation to this centre.

Based on the survey results gathered for the shopping centre sites in Rockhampton and Mackay it is recommended that a minimum carparking requirement for the sub-regional retail centre be adopted as 5.0 spaces per 100m² GLA.

The figure of 5.0 spaces per 100m² GLA has been recommended to allow some conservativeness in the requested parking provision. The basis for this is that a review of other parking data suggests that provision of approximately 5.0 spaces per 100m² GLA would only be adequate to accommodate annual average demands. Similarly, it is considered that shortfalls of parking supply on site often result in parking off site (particularly by staff) which may result in parking in adjacent facilities and/or residential streets. These latter situations have an undesirable impact on the community.

Given the size of these centres, GLA is typically about 80 – 90% of GFA. It is suggested that GLA provides a better measure of parking and traffic demand than GFA for this situation. Therefore, GLA is recommended as the measure for the sub-regional centre. For the sub-regional centre, a comparative rate per GFA is approximately 4.4 spaces per 100m².

It would be appropriate for Council to accept (based on satisfactory traffic advice) relaxations in the parking provision based on such aspects as:-

- different land-use types (e.g. retail showrooms);
- provision of high quality public transport facilities integrated within the site;

- proven carparking demand;
- different hours of operation for different facilities;
- quality pedestrian and vehicle connections between multiple sites for cross usage of parking supply.

4.0 DISTRICT CENTRE

Allenstown has been designated as a district centre. It provides for the weekly shopping, service and community needs of surrounding residents.

Eppell Olsen & Partners have undertaken carparking demand surveys for Allenstown and the results of this analysis are described below. Further detail regarding the survey analysis can be found in the "Rockhampton Parking Strategy – Survey Analysis Report" (June 2003).

Abacus Surveys Pty Ltd and Urban Economics undertook parking and land-use surveys (respectively) in September 2002. On and off-street carparks were surveyed separately and reported as peak or average parking occupancies. Note that there are differences between the floor area reported herein and those in the Centres' Planning Strategy (Urban Economics, April 2003) report due to the use of slightly different boundaries. The following provides a summary of the survey results and associated analysis and more detailed information is provided in Appendix E.

Allenstown is located to the immediate southwest of the Rockhampton CBD. The centre is based around Allenstown Plaza which is located on land bound by Canning Street, Caroline Street and Upper Dawson Road. The main focus of Allenstown Plaza is the Woolworths supermarket.

The total occupied floor space within the survey area at the time of the surveys was 8,050m², with a further 158m² being vacant (98% occupancy). Surveys were undertaken over three hour periods during the middle of the day on Thursday, Thursday evening and Saturday morning. The combined peak parking period for the Allenstown centre was found to occur at 12.30p.m. on Thursday 19 September 2002. The parking occupancy within the centre for this time is demonstrated in Table 4.1 below and Table E1 in Appendix E.

A tavern exists within the Allenstown Centre. Whilst the parking survey includes this site, the results in Table 4.1 and calculations below exclude the tavern (floor area and parking accumulation). This is to give a better indication of parking demand for the centre exclusive of the tavern, which generates demand at a different peak time. Note that the tavern site has also been surveyed separately as part of the land-use parking surveys discussed in Section 7.0 of this report.

Table 4.1 ***Allenstown Parking Analysis – Thursday***

Area	**On-street**			**Off-street***		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Canning St (William & Derby)	36	39%	36%	8	50%	50%
Canning St (Derby & Caroline)	58	93%	93%	0	n/a	n/a
Upper Dawson Road (Caroline & Canning)	27	78%	81%	0	n/a	n/a
Caroline St (Upper Dawson & Canning)	32	41%	41%	0	n/a	n/a
Allentown Plaza	0	n/a	n/a	259	71%	76%
Total*	**153**	**67%**	**67%**	**267**	**70%**	**75%**

* not including tavern parking (93 spaces) or the private carpark constructed on the corner of Canning and Derby Streets.

The peak parking accumulation rate demonstrated within the Allenstown survey area on the day of the survey represents an average of 3.8 spaces per 100m² floor area GFA. However, the data indicated that parking demand at Allenstown Plaza occurs at 3.7 spaces per 100m² whilst parking demand elsewhere within the Allenstown centre occurs at 4.0 spaces per 100m². It is our opinion that the on-street parking adjacent to Allenstown Plaza is used in preference to the underground parking, hence the higher rate is more representative of actual demand.

The results of the surveys indicated that:-

- total parking supply is approximately 420 spaces (plus 93 spaces at the tavern), total peak demand is approximately 300 cars, hence there are currently about 120 spare spaces (50 on-street and 70 off-street);
- peak parking accumulation for the centre represents approximately 3.8spaces/100m² GFA;
- the on-street parking on Canning Street between Derby and Caroline (average 93%, peak 93%), and the on-street parking on Upper Dawson Road between Caroline and Canning (average 78%, peak 81%) demonstrated the highest utilisation in the centre during the combined peak period on the Thursday;
- the on-street parking on Canning Street, between William and Derby, demonstrated the lowest utilisation during the combined peak period on the Thursday (39% average, 36% peak);

- there is space for approximately 40 cars off-street in the parking area at the rear of the tavern. It is unclear whether this land is part of the tavern or the other adjoining land parcels. Note that at peak demand times for the tavern, these spare spaces may not be available;
- there are approximately 60 unused spaces (mainly underground) at Allenstown Plaza. It is likely these are not a popular choice due to lack of perceived convenience and/or safety;
- there are approximately 20 unused on-street spaces on Canning Street (William – Derby).

For the future situation, in terms of carparking in the Allenstown centre, the following aspects are noted:-

- recent works have provided a further 70 carparking spaces off-street on a site in Canning Street opposite Allenstown Plaza;
- potential streetscape works identified for Canning Street (Caroline Street – William Street) and Derby Street (Canning Street – Upper Dawson Road) could provide an additional 35 spaces (approximately);
- it has been suggested that an additional supermarket of 3,000m² GFA may be located in the Allenstown centre.

With all vacant premises occupied and the new off-street carpark (70 spaces) in place, there would be approximately 180 spare spaces in the overall centre. Many of these represent off-street spaces at Allenstown Plaza (approximately 60 spaces) and off Anderson Street near the tavern (40 spaces).

With the addition of a 3,000m² supermarket (without any additional parking) there would still be an excess of approximately 70 spaces (based on the surveyed demand rate) although it is recognised that this would rely on the use of many spaces within the overall centre that are not in close proximity to the proposed site.

The potential streetscape works may provide the opportunity for further additional on-street spaces. It should be noted that there may be traffic concerns throughout the area if more development occurs in Allenstown and these should be addressed as part of overall traffic management works.

4.1 District Centre Parking Strategies

It is clear that within a traditional District Centre like Allenstown there is a cross utilisation of facilities such that a cross utilisation of carparking occurs. This, in turn, requires a lesser parking demand than for individual stand-alone facilities. The existence or provision of on-street parking within District Centres allows an efficient cross utilisation of carparking spaces.

Within the Allenstown precinct the following strategies are identified:-

1. There are opportunities at present to allow some additional development to occur in the Allenstown centre without the provision of additional carparking, subject to the location (i.e. proximate to available spaces) and land ownership of such development. In the absence of parking provision on site, the development should provide a monetary contribution in lieu, using a parking rate of 4.0 spaces per 100m² GFA. The contribution can be used by Council to improve pedestrian access to existing parking areas and streetscaping works.
2. New development of a relatively small scale (less than 1,500m²) within Allenstown should provide carparking at a rate equivalent to 4.0 spaces per 100m² GFA. If the development is larger than this, a special impact report should be undertaken.
3. Streetscaping works should be encouraged at Allenstown to make better use of on-street parking as the supply for all premises within the centre. Such works should make parking on-street aesthetically pleasing and provide convenient and comfortable pedestrian access between parking areas and destinations. These works could occur at the loss of some on-street spaces, given the current oversupply of spaces across the whole of the survey area.

5.0 LOCAL/NEIGHBOURHOOD CENTRES

The existing centres of Glenmore Village, Park Avenue, Wandal, Dean Street, Elphinstone Street and Richardson Road have been designated as local/neighbourhood centres in the Centres' Planning Strategy. These centres are intended to service the day-to-day needs of the immediate surrounding populations. The carparking demands for all of these centres, with the exception of Richardson Road, have been analysed and results discussed below. Abacus Surveys Pty Ltd and Urban Economics undertook parking and land-use surveys (respectively) in September 2002. Note that there are differences between the floor areas reported herein and those in the Centres' Planning Strategy report (Urban Economics, April 2003) due to the use of slightly different boundaries for centres.

Further detail regarding the survey analysis can be found in the "Rockhampton Parking Strategy – Survey Analysis Report" (June 2003) and also in Appendix E of this report.

Note that some small shops within the Richardson Road area have been surveyed as part of the land-use parking rates documented in Section 7.0.

5.1 Elphinstone

The Elphinstone centre is located in north Rockhampton to the north-east of the Rockhampton CBD, immediately east of the Musgrave Road centre. The centre focuses around the intersection of Elphinstone Street/Berserker Street.

The total occupied floor space within the survey area at the time of the surveys was 3,417m² GFA, with a further 139m² being vacant (96% occupancy). Surveys were undertaken between 10.00a.m. and 1.00p.m. on Thursday 19 September 2002. The combined peak parking period was at 11.30a.m. The peak and average parking occupancies demonstrated in various locations within the centre, at this time, is identified in Table 5.1 below and Table E2 in Appendix E.

Table 5.1 ***Elphinstone Parking Analysis – Thursday***

Area	**On-street**			**Off-street**		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Berserker St (Bedford & Elphinstone)	32	28%	50%	22	45%	50%
Berserker St (Elphinstone & Mostyn)	22	23%	23%	53	42%	45%
Berserker St (Mostyn & Edington)	16	19%	25%	43	19%	19%
Elphinstone St (Nobbs & Berserker)	22	14%	14%	56	32%	36%
Total	**92**	**22%**	**30%**	**174**	**33%**	**36%**

The results of the surveys indicated that:-

- total parking supply is approximately 230 spaces (plus 39 spaces at Mitre 10), total peak demand is approximately 91 cars, hence there are currently about 170 spare spaces (this includes approximately 40 spaces on a vacant lot) (60 spaces on-street and 110 spaces off-street);
- peak parking accumulation for the centre represents approximately 2.7spaces/100m² GFA;
- the off-street carpark of the speciality shop located on Berserker Street, between Elphinstone and Bedford Streets, demonstrated the highest average and peak occupancy of all parking within the Elphinstone centre (average 50%, peak 57%). The vacant lot, also on Berserker Street, between Elphinstone and Mostyn Streets, demonstrated the second highest utilisation (average 50%, peak 55%);
- peak on-street parking was surveyed as 50% occupancy in one section only, with other on-street occupancy levels 25% or less;
- the following locations demonstrated the lowest utilisation at the time of the surveys:-
  - on-street parking on Elphinstone Street between Nobbs and Berserker (average and peak 14%);
  - the off-street carpark of the fruit shop on Berserker Street (average and peak 14%);
  - the off-street carpark of the corner shop on Berserker Street/Mostyn Street (average and peak 15%);

- parking utilisation within Elphinstone, in general, was low on the day of the survey. This may be explained by the high quantity of parking supply (92 on-street spaces and 174 off-street spaces) available in comparison to the reasonably small size of the centre (3,417m²).

It is noted that a shop development has previously been approved by Council on the vacant lot discussed above. Parking in this location (40 spaces) will, therefore, be unavailable in the near future if the development is constructed. Nonetheless, over 100 spare spaces would still be available (excluding the demand from the new shop development). The Elphinstone centre future scenario is based on the anticipated parking demand and on the assumption that all the vacant premises, which existed in September 2002, become occupied. As such, it is concluded that some additional development can occur without the provision of parking, subject to its location and land ownership details.

5.2 Frenchville

The Frenchville centre in north Rockhampton is located to the north-east of the Rockhampton CBD. It is centred around Dean Street between Kerrigan and Honour Streets.

The total occupied floor space within the survey area at the time of the surveys was 3,410m² GFA, with a further 745m² being vacant (82% occupancy). The tavern is not included in this area (see discussion below). Surveys were undertaken between 10.00a.m. and 1.00p.m. on Thursday 19 September 2002 and Saturday 21 September 2002. The centre's combined peak parking period occurred at 12.15p.m. on the Thursday. The peak and average parking occupancies demonstrated in various locations within the centre at this time is identified in Table 5.2 below and Table E3 in Appendix E.

It is recognised that the study area includes a tavern on Dean Street, however, the parking survey did not include the peak demand time (evening) for this facility. This is likely to occur outside the overall peak, and significant off-street parking is available such that this is unlikely to be an issue. Note that the tavern site has also been surveyed separately as part of the land-use surveys discussed in Section 7.0 of this report.

Table 5.2 ***Frenchville Parking Analysis – Thursday***

Area	**On-street**			**Off-street***		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Dean Street (Kerrigan & Vallis)	33	42%	45%	64	63%	72%
Dean Street (Vallis & Honour)	39	18%	31%	22	36%	41%
Total*	**72**	**29%**	**44%**	**86**	**56%**	**64%**

* Not including the tavern parking (107 spaces)

The results of the surveys indicated that:-

- total parking supply is approximately 160 spaces (plus 107 spaces at the tavern), total peak demand is approximately 90 cars, hence there are currently about 70 spare spaces (40 on-street and 30 off-street);
- peak parking accumulation for the centre represents approximately 2.6spaces/100m² GFA;
- the off-street carpark for the Foodstore demonstrated the highest occupancy during the centre's combined peak parking period (average 66%, peak 76%). It should also be noted that the Foodstore demonstrated an average occupancy of 84% and a peak occupancy of 100% (at 10.30a.m.) for the Saturday survey period;
- the off-street parking for the specialty shops on Dean Street demonstrated the lowest utilisation during the centre's combined peak period (average 27%, peak 19%);
- the highest utilisation period for the on-street parking in the centre was during the Saturday survey period on Dean Street between Kerrigan and Vallis (average 42%, peak 61%).

The Frenchville centre future scenario is based on the assumption that all the vacant premises, which existed in September 2002, become occupied. The outcomes of the parking analysis indicate that approximately 50 spare spaces (plus the spaces at the tavern) will exist within Frenchville, based on the anticipated parking demand and on the assumed take-up of existing vacancies. As such, it is concluded that some additional development can occur without the provision of parking, subject to its location and land ownership details.

5.3 Glenmore Village Shopping Centre

The Glenmore Village Shopping Centre is located in north Rockhampton to the north of the Rockhampton CBD, on the corner of Yaamba Road and Farm Street. The centre is a typical modern self-contained shopping centre comprising numerous facilities within an overall site, including off-street parking only (no on-street parking on frontages). These uses include shops, fast food franchise restaurants and a tavern. A motel also exists on the site, however, this has been excluded from the land-use and parking data.

The total occupied floor space within the shopping centre at the time of the surveys was 2,092m² GFA, with a further 76m² being vacant (96% occupancy). The tavern has not been included (see discussion below). Surveys were undertaken over three hour study periods on Thursday around midday, Thursday evening and Saturday morning. The combined peak parking period for the centre was between 10.00a.m. and 1.00p.m. on Saturday 21 September 2002. The specific peak parking time on this day was 12.30p.m. The peak and average parking occupancies demonstrated in various locations within the centre at this time is identified in Table 5.3 below and within Table E5 at Appendix E.

It is recognised that a tavern is located within the precinct, however, the parking surveys do not incorporate the peak demand time for this facility. This is likely to occur outside the overall peak, hence it is not considered to be a significant issue.

Table 5.3 — Glenmore Shopping Centre Parking Analysis – Saturday

Area	**On-street**			**Off-street***		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Glenmore Shopping Centre	0	n/a	n/a	202	56%	62%
Total	**0**	**n/a**	**n/a**	**202**	**56%**	**62%**

* not including the tavern parking (41 spaces)

The results of the surveys indicated that:-

- total parking supply is approximately 200 spaces (plus 41 spaces at the tavern), total peak demand is approximately 130 cars, hence there are currently about 75 spare spaces (on-site);
- peak parking accumulation for the centre represents approximately 6.0spaces/100m² GFA;
- the peak and average parking occupancies in the centre for the three parking periods (e.g. Thursday midday, Thursday evening and Saturday morning) are reasonably close. This indicates that the shopping centre has a reasonably consistent parking utilisation.

The Glenmore Village Shopping Centre future scenario is based on the assumption that all the vacant premises, which existed in September 2002, become occupied. The outcomes of the parking analysis indicate that approximately 70 spare spaces will exist within the Glenmore Village Shopping Centre based on the anticipated parking demand and on the assumed take-up of existing vacancies in the centre. This doesn’t include the 41 spaces, which have been assigned to the tavern. These results indicate the potential to allow some additional development to occur in the centre without the provision of parking, subject to its location and land ownership details.

5.4 Park Avenue

The Park Avenue local centre is located in north Rockhampton to the north-west of the Rockhampton CBD. The centre is predominantly based around the Haynes Street and Main Street intersection.

The total occupied floor space within the Park Avenue precinct at the time of the surveys was 1,587m² GFA, with a further 190m² vacant (89% occupancy). The tavern has not been included (see discussion below). Surveys were undertaken over a three hour period on Thursday 19 September 2002 between 10.30a.m. and 1.30p.m. The peak parking time during this period was at 12.15p.m. The peak and average parking occupancies demonstrated in various locations within the centre at this time is demonstrated in Table 5.4 below and Table E7 in Appendix E.

It is recognised that a hotel/tavern is located within the precinct, however, the parking surveys do not incorporate the peak demand time for this facility. This is likely to occur outside the overall peak, hence it is not considered to be a significant issue.

Table 5.4 ***Park Avenue Parking Analysis – Thursday***

Area	**On-street**			**Off-street***		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Main St (Edgar & Haynes)	42	33%	45%	35	66%	69%
Main St (Haynes & Redshaw)	38	34%	29%	12	17%	17%
Total	**80**	**34%**	**38%**	**47**	**53%**	**55%**

* not including the tavern parking (102 spaces)

The results of the surveys indicated that:-

- total parking supply is approximately 130 spaces (plus 102 spaces at the tavern), total peak demand is approximately 60 cars, hence there are currently about 70 spare spaces (50 on-street and 20 off-street);
- peak parking accumulation for the centre represents approximately 3.5spaces/100m² GFA;
- the off-street carpark for the Post Office on the western side of Main Street demonstrated the highest utilisation on the day of the surveys (average 66%, peak 69%);
- the off-street carpark for the Food Store on the eastern side of Main Street demonstrated the lowest utilisation on the day of the survey (average 17%, peak 17%);
- there are significant unused spaces at the rear of the hotel/TAB (up to 80 spaces);
- there are approximately 50 available spaces on-street.

The Park Avenue centre future scenario is based on the assumption that all the vacant premises, which existed in September 2002, become occupied. The outcomes of the parking analysis indicate that approximately 60 spare spaces will exist within the Park Avenue centre based on the anticipated parking demand and on the assumed take-up of existing vacancies. This doesn't include the 102 spaces available on the tavern site. As such, it is concluded that some additional development can occur without the provision of parking, subject to its location and land ownership details.

5.5 Wandal

The Wandal centre is located in south Rockhampton to the west of the Rockhampton CBD, just to the south of the Fitzroy River. It is based around Wandal Road between Wilkinson Street and Baden Powell Street.

The total occupied floor space within the Wandal precinct at the time of the surveys was 1,393m² GFA, with a further 573m² vacant (71% occupancy). The tavern floor area has been excluded (see discussion below). Surveys were undertaken over a three and a half hour period on Thursday 19 September 2002 between 2.30p.m. and 6.00p.m. The peak parking time during this period was at 3.15p.m. The peak and average parking occupancies demonstrated in various locations within the centre at this time is demonstrated in Table 5.5 below and Table E8 in Appendix E.

It is recognised that a tavern exists within the precinct, however, the parking surveys do not incorporate the peak demand time for this facility. This is likely to occur outside the peak and is, therefore, not considered to be a significant issue.

Table 5.5 ***Wandal Parking Analysis – Thursday***

Area	**On-street**			**Off-street***		
	Parking Supply	**Av Occ.**	**Peak Occ.**	**Parking Supply**	**Av Occ.**	**Peak Occ.**
Wandal Road (Baden Powell & Woodville)	53	36%	45%	27	30%	37%
Wandal Road (Woodville & Wilkinson)	43	30%	26%	6	33%	33%
Total*	**96**	**33%**	**36%**	**33**	**30%**	**36%**

* not including the tavern parking (18 spaces)

The results of the surveys indicated that:-

- total parking supply is approximately 130 spaces (plus 18 spaces at the tavern), total peak demand is approximately 50 cars, hence there are currently about 80 spare spaces (60 on-street and 20 off-street). Note that subsequent to the carparking surveys, streetscape works were undertaken and this has reduced the number of parking spaces to approximately 120 spaces;
- peak parking accumulation for the centre represents approximately 3.4spaces/100m² GFA;
- the on-street parking on Wandal Road between Baden Powell Street and Woodville Street demonstrated the highest utilisation on the day of the survey (average 36%, peak 45%);
- the off-street carpark for the tavern demonstrated the lowest utilisation on the day of the survey (average 11%, peak 6%);
- the parking occupancies for both on and off-street parking in Wandal were low on the day of the surveys, indicating the centre may be operating below its potential.

The Wandal centre future scenario is based on the assumption that all the vacant premises, which existed in September 2002, become occupied. The outcomes of the parking analysis indicate that approximately 50 spare spaces will exist within the Wandal Centre based on the anticipated parking demand and on the assumed take-up of existing vacancies (this is based on the parking available subsequent to the recent streetscape works). This doesn't include the 18 spaces currently existing on the tavern site. As such, it is concluded that some additional development may be able to occur without the provision of parking, subject to its location and land ownership details.

5.6 Local/Neighbourhood Centres Carparking Strategies

It is evident from the carparking assessment undertaken (parking surveys and the future development scenario whereby all existing vacancies become occupied) that there is a reasonable supply of spare spaces in most of the local/neighbourhood centres. With the current parking demand rates being experienced, additional development in each centre is likely to be achievable without providing additional carparking (subject to location proximate to spare space availability and land ownership issues). Alternatively, some streetscape improvement projects could be undertaken at the expense of losing car spaces without being detrimental to the overall supply. The details of each centre considered are summarised as follows:-

- Elphinstone generates 2.7spaces/100m² GFA and could have in excess of 100 spare spaces (excluding 40 spaces on the vacant lot and demand of the new shop) if all vacant tenancies are filled;
- Frenchville generates 2.6spaces/100m² GFA and could have up to 80 spare spaces (plus the spaces at the tavern) if all vacant tenancies are filled;
- Glenmore Village Shopping Centre generates 6.0spaces/100m² GFA and could have up to 70 spare spaces (excluding spaces at the tavern) if all vacant tenancies are filled;
- Park Avenue generates 3.5spaces/100m² GFA and could have up to 60 spare spaces (excluding spaces at the tavern) if all vacant tenancies are filled;
- Wandal generates 3.4spaces/100m² GFA and could have up to 50 spare spaces (excluding spaces at the tavern) if all vacant tenancies are filled.

Based on these results it would appear that an appropriate carparking strategy for Local/Neighbourhood Centres (excluding Glenmore Village Shopping Centre) would be to allow carparking provision at a rate of 4.0 spaces per 100m² GFA (similar to the District Centre). Due to the spare spaces in the Local/Neighbourhood Centres, over and above what would be required if all current vacancies were occupied, there are currently opportunities to allow some additional development without the provision of additional carparking (subject to location and land ownership issues), however, a monetary contribution should be provided in lieu of carparking provision. The exception to this is the Glenmore Village Shopping Centre, which is more typical of a self-contained shopping centre and does not provide sections of on-street parking and/or pedestrian circulation. As a result, parking for development at Glenmore Shopping Centre should be provided in accordance with the planning scheme.

6.0 HIGHWAY BUSINESS CENTRES

Highway Business Centres designated in the Centres' Planning Strategy include Gladstone Road, Musgrave Street and Yaamba Road. Eppell Olsen & Partners have undertaken an analysis of the parking areas on Gladstone Road and Musgrave Street as discussed in the following sections. Yaamba Road was not surveyed due to the majority of parking consisting of private off-street parking.

6.1 Gladstone Road

The Gladstone Road centre is located in south Rockhampton to the south of the Rockhampton CBD, and to the immediate east of the Allenstown centre. The centre includes land-uses on Gladstone Road between Derby Street and Stanley Street in a typical linear/strip development pattern.

No floor space data has been collated for the Gladstone Road centre. Parking surveys were, however, undertaken between 10.00a.m. and 1.00p.m. on Thursday 19 September 2002. The combined peak parking time for the centre was at 12.30p.m. The peak and average parking occupancies demonstrated in various locations within the centre at this time are identified in Table 6.1 and Table E4 in Appendix E.

Table 6.1 ***Gladstone Road Parking Analysis – Thursday***

Area	**On-street**			**Off-street**		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Gladstone Road West (Derby and Stanley)	30	13%	13%	45	40%	49%
Gladstone Road East (Derby & Stanley)	24	29%	38%	47	64%	91%
Total	**54**	**19%**	**24%**	**92**	**52%**	**71%**

As no land-use data is available, parking accumulation rates have not been estimated.

The results of the surveys indicated that:-

- total parking supply is approximately 150 spaces, total peak demand is approximately 80 cars, hence there are currently about 70 spare spaces (50 on the western side and 20 on the eastern side);
- the two off-street carparks for the Fruit Market demonstrated the highest demand in the centre at the time of the survey (average 64%, peak 91%);
- much of the land-use on the western side of Gladstone Road has vacancies, hence the low parking demand in this location. The on-street parking on the western side of Gladstone Road between Derby Street and Stanley Street demonstrated the lowest occupancies on the day of the surveys (average 10%, peak 13%);
- off-street parking appears to be the preferred parking location for customers and staff of the businesses on Gladstone Road.

No land-use data for the Gladstone Road centre was available. No future development scenario has, therefore, been able to be undertaken.

6.2 Musgrave Street

The Musgrave Street centre is located in north Rockhampton to the north of the Rockhampton CBD and to the immediate west of the Elphinstone centre. The centre is based around Musgrave Road between Macaree Street and High Street and provides typical strip development along a major arterial road. Northside Plaza is contained within the survey area but was excluded from the surveys.

The purpose of the parking surveys was to determine the extent of on-street parking along Musgrave Street only. As such, no off-street parking has been considered, nor has any parking in the adjacent side streets.

The total occupied floor space within the Musgrave Street centre at the time of the surveys was 13,418m² GFA, with a further 2,634m² vacant (84% occupancy). Surveys were undertaken over a three hour period on Thursday 19 September 2002 between 10.30a.m. and 1.30p.m. The peak parking time during this period was at 11.30a.m. The peak and average parking occupancies demonstrated in various locations within the centre for this time are demonstrated in Table 6.2 below and Table E6 in Appendix E.

Table 6.2 ***Musgrave Street Parking Analysis – Thursday***

Area	**On-street**			**Off-street**		
	Parking Supply	**Avg Occ.**	**Peak Occ.**	**Parking Supply**	**Avg Occ.**	**Peak Occ.**
Musgrave St West (Macaree & High)	84	38%	44%	0	n/a	n/a
Musgrave St East (High & Macaree)	67	46%	49%	0	n/a	n/a
Total	**151**	**42%**	**46%**	**0**	**n/a**	**n/a**

The results of the surveys indicated that:-

- total parking supply on Mugrave Street is approximately 150 spaces, total peak demand is approximately 70 cars, hence there are currently about 80 spare spaces;
- the on-street parking on the eastern side of Musgrave Road demonstrated a slightly higher utilisation (average 46%, peak 49%) than the western side of Musgrave Road (average 38%, peak 44%).

6.3 Highway Business Centres Carparking Strategies

The important aspect of these highway business centres is the current provision of on-street parking on the highways. Such parking is not typically appropriate on a major arterial traffic route. In the longer-term the capacity needs of these arterial routes may be such that parking needs to be removed for the sake of traffic efficiency/operation. In particular, some of these routes may be under the control of the Department of Main Roads.

On the basis of the above, it is important in these highway business centres that future developments provide parking on site or, subject to appropriate conditions and negotiations, in adjacent side streets where commercial frontage exists. There should be no reliance on the on-street parking on the arterial routes in the longer-term. In the case of Northside Plaza, which is more typical of a self-contained shopping centre that does not provide sections of on-street parking and/or pedestrian circulation, parking should be provided on-site in accordance with the planning scheme.

7.0 LAND-USE PARKING RATES

The Rockhampton Planning Scheme is Council's tool to assess and direct development in the City. It determines the appropriate location for various land-uses in the City. It also provides policy and requirements on how such development should occur. These provisions give direction in relation to the number of carparking spaces required for particular land-uses. The scheme also allows Council to accept a monetary contribution in lieu of the provision of carparking on-site in particular locations in the CBD.

As part of this parking strategy, the following issues need to be addressed:-

- do the current rates for parking spaces reflect demands?
- are there land-uses which require specific parking number rates which are not contained in the current scheme?
- is one rate for a particular land-use appropriate across the whole City or should different rates apply to different areas?
- where and how should relaxations occur to parking rates and what are the consequences of such relaxations?

A total of 25 parking rates exist for land-uses within the scheme. This includes 10 different rates for commercial type land-uses, four for tourist related uses, four for health and educational facilities, four for industrial, two for recreation and one for residential. These are detailed in Table 7.1.

Table 7.1 ***Existing Land-uses within the Planning Scheme***

Commercial	Tourist	Health/ Education	Industrial	Recreation	Residential
• Bulk Store • Catering Shop • Commercial Kennels/ Catteries • Commercial Premises • Plant Nursery • Professional Offices • Retail Showroom • Restaurant • Shop • Undertaker's Establishment	• Accommodation Building • Bed & Breakfast • Hotels • Motels	• Day Care Centre • Educational Establishment • Hospital • Place of Worship	• Industry • Liquid Fuel Depot • Transport Terminal • Warehouse	• Indoor Entertainments • Squash Court	• Multiple Dwelling

Council uses the specified parking rates for the above land-uses when assessing the parking requirements for a development application. Where a development type is proposed which does not fit into these 25 land-use categories, either the land-use which 'best fits' the development's description is used to assess the application, or the amount of parking required is determined by Council, or Council may ask the developer to justify the amount of parking proposed.

Council may provide relaxations on the number of carparking spaces required, as follows:-

> *"Notwithstanding any of the provisions contained in this division the Council may:-*
>
> *a) dispense with or modify all or any of the parking requirements contained herein if it considers that dispensation of modification is justified having regard to:-*
> *i) the location of the site with respect to existing or proposed public carparking stations, available carparking areas, high level of pedestrian accessibility;*
> *ii) the particular circumstances of the proposed use including hours of operation, anticipated intensity;*
> *iii) the existing use on the site;*
> *iv) the levels or depth of the allotment;*
> *v) vehicle access, whether it is convenient or hazardous;*
> *vi) the provisions of any development control plan affecting the site; or*
> *vii) the proposed layout and size of carparking bays; and*
>
> *b) at its absolute discretion from time to time in any particular case, forego all or any of its carparking space requirements and accept a cash payment of such amount as Council may from time to time determine in lieu thereof to allow the Council to provide alternative off-street carparking spaces."*
>
> *(Division VII, Section 5 (a, b))*

If the developer believes a parking relaxation is warranted, they need to justify their position in a traffic impact report. Council then considers the merits of the argument and either accepts or rejects the relaxation. If a developer is unable to provide the parking requirements on the subject site, they may be required to pay a cash payment to Council in lieu of providing the parking spaces on site (in parts of the CBD only).

7.1 Review of Existing Parking Rates Against Other Local Governments

An analysis of Rockhampton's existing carparking rates indicates that there are discrepancies between some of the parking rates utilised by Rockhampton City Council and other local governments.

The following land-use parking rates contained within Rockhampton's Town Planning Scheme are generally consistent with those used by the majority of local governments included in the comparison (Refer to Appendix F):-

- Bed and Breakfast – 1/guest room;
- Catering Shop – 1/15m² GFA;
- Caretaker's residence – one space;
- Commercial Kennels or Cattery – 1/2 employees;
- Educational Establishment – 1/staff member + 1/10 students of driving age + setdown/pickup area;
- Motel – 1/unit + 1/3 employees;
- Multiple Dwelling – 1/unit + 0.5 unit (visitor);
- Shop – 1/20m² GFA (first 100m²) + 7/100m² thereafter (for smaller developments);
- Squash Court – 4/court;
- Undertaker's Establishment – 1/2 employees (min 4) + 1/5 persons that can be accommodated in the chapel.

The remaining land-use parking rates contained within the Rockhampton Town Planning Scheme are generally inconsistent in comparison to other local governments' rates. These are detailed and demonstrated in Table 7.2.

Table 7.2 ***Inconsistent Land-use Parking Rates***

Land-use	Rockhampton Rate	Average Rate of Other Councils	Example of Application			
			Example	Parking Required (Rocky)	Parking Required (avg rate)	Diff
Accommodation Building	1/unit + 0.5/unit (visitor)	1/unit + 1/3 unit (visitor)	30 units/ 4 visitors	45	35	+ 10 (22%)
Bulk Store	1/50m² GFA	1/70m² GFA	3000m² GFA	60	45	+15 (25%)
Commercial Premises	1/45m²	1/25 – 1/30m² GFA	300m² GFA	7	11	- 4 (36%)
Day Care Centre	1/employee + pick up set down area	1/employee + pick up set down area 1/10 children	50 kids + 5 staff 300m² GFA	5	11	-6 (55%)
Hospital	1/3 beds +1/2 employees + 2 for ambulance	1/3-4 beds +1/2 employee + 1/Dr staff + storage for emergency vehicles	300 bed + 50 staff +10 doctors + 10000m² GFA	132	128	+4 (3%)
Hotel	1/unit + 1/10m² (lounge) + 1/3m² (bar) + 1/10m² (retail) + 6 (bottleshop)	1/room + 1/10m² GFA(licensed area) + 1/50m² GFA (bulk liquor) + 10 (bottleshop)	50 rooms, 20m² (bar), 130m² (lounge) + 200m² (bottleshop) + 6 staff	90+ 6 spaces for bottleshop queuing	78+ 10 spaces for queuing at bottleshop	+12 (13%)
Indoor Entertainments	1/20m² TUA	1/15m² GFA	1000m² GFA	50	68	-18 (26%)
Industry	1/50m² GFA or 1/2 employees	1/75m² GFA	5000m² GFA	100	65	+35 (35%)
Place of Worship	1/10 seats	1/7 seats or 8/100m²	150 seats/ 300m² GFA	15	23	-8 (35%)
Plant Nursery	1/500m² TUA (min 5 spaces)	1/200m² TUA + 1/2 employees	2000m² + 4 staff	5	13	-8 (62%)
Professional Office	1/45m² GFA or 1/2employees	1/30m² GFA	300m² GFA	7	10	-3 (30%)
Retail Showroom	1/50m² GFA	1/40m² GFA	3000m² GFA	60	72	-12 (16%)
Restaurant	1/6 places + 1/employee	9/100m² GFA + 1/2employees	200m² (i.e. 50 seats/6 staff)	16	21	-5 (24%)
Shop (Larger Development)	1/20m² GFA (1st 100m²) and 7/100m² thereafter	6/100m²	10000m² GFA	698	625	+73 (10%)
Warehouse	1/50m² GFA	1/100m² GFA	5000m² GFA	100	56	+44 (44%)

A number of specific parking rates for particular developments, not included within Rockhampton's Planning Scheme, are adopted by other local governments. An analysis of a selection of the most applicable rates to Rockhampton's development demands is compared to the land-use parking rate which would be applied from Rockhampton's Planning Scheme in a hypothetical development application. The differences in parking, which would be required by an identical development in Rockhampton and the average rate used by other local governments, is demonstrated in Table 7.3 (refer Appendix G).

Table 7.3 Alternative Land-use Rates and Comparison to Applicable Rockhampton Rate

Land-use	**Average Rate of Other Councils**	**Comparative Rockhampton Parking Rate**	**Example of Application**			
			Example	**Parking Required (avg rate)**	**Parking Required (Rocky)**	**Diff**
Aged Care Dwelling	1/unit + 1/4 (visitor)	1/unit + 0.5 (visitor)	10 dwellings	13	15	+2 (13%)
Backpackers	1/5 beds + 0.5/staff	1/unit + 0.5 (visitor) (Accommodation Unit)	12 rooms/48 beds/4 staff	12	18	+6 (35%)
Boat/Car Repair	2-5/100m² TUA	1/50m² GFA or 1/2 employees	300m²/4 working bays/4 staff	14	8	-6 (43%)
Bottleshop	5/100m² + reservoir space for 12 cars	1/50m² GFA	200m²	23	4	-19 (83%)
Cinema/Theatre	1/9 seats or 1/12m²	1/20m² TUA (Indoor Recreation)	1500 seats/ 800m²	188	40	-148 (80%)
Factory	1/100m² GFA	1/50m² GFA or 1/2 employees (Industry)	1,000m²	10	20	+10 (50%)
Fast Food (Drive-thru)	1/10m² GFA + queuing for 8 vehicles	1/15m² GFA	600m² + 50 seats + 6 staff	70	40	-30 (43%)
Fast Food Takeaway	1/10m² GFA	1/15m² GFA (Catering Shop)	150m²	17	10	-7 (40%)
Function Centre/Hall	7.5/100m² GFA	1/20m² TUA	2,000 GFA	134	90	-44 (33%)
Golf Course	4/hole + requirements for clubhouse	Nil	9 hole	36	-	-
Gym	1/15m² GFA	1/20m² TUA	2,000m² GFA	134	90	-44 (33%)
Light Industry	1.8/100m² GFA	1/50m² GFA or 1/2 employees (Industry)	1,000m²	13	20	+7 (35%)
Major Shopping Centre	1/18m² GFA	1/20m² GFA (1st 100m²) + 7/100m² thereafter	25,000m²	1,369	1,748	+379 (22%)
Medical Centre	4/consulting room or 1/20m² GFA	1/45m² GFA or 1/2 employees (Professional Office)	400m²/3 Drs/ 3 staff	20	9	-11 (65%)

Table 7.3 (cont.) Alternative Land-use Rates and Comparison to Applicable Rockhampton Rate

Land-use	**Average Rate of Other Councils**	**Comparative Rockhampton Parking Rate**	**Example of Application**			
			Example	**Parking Required (avg rate)**	**Parking Required (Rocky)**	**Diff**
Motor/Boat Showroom	1/100m² TUA	1/50m² GFA (retail showroom)	500m² GFA + 2000m² display area	25	10	-15 (60%)
Motor Trade Retail	1/45m² GFA	1/50m² GFA	1,000m² GFA	23	20	-3 (13%)
Nightclub	1/14m²	1/20m² TUA (Indoor Entertainment)	200m²	15	10	-5 (35%)
Outdoor Sports Ground	50/field	Nil	2 fields	100	-	-
Primary School	1/2 employees	1/staff + setdown pickup area	40 staff	20	40 + pickup setdown area	+20 (50%)
Service Station	4/work bay +requirements of retail/restaurant rates	1/50m² GFA or 1/2 employees (industry)	150m² (convenience) + 3 work bays + 3 staff	19	3	-16 (85%)
Tavern	1/6m² (bar, lounge, dining) 1/10m² (bulk liquor sales + queuing for 12 vehicles (bottleshop)	1/15m² GFA (Catering Shop)	20m² (bar) + 500m² (dining, lounge)	87	35	-52 (60%)
Tertiary College	1/2 staff + 1/10 students	1/staff + 1/10 students + setdown pickup area	10,000 students + 100 staff	1,050	1,100 + setdown pickup area	+20 (5%)
Vet	1/25m² GFA or 3/practitioner	1/2 employees (min 5) (Commercial Kennel or Cattery)	300m² + 2 vets + 3 rooms + 4 staff	12	5	-7 (58%)

As can be seen from the results demonstrated in Table 7.3, over half of the development types analysed would be providing less parking under Rockhampton's planning scheme than is being required in other local government areas, due to higher parking rates being applied to the relevant developments. Particularly noticeable development types which would require less parking under Rockhampton's scheme compared to other local governments include cinema/theatres, medical centres, service stations, bottleshops, fast food (drive-thru), function centre/hall, taverns, gym, motor/boat showroom and veterinary surgeons.

On the other hand, specific industrial uses, major shopping centre developments and some educational facilities appear to require higher parking rates when compared to those used in other local government areas. In particular, factories and light industry type developments require less parking in other local government areas when compared to Rockhampton. In Rockhampton the rate for general industry is currently being applied to lower intensity industrial developments as well as higher intensity developments, however, it appears that different parking generation rates occur for different development intensities.

7.2 Land-use Parking Generation Survey Results

Following the comparison of land-use rates used by Rockhampton and other local governments, as discussed above, it was identified that further parking generation surveys be undertaken to understand actual parking demand for these land-uses. These parking generation surveys were undertaken for land-uses which were identified as a high priority for Council, or where minimal parking data existed. Other land-use parking rates, not included in the surveys, are proposed to be determined from a comparison of existing land-use rates adopted by other local government authorities, as previously detailed.

The land-use parking surveys were undertaken in Rockhampton and other regional centres (Mackay, Townsville and Toowoomba) in Queensland during December 2002 and January 2003. A full data compendium of the parking survey results has been assembled separately, however, a summary of the results is provided in Appendix H.

7.3 Recommendations on Land-use Parking Rates

The repercussion of developments in the City providing less carparking than is required means that a parking shortfall could occur in the future. The analysis of the existing surplus and deficiencies in the CBD and centres combined with specific land-use parking generation surveys has enabled a better understanding of these impacts.

The following results/conclusions are made for those land-uses identified in Table 7.2 as being inconsistent with other local government authorities and for other land-uses which have been surveyed:-

- accommodation building – peak surveyed demand is 1.67 cars per dwelling unit. This result is significantly higher than the other results, which are generally 0.5 cars per unit. Despite these results, for permanent accommodation a more realistic provision of 1.0 space per unit plus 0.25 spaces per unit for visitors is recommended. This recommendation is given on the basis of market demand for at least one car space per unit. In addition, an appropriate provision for visitor parking is required;
- aged care accommodation – peak surveyed demand is 0.4 cars per dwelling unit. A provision of 0.5 spaces per dwelling unit for the first 25 units, and a rate of 0.25 spaces per dwelling unit thereafter, plus one space per six beds is suggested;
- boat/car repair – peak surveyed demand is 0.3 cars per 100m² site area. This is based on limited data only, therefore, based on other Councils, the recommended rate is 2.0 spaces per 100m² TUA;
- bottleshop – peak surveyed demand is 1.2 cars per 100m² GFA, however, this is based on one site only. After comparison with survey results for hotels/taverns and for small shops, comparison with previous data from South East Queensland and comparison with other Councils the suggested rate is 5.0 spaces per 100m² GFA (plus drive-thru queue for 12 cars if provided);
- cinema – peak surveyed demand is 0.3 cars per seat (equivalent to one car per three seats). Based on the other results and following comparison with other Councils the suggested rate is one space per five seats;
- commercial premises – peak surveyed demand is 1.6 cars per 100m² GFA, however, only two sites (both in the CBD) were surveyed. Based on previous survey results from other sources and following a comparison with other Councils a rate of 3.3 spaces per 100m² GFA (equivalent to one space per 30m² GFA) is suggested;
- day care centre – only one site has been surveyed (in Toowoomba). This result is one space per 100m². However, it is more appropriate to use the number of children as the parking relationship, hence the recommended rate is one space per employee plus one space per five children (based on other Councils);

- fast food – peak surveyed demand at the busiest site is 10.8 cars per 100m² GFA, however, this result is significantly higher than other results. The average of the surveyed rates is approximately 8.3 cars per 100m² GFA. A rate of 8.3 spaces per 100m² GFA (plus drive-thru queue for eight cars if provided) is, therefore, considered more appropriate when considering the rates recommend elsewhere;
- function centre/hall – peak surveyed demand is 4.4 cars per 100m² GFA, however, this represents one site only. Based on comparison with the restaurant results and rates used by other Councils, a rate of 5.0 spaces per 100m² GFA (equivalent to one space per 20m² GFA) is suggested;
- hospital – peak surveyed demand is 1.75 cars per bed. On the basis of this result a rate of 2.0 spaces per bed is suggested;
- hostel/backpackers – peak surveyed demand is 0.25 cars per unit. After comparison with the rates of other Councils, a requirement of one space per two bedrooms (or units) is suggested;
- hotel/tavern – peak surveyed demand at the busiest site is 11.6 cars per 100m² GFA, however, this result is significantly higher than other results. Excluding this site, the peak surveyed demand is 7.2 cars per 100m² GFA and the average is approximately 3.6 cars per 100m² GFA. A rate of 6.7 space per 100m² GFA (equivalent to 1 space per 15m² GFA) is considered more appropriate when considering the results of other surveys in South East Queensland and the rates of other Councils;
- indoor entertainment – based on consideration of other Councils a rate of 6.7 spaces per 100m² GFA (equivalent to 1 space per 15m² GFA) is suggested. Given the survey results for function halls it may be appropriate to accept a rate of 5.0 cars per 100m², however, in the absence of more data, for former (existing) rate is to be retained;
- industry – peak surveyed demand at the busiest site is 2.6 cars per 100m² GFA, however, this result is significantly higher than other survey results. Excluding this site, the peak demand is 0.5 cars per 100m² GFA and the realistic average is approximately 0.4 cars per 100m² GFA. A rate of 1.0 space per 100m² GFA is considered more appropriate when considering these results and the rates of other Councils. The higher rate is recommended on the basis that the provision of vehicle manoeuvring areas (not cluttered by cars) on the road frontage and at the site entry is important, hence on-street parking should be avoided;

- light industry - peak surveyed demand is 1.3 cars per 100m² GFA. A rate of 1.5 space per 100m² GFA is considered appropriate when considering the rates of other Councils;
- medical centre - peak surveyed demand is 6.6 cars per 100m² GFA. A rate of 5.0 spaces per 100m² GFA is considered more appropriate when considering the range of results and the rates of other Councils;
- motel – peak surveyed demand is 0.6 cars per unit. A rate of 1.0 space per unit is suggested based on other Councils and the desire to provide sufficient parking for peak occupancy rates. Based on the survey results it may be appropriate in some circumstances to accept a lower rate where the potential overflow impact is manageable;
- outdoor sports ground – in the absence of any better data a rate of 50 spaces per field is considered suitable (based on other Councils' rates), however, each site should be considered on its specific requirements;
- place of worship – based on consideration of other Councils a rate of 8.3 spaces per 100m² GFA (equivalent to one space per 12m² GFA) is suggested;
- plant nursery – peak surveyed demand is 0.7 cars per 100m² site area (equivalent to 11.1 cars per 100m² GFA). Based on other Councils the recommended rate is 0.5 spaces per 100m² TUA (Total Use Area);
- professional office – based on consideration of results reported elsewhere and the rates used by other Councils a rate of 3.3 spaces per 100m² GFA (equivalent to one space per 30m² GFA) is suggested;
- retail showroom – peak surveyed demand is 3.1 cars per 100m² GFA. The average of the peaks at the surveyed sites is 2.0 cars per 100m² GFA. Based on these results and comparison with other Councils a rate of 2.5 spaces per 100m² GFA (equivalent to one space per 40m² GFA) is suggested;
- restaurant – the peak surveyed demand is 3.9 cars per 100m² GFA, however, based on comparison with other Councils a rate of 5.0 spaces per 100m² GFA (equivalent to one space per 20m² GFA) is suggested;
- shop (small development outside a designated centre typically < 2,000m² GFA) – peak surveyed demand of the busiest site is 25.0 cars per 100m² GFA, however, this result is significantly higher than other survey results. As such, the realistic average is approximately 3.5 cars per 100m² GFA. A rate of 5.0 spaces per 100m² GFA is considered more appropriate when considering the overall results and the rates of other Councils;

- shop (larger development outside a designated centre typically >10,000m²) – peak surveyed demand is 4.8 cars per 100m² GLA. A rate of 5.0 spaces per 100m² GLA is suggested;
- vehicle showroom - peak surveyed demand is 1.1 cars per 100m² site area. Based on other Councils the recommended rate is 1.0 space per 100m² TUA (Total Use Area);
- warehouse/bulk store - based on consideration of other Councils a rate of 1.0 space per 100m² GFA is suggested.

Note that in all situations, Council should consider appropriate relaxations only where sound argument and supporting data is provided by appropriately qualified professionals. Section 9.0 of this report details a recommended approach to relaxations.

Table 7.4 summarises the above recommendations.

Table 7.4 ***Recommended Land-use Parking Rates***

Land-use	Previous Rockhampton Rate	Peak Surveyed Demand	Avg Peak Surveyed Demand	Avg Other Local Governments	Recommended Rate
Accommodation Building	1 covered/unit + 0.5/unit (visitor)	1.67 cars per unit	0.5 cars per unit	1/unit + 1/3unit (visitor)	1.0 space per unit plus 0.25 spaces per unit for visitors **Due to market demand for at least one car space per unit plus appropriate provision for visitor parking*
Aged Care Accommodation	n/a	0.4 cars per dwelling unit		1/unit + 1/4unit (visitor)	0.5/unit for first 25 units and 0.25/unit thereafter plus 1/6 beds (visitor)
Boat/Car Repair	n/a	0.3 cars per 100m² site area (limited data)		2-5/100m² TUA	2.0 spaces per 100m² TUA
Bottleshop	n/a	1.2 cars per 100m² GFA (limited data)		5/100m² + reservoir space for 12 cars where drive-in exists	5.0 spaces per 100m² GFA (plus drive-thru queue for 12 cars if provided)
Cinema	n/a	0.3 cars per seat (equivalent to 1/3seats)		1/9 seats	1.0 space per five seats
Commercial Premises	1/45m²	1.6 cars per 100m² GFA (limited data)		1/25-30m² GFA	3.3 spaces per 100m² GFA (equivalent to one space per 30m² GFA)
Day Care Centre	1/employee + pick up/set down area	1.0 space per 100m². (limited data)		1/employee + pick up set down area for 1/10 children	1.0 space per employee plus 1.0 space per five children
Fast Food	n/a	10.8 cars per 100m² GFA	8.3 cars per 100m² GFA	1/10m² GFA + queuing for 8 vehicles	8.3 spaces per 100m² GFA (plus drive-thru queue for 8 cars if provided)
Function Centre/hall	n/a	4.4 cars per 100m² GFA (one site only)		7.5/100m² GFA	5.0 spaces per 100m² GFA (equivalent to one space per 20m² GFA)
Hospital	1/3 beds + 1/2 employees + 2 ambulance	1.75 cars per bed		1/3-4 beds + 1/2employee + 1/Dr staff + storage for emergency vehicles	2.0 spaces per bed
Hostel/ Backpackers	n/a	0.25 cars per unit		1/5beds + 1/2 employees	one space per two bedrooms (or units)
Hotel/Tavern	1/unit + 1/10m² GFA lounge +1/3m² GFA bar + 1/10m² GFA retail + reservoir of 6 for bottleshop	Busiest site - 11.6 cars per100m² GFA. Excluding this site, 7.2 cars per 100m² GFA	3.6 cars per 100m² GFA	1/room + 1/10m² GFA (licensed area) + 1/50m² GFA (bulk liquor sales) + queuing for 10 vehicles for drive through bottleshop	6.7 space per 100m² GFA (equivalent to 1 space per 15m² GFA)
Indoor Entertainment	1/20m² TUA			1/15m² GFA	6.7 spaces per 100m² GFA (equivalent to 1 space per 15m² GFA). Given the survey results for function halls it may be appropriate to accept a rate of 5.0 cars per 100m², however, in the absence of more data, for former (existing) rate is to be retained

Table 7.4 (Cont.) ***Recommended Land-use Parking Rates***

Land-use	**Previous Rockhampton Rate**	**Peak Surveyed Demand**	**Avg Peak Surveyed Demand**	**Average Other Local Governments**	**Recommended Rate**
Industry	1/50m² GFA or 1/2 employees	Busiest site - 2.6 cars per100m² GFA Excluding this site, 0.5 cars per 100m² GFA	0.4 cars per 100m² GFA	1/75m² GFA	1.0 space per 100m² GFA **The higher rate recommended on basis that the provision of vehicle manoeuvring areas (not cluttered by cars) on the road frontage and at the site entry is important, hence on-street parking should be avoided*
Light Industry	n/a	1.3 cars per 100m² GFA		1.8/100m² GFA	1.5 space per 100m² GFA
Medical Centre	n/a	6.6 cars per 100m² GFA		4/consulting room or 1/20m² GFA	5.0 spaces per 100m² GFA
Motel	1/unit + 1/3 employees	0.6 cars per unit		1/unit +1/2 employees + restaurant rate	1.0 space per unit
Outdoor Sports Ground	n/a			50/field	50 spaces per field, however, each site should be considered on its specific requirements
Place of Worship	1/10 seats			1/7 seats or 8/100m² GFA	8.3 spaces per 100m² GFA
Plant Nursery	1/500m² TUA (min 5 spaces)	0.7 cars per 100m² site area (equivalent to 11.1 cars per 100m² GFA)		1/200m² TUA + 1/2 employees	0.5 spaces per 100m² TUA (Total Use Area)
Professional Office	1/45m² GFA or 1/2 employees			1/30m² GFA	3.3 spaces per 100m² GFA (equivalent to one space per 30m² GFA)
Retail Showroom	1/50m² GFA	3.1 cars per 100m² GFA	2.0 cars per 100m² GFA	1/40m² GFA	2.5 spaces per 100m² GFA (equivalent to one space per 40m² GFA)
Restaurant	1/6 places + 1/employee	3.9 cars per 100m² GFA		9/100m² GFA or 1/3seats + 1/2 employees	5.0 spaces per 100m² GFA
Shop (small development typically <2,000m² GFA)	1/20m² GFA (1st 100m²) & 7/100m² thereafter	25.0 cars per 100m² GFA (significant higher than other survey results)	3.5 cars per 100m² GFA	1/20m² GFA	5.0 spaces per 100m² GFA
Shop (larger development typically >10,000m²)	1/20m² GFA (1st 100m²) & 7/100m² thereafter	4.8 cars per 100m² GFA		6/100m² GFA	5.0 spaces per 100m² GLA
Vehicle Showroom	n/a	1.1 cars per 100m² site area		1/115m² TUA	1.0 space per 100m² TUA (Total Use Area)
Warehouse/Bulk Store	1/50m² GFA			1/100m² GFA	1.0 space per 100m² GFA

8.0 PARKING MONETARY CONTRIBUTIONS

Council allows monetary contributions in lieu of the provision of carparking spaces in parts of the CBD. In this area, Council has identified a Core Area, which requires $4,000 per car space and a Balance Area which requires $2,000 per car space. Monetary contributions in lieu of parking do not apply to areas outside of these parts of the CBD. Figure 8.1 illustrates where these contributions apply. Council has identified the following issues in relation to monetary contributions:-

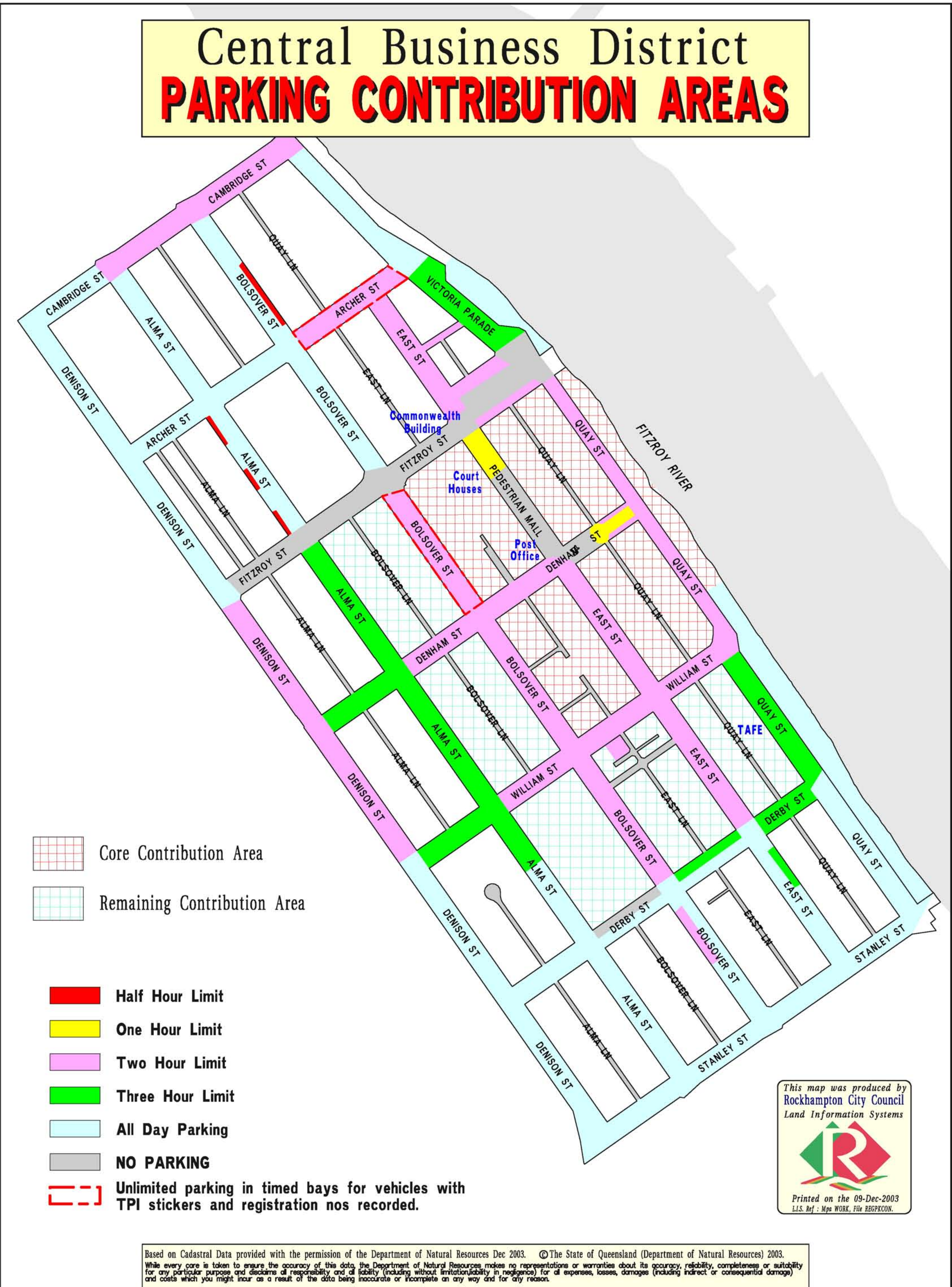
- should a whole of City approach be applied to monetary contributions in lieu of carparking?
- what guidelines should be applied when considering relaxations to the monetary contributions?
- are the current rates for contributions appropriate?
- need a process and plan for the expenditure of the monetary contributions to parking.

When Rockhampton's monetary contribution rates are compared to comparative regional local governments it is found that Rockhampton's rates are significantly lower than others. For example:-

- Bundaberg City Council charges $11,500/space in the Central Business Area (core area);
- Mackay City Council $12,500/space in the Central Business Area;
- Toowoomba City Council $8,000/space in all areas;
- Townsville City Council $10,000/space in the Central Business Area;
- Livingstone Shire Council $4,500/space in Yeppoon;
- Gold Coast City Council $6,640/space in Mudgeeraba and $8,670/space in Nerang (both inland non-tourist centres);
- Tweed Heads Shire Council $9,190/space in the Murwillumbah centre;
- Lismore City Council charges an average of $8,300/space in the CBD.

Rockhampton's parking contribution rate of $4,000 per space in parts of the CBD (Core Area) is half, and in some instances three times less than the local government authorities identified above. Appendix I shows details of the comparison of Rockhampton's parking contribution rates with other local governments.

Figure 8.1 Areas Requiring Monetary Contributions for Parking



Two local government authorities that were examined had a parking monetary contribution rate less than Rockhampton's, this being Coffs Harbour City Council at $1,424/space across all areas (including residential areas) and Warwick Shire Council at $2,000/space throughout the entire CBD.

Rockhampton City Council's current approach to in lieu parking contribution rates needs to be reviewed in light of the findings of this strategy. The following conflicting issues have been taken into account in the recommendations of this strategy:-

- setting contribution rates too high, such that development is discouraged; and
- ensuring that in lieu rates properly reflect land values and the cost of constructing and maintaining the carparking spaces.

8.1 Recommended Approach to In Lieu Parking Monetary Contributions

The recommended approach to developing a more appropriate cost contribution in lieu, includes the following elements:-

- cost contribution in lieu only to be applicable in the CBD core area, CBD frame area and defined District or Local/Neighbourhood Centres. The basis for this is that there needs to be a defined area or plan by Council to provide parking (public and private) jointly accessible by all users in the centre without significant adverse impacts on neighbouring areas;
- cost contributions in each of these areas should reflect the true value of providing spaces. This should represent multi-storey parking in the CBD core, at grade parking in the CBD frame and at grade parking in district/neighbourhood centres (at grade parking may be on-street or off-street);
- contributions received by Council may be used to provide parking and/or to provide enhancements to streetscaping and pedestrian areas where adequate parking is available in reasonable proximity. These works may be undertaken when the contribution is made or in the future when a need arises. The aim of this is to avoid an oversupply of parking, encourage a more efficient use of the available parking supply and improve street aesthetics;

- cost contributions in lieu should not normally be accepted outside the centres defined above. The basis for this is that an undersupply of parking in “non-centres” may have adverse impacts on neighbouring areas (particularly residential areas).

The cost to construct carparking spaces in the CBD has been estimated by a civil engineering consultant for a number of potential scenarios. The off-street scenarios each consider a site area of 2,500m² at a land cost of $625,000 (based on current land values recommended by local valuers). The approximate cost per space in each scenario, including land cost, pavement construction cost and structure construction cost is as follows:-

- off-street at grade carpark - $9,700 per space;
- off-street multi-storey carpark - $13,000 per space (three storey) or $14,600 per space (two storey);
- on-street angle parking - $2,200 per space (land cost is not applicable).

On the basis of these cost estimates it is apparent that Council’s current cost in lieu contribution amount ($4,000) for the core area in the CBD is only adequate to fund the construction of on-street spaces. Future planning for the CBD indicates that with only a 25% increase in current demand rates, there would be a need to provide approximately 150 - 190 spaces (most likely on-street) near Alma Street/Denham Street, plus 40 spaces (most likely off-street) near East Street/Fitzroy Street/Bolsover Street.

On the basis of the future CBD planning, comparison of other local authority cost in lieu contribution rates and consideration of actual construction costs, it is suggested that cost in lieu contribution rates for Rockhampton be applied as follows:-

- CBD core area - $12,500 per space;
- CBD frame area - $4,000 per space; and
- District/Neighbourhood Centre - $2,500 per space.

These costs should be appropriately indexed according to the Consumer Price Index (CPI) or other appropriate measure to ensure that future changes in economic circumstances are reflected in the contribution rate.

These monies should be collected with the intention of funding the construction of on-street parking (and improvements) plus the construction of off-street carparking (at grade or multi-storey). The most significant constraint in regard to the latter is the availability of vacant land in, or close to, the CBD core area. It would be appropriate for Council to pursue on-street parking opportunities (e.g. increase centre parking) in the short-term, however, planning for the longer-term, needs to include significant off-street parking stations. As such, planning should commence to review the available opportunities for a suitable site.

Whilst it is recognised that Council will make some varied decisions at its own discretion in particular circumstances, it is recommended that monetary contributions be made at the time of commencement of the applicable use (building completion). Council needs to put in place, and adhere to, formal procedures for collection of the monies to satisfy the objectives. For example, Council could tie this requirement to the Certificate of Classification and, therefore, withhold certification until such payment is received. It is not considered necessary to apply specific discounts to the parking contributions for upfront payment (prior to commencement of the use), for particular organisations or for situations of financial hardship. These situations can be dealt with under specific circumstances at Council's discretion.

It is recognised that in some instances carparking for a development may be provided partially or completely on site. In other instances, the development may undertake specific works for the provision of carparking elsewhere in close proximity (e.g. on-street, another site) or may undertake significant streetscape works to improve the usability of, or pedestrian connection to existing on-street parking. In these circumstances, Council should apply an appropriate reduction to the overall cost contribution applicable to the number of car spaces provided. Note that where existing on-street carparking is relied on, any reductions for this should only be allowed subject to the proven availability of these spaces. For example, if a developer is required to provide 10 car spaces and they provide six spaces on-street or elsewhere in close proximity, then the developer needs to also pay a contribution in lieu for the additional four spaces.

Whilst the application of a levy payment over a designated period (similar to a rates payment) may be an appropriate mechanism to reduce any perceived disincentive to development, this is not considered to be an essential requirement. The application of a cost contribution at the commencement of the use is more relevant to the purpose of the contribution.

It is recognised that parking cost contributions would, in the current circumstances of limited development and spare car spaces in the CBD, be considered a deterrent to CBD revitalisation. Specific strategies to address this are discussed in Section 9.0.

9.0 PROVISIONS FOR PARKING RELAXATIONS/DISCOUNTS

Council currently allows for parking relaxations based on the location of the site in relation to existing or proposed carparking stations, good pedestrian activity, hours of operation, existing uses on the site, level or depth of allotment, vehicle access, etc. It is expected these issues should continue to be considered as part of relaxation deliberations.

Relaxations for parking can also assist in encouraging development in particular locations or type of development (e.g. mixed-use development), however, this needs to be balanced with an understanding of existing and future parking needs and the surplus and deficiency analysis. For example, providing relaxations to encourage development in an area where there is a deficiency in parking could have the opposite effect and discourage people coming to the development.

Relaxations could also assist in encouraging the use of public transport in order to support the State Government's policy to reduce car use in the region and encourage more trips by public transport, walking and cycling. Some local governments allow discounts to the parking numbers if the development is within 200m of public transport. In Rockhampton, this may only apply to the CBD, where there are opportunities to improve public transport services, particularly for commuters.

The relaxations to parking rates that are recommended in this report provide a balance between encouraging development and the existing parking demands, particularly in relation to existing supply. The following approach to the relaxation of parking rates is recommended:-

- in the CBD allow relaxations to the parking rate generally to the equivalent of 2 spaces per $100m^2$ GFA or pay contributions for this many spaces;
- in the CBD allow for cost contribution in lieu of providing carparking;
- in the Specialist Sub-regional Retail Centre allow relaxations where it can be demonstrated by appropriately qualified professionals that a relaxation is warranted based on aspects such as public transport facilities, surveyed carparking demand and cross usage of parking areas (see Section 3.0);

- in District or Local/Neighbourhood Centres allow relaxations to the equivalent of 4 spaces per 100m² GFA or pay contributions for this many spaces. Glenmore Village Shopping Centre and Northside Plaza, due to their self-contained characteristics, are, however, exceptions to this relaxation of 4 spaces per 100m²;
- in District or Local/Neighbourhood Centres allow cost contribution in lieu of providing carparking, subject to the availability of parking (existing or future) in close proximity and subject to land ownership issues;
- for heritage buildings within the CBD, special relaxations need to be developed targeted towards the type of development that is to be encouraged in such buildings. In any case it would not be unreasonable for development of such sites to provide for their parking needs by cost in lieu contributions. It is recognised that incentives in areas other than carparking may be required to encourage the redevelopment of such facilities;
- non-permanent accommodation in the CBD (similar to motels) should be treated at a conventional parking rate (one space per unit), however, relaxation's should be considered by Council on the basis of sound argument and statistics.

In all development areas the prospect of cross utilisation of parking spaces should be given due consideration. Cross utilisation represents either:-

- more than one different land-use type in close proximity sharing carparking spaces, due to the different time of peak parking demand for each use; or
- more than one land-use in close proximity sharing carparking spaces due to trips occurring as a single visit to more than one facility.

In all situations where cross utilisation is a likely and reasonable prospect, Council should give due consideration to sound arguments presented by an applicant.

9.1 Interim Strategies

To encourage the revitalisation of the CBD in Rockhampton it is suggested that the carparking contribution rates identified in Section 8.1 could be relaxed for a defined period of time. The aim is to provide Council with an appropriate contribution rate to facilitate provision and/or improvement of on-street parking (with high quality streetscape and pedestrian facilities) and to pursue acquisition of land for off-street parking for the long-term needs of the City. The challenge is to balance the provision of an incentive for development against ensuring Council has sufficient funds to provide public parking for the increased demands brought about by new development. The defined period would provide an incentive to development in the short-term and by reverting to the normal contribution rates after, would allow the ongoing provision of carparking to meet the needs of the CBD.

Our analysis of parking in the CBD indicates that currently there is a surplus of carparking (approximately 760 spaces) in the CBD, however, in the analysis of the future development scenarios it was found that there will be a need for additional spaces. Using the mid-term scenario analysed, it was found there would be a need for 150 - 190 spaces near Alma/Denham Streets (most likely on-street) and an additional 40 spaces near East/Fitzroy/Bolsover Streets (most likely off-street). Council, therefore, needs to start acquiring funds to pay for this provision, including acquiring a site and possibly building a multi-storey carpark.

Council has a number of options to consider in regard to relaxations on cost contributions that can be applied for the next two years:-

- Option 1 – waive the total fee for a defined period. This could apply to both the CBD core and frame area or just the CBD core area. Council would, therefore, be contributing to carparking works and acquiring land out of its own funds;
- Option 2a – charge a reduced fee of $2,500 per space in the CBD core and frame area which would mean that monies are being collected for on-street carparking provision only;
- Option 2b – charge a reduced fee of $4,000 per space in the CBD core and frame area. This option would mean Council would be collecting monies for on-street carparking works plus contributions towards the cost of acquiring land for a future off-street carpark;

- Option 2c – charge a reduced fee of $5,000 per space in the CBD core and $2,500 per space in the CBD frame. This option allows a discounted rate for both the core and frame area. This option allows for acquiring land for a future carparking site in the core CBD and the provision of on-street parking in the frame;
- Option 3 – only waive the fee for particular development types e.g. heritage building redevelopments or mixed-use development. This would mean Council would still be collecting monies for parking, however, it still may have to contribute to carparking works out of its own funds depending on the number of development types this applies to.

Option 2b would be our preferred option as it still implies a discounted rate (i.e. $12,500 per space reduced to $4,000 per space in the CBD core), but still allows Council to be planning for the future.

No matter which option Council chooses, it is paramount that Council monitor the carparking demand/supply relationship (e.g. carparking occupancy surveys) and development activity in the CBD (e.g. number of new developments and vacancy percentages) to ensure there is not a deficiency of parking in the CBD, and to foresee the time frame for providing new parking and introducing the standard (higher) contribution rate.

The results of this monitoring will guide the future needs beyond the interim period (nominally two years). Where necessary, changes to the contribution rates may be required to facilitate such future provision. Monitoring should also guide how long the incentive is in operation. It may eventuate that the period needs to be extended for another two years, but at less of a reduction.

10.0 RECOMMENDED PLANNING SCHEME PROVISIONS

In order to implement the strategies embodied in this report, it will be necessary to make some changes and/or additions to Council's planning scheme. Council is currently developing a new Integrated Planning Act planning scheme and it is, therefore, appropriate that the strategies recommended in this report be included in the new scheme. Note that some of the strategies are at the discretion of Council and cannot be explicitly incorporated in the planning scheme.

The parking related strategies have been documented by Humphreys Reynolds Perkins into a planning scheme policy "Off-street Parking Contribution" and code "Parking and Access Code". A draft format of each of these documents is included in Appendix J.

It is recognised that there will be other decisions and policies (including interim policies) that will need to be prepared by Council to fully enact the strategies herein. The strategies documented herein provide the guidelines for Council to use when making decisions regarding carparking within Rockhampton. These should be used for development based actions as well as other Council based initiatives.

Appendix A

Current Parking Inventory and Surveys

ROCKHAMPTON CBD PARKING

CAR PARKING INVENTORY (SEPTEMBER 2002)

Table A1

ZONE	On Street Parking Spaces		Off Street Parking Spaces		Total Car Spaces
	4 hours or less	More than 4 hours	1999/2000 Surveys (Council)*	2002 Surveys (Abacus)	
1					
2					
3	101	55	54		**210**
3A				157	**157**
4	103		103		**206**
5	87		116		**203**
6	109		9		**118**
6A				187	**187**
7					
8					
9	145	14	49	54	**262**
10	91		65	388	**544**
11	50		104		**154**
12	86		71		**157**
13	60	80	45		**185**
14	56			117	**173**
15					
16					
17	106	26	109		**241**
18	154		7		**161**
19	90		62		**152**
20		117	647		**764**
21	14	95	91		**200**
22	33				**33**
23					
24					
25	77	21	3		**101**
26	110		18		**128**
27	75		13		**88**
28					
29					
30					
TOTAL	**1458**	**408**	**1566**	**786**	**4218**

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

SURVEYED PEAK CAR PARKING DEMAND (SEPTEMBER 2002 and 1999/2000)

Table A2

ZONE	On Street Parking Spaces (Abacus 2002)			Off Street Parking Spaces (Council 1999/2000)		Total Car Spaces	
	4 hours of less	more than 4 hours	% Occupied	# Spaces	% Occupied	# spaces	% Occupied
1							
2							
3	81	11	59%	34	63%	**126**	**60%**
3A				(123)	78%	**123**	**78%**
4	87	4	88%	83	81%	**174**	**84%**
5	69	4	84%	78	67%	**151**	**74%**
6	76	6	75%	8	89%	**90**	**76%**
6A				(114)	61%	**114**	**61%**
7							
8							
9	98	35	84%	(72)	70%	**205**	**78%**
10	76	1	85%	(185)	41%	**262**	**48%**
11	43	3	92%	80	77%	**126**	**82%**
12	65	12	90%	47	66%	**124**	**79%**
13	77	9	61%	18	40%	**104**	**56%**
14	19	1	36%	(64)	55%		
15							
16							
17	63	24	66%	70	64%	**157**	**65%**
18	89	4	60%	4	57%	**97**	**60%**
19	50	15	72%	44	71%	**109**	**72%**
20	52	58	94%	402	62%	**512**	**67%**
21	34	55	82%	51	56%	**140**	**70%**
22	18		55%				
23							
24							
25	34	10	45%	3	100%	**47**	**47%**
26	54	4	53%	10	56%	**68**	**53%**
27	47	4	68%	13	100%	**64**	**73%**
28							
29							
30							
TOTAL	**1095**	**259**	**73%**	**(1439)**	**61%**	**2793**	**66%**

(157) Includes Abacus site

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

SURVEYED PEAK CAR PARKING DEMAND (SEPTEMBER 2002)

Table A3

ZONE	On Street Parking Spaces			Off Street Parking Spaces			Total Car Spaces		
	no. of spaces	no. occupied	no. spare	no. of spaces	no. occupied	no. spare	no. of spaces	no. occupied	no. spare
1									
2									
3	156	92	64	54	34	20	**210**	**126**	**84**
3A	0	0	0	157	123	34	**157**	**123**	**34**
4	103	91	12	103	83	20	**206**	**174**	**32**
5	87	73	14	116	78	38	**203**	**151**	**52**
6	109	82	27	9	8	1	**118**	**90**	**28**
6A	0	0	0	187	114	73	**187**	**114**	**73**
7									
8									
9	159	133	26	103	72	31	**262**	**205**	**57**
10	91	77	14	453	185	268	**544**	**262**	**282**
11	50	46	4	104	80	24	**154**	**126**	**28**
12	86	77	9	71	47	24	**157**	**124**	**33**
13	140	86	54	45	18	27	**185**	**104**	**81**
14	56	20	36	117	64	53	**173**	**84**	**89**
15									
16									
17	132	87	45	109	70	39	**241**	**157**	**84**
18	154	93	61	7	4	3	**161**	**97**	**64**
19	90	65	25	62	44	18	**152**	**109**	**43**
20	117	110	7	647	402	245	**764**	**512**	**252**
21	109	89	20	91	51	40	**200**	**140**	**60**
22	33	18	15	0	0	0	**33**	**18**	**15**
23									
24									
25	98	44	54	3	3	0	**101**	**47**	**54**
26	110	58	52	18	10	8	**128**	**68**	**60**
27	75	51	24	13	13	0	**88**	**64**	**24**
28									
29									
30									
TOTAL	**1866**	**1354**	**512**	**2352**	**1439**	**913**	**4218**	**2793**	**1425**

	supply	demand
equivalent parking rate per 100sq.m. - based on total floor space in survey area	1.70	1.33

NOTE: shaded cells represent the "survey area"

Appendix B

Land Use Inventory

ROCKHAMPTON CBD PARKING

LAND USE INVENTORY (SEPTEMBER 2002)

Source: Urban Economics

Table B1

ZONE	FLOOR SPACE AREAS (sqm)								Total Potential (sqm)	%age occupancy
	Retail	Office	Accom	Entment	Comm	Special *	Total Occupied	Total Unoccupied		
1										
2										
3	1312	1617		9457	1441	4800	18627	1200	19827	94%
3A							0		0	
4	2907	8284		837	7597		19625	3495	23120	85%
5	2126	4186		1980	2341		10633	4120	14753	72%
6	1156	4769		76	793		6794	2358	9152	74%
6A							0		0	
7										
8										
9	2785	300		1369	3750	1089	9293	883	10176	91%
10	7140	84		1156	2683	10350	21413	1093	22506	95%
11		8578		896	1278	6754	17506	300	17806	98%
12	864	10283		1377	3506	910	16940	3788	20728	82%
13	188	3894	720	3141	1058		9001	587	9588	94%
14										
15										
16										
17	900	13516		3334	344	0	18094	2487	20581	88%
18	975	1352		2354	3218	3310	11209	9153	20362	55%
19	225	3833		4600	4065		12723	3505	16228	78%
20	13163			148	795		14106	139	14245	99%
21	123	3764			2499		6386		6386	100%
22										
23										
24										
25	227		187	1975	924		3313	950	4263	78%
26	3861	931	245	1178	1925		8140	2495	10635	77%
27	4206			1084	746		6036	1175	7211	84%
28										
29										
30										
TOTAL	42158	65391	1152	34962	38963	27213	209839	37728	247567	85%

*	Zone	Area	Use	Area	Use
	3	4800	Residential		
	9	1089	Car Park		
	10	10350	Car Park		
	11	3560	CQU	3194	Police
	12	455	Emerg Serv	455	Qld Amb
	17	912	Art School		
	18	1560	TAFE	1750	Tech Coll.

NOTE: shaded cells represent the "survey area"

Note: 3A & 6A are Riverside Car Parks

ROCKHAMPTON CBD PARKING

POTENTIAL FUTURE LAND USE INVENTORY (all unoccupied uses filled)

Table B2

ZONE	FLOOR SPACE AREAS (sqm)								Total Potential (sqm)	%age occupancy
	Retail	Office	Accom	Entment	Comm	Special *	Total Occupied	Total Unoccupied		
1										
2										
3	1312	1617		10657	1441	4800	19827		19827	100%
3A							0		0	
4	3431	9158		837	9694		23120		23120	100%
5	2950	5628		2804	3371		14753		14753	100%
6	1510	6419		76	1147		9152		9152	100%
6A							0		0	
7										
8										
9	2785	300		1369	4633	1089	10176		10176	100%
10	8233	84		1156	2683	10350	22506		22506	100%
11		8878		896	1278	6754	17806		17806	100%
12	864	13124		1377	4453	910	20728		20728	100%
13	188	4188	720	3434	1058		9588		9588	100%
14										
15										
16										
17	900	13779		5558	344		20581		20581	100%
18	2399	2776		5202	6676	3310	20363		20363	100%
19	225	5001		5769	5233		16228		16228	100%
20	13302			148	795		14245		14245	100%
21	123	3764			2499		6386		6386	100%
22										
23										
24										
25	227		187	2925	924		4263		4263	100%
26	5358	931	245	1552	2549		10635		10635	100%
27	5381			1084	746		7211		7211	100%
28										
29										
30										
TOTAL	49188	75647	1152	44844	49524	27213	247568	0	247568	100%

*	Zone	Area	Use	Area	Use
	3	4800	Residential		
	9	1089	Car Park		
	10	10350	Car Park		
	11	3560	CQU	3194	Police
	12	455	Emerg Serv	455	Qld Amb
	17	912	Art School		
	18	1560	TAFE	1750	Tech Coll.

NOTE: shaded cells represent the "survey area"

Note: 3A & 6A are Riverside Car Parks

ROCKHAMPTON CBD PARKING

POTENTIAL FUTURE LAND USE INVENTORY (all unoccupied uses filled as per precinct strategy)

Table B3

ZONE	FLOOR SPACE AREAS (sqm)								Total Potential (sqm)	%age occupancy
	Retail	Office	Accom	Entment	Comm	Special *	Total	unoccupied converted to		
1										
2										
3	1312	1617		10657	1441	4800	19827	entment	19827	100%
3A							0		0	
4	6402	8284		837	7597		23120	retail	23120	100%
5	6246	4186		1980	2341		14753	retail	14753	100%
6	1156	7127		76	793		9152	office	9152	100%
6A							0		0	
7										
8										
9	2785	300		2252	3750	1089	10176	entment	10176	100%
10	8233	84		1156	2683	10350	22506	retail	22506	100%
11	3860	8578		896	1278	3194	17806	retail	17806	100%
12	864	14071		1377	3506	910	20728	office	20728	100%
13	188	4481	720	3141	1058		9588	office	9588	100%
14										
15										
16										
17	900	16003		3334	344	0	20581	office	20581	100%
18	975	10505		2354	3218	3310	20362	office	20362	100%
19	225	7338		4600	4065		16228	office	16228	100%
20	13302			148	795		14245	retail	14245	100%
21	123	3764			2499		6386		6386	100%
22										
23										
24										
25	227		187	1975	1874		4263	comm	4263	100%
26	3861	931	245	1178	4420		10635	comm	10635	100%
27	4206			1084	1921		7211	comm	7211	100%
28										
29										
30										
TOTAL	54865	87269	1152	37045	43583	23653	247567		247567	100%

*	Zone	Area	Use	Area	Use
	3	4800	Residential		
	9	1089	Car Park		
	10	10350	Car Park		
	11			3194	Police
	12	455	Emerg Serv	455	Qld Amb
	17	912	Art School		
	18	1560	TAFE	1750	Tech Coll.

NOTE: shaded cells represent the "survey area"

Note: 3A & 6A are Riverside Car Parks

Appendix C

Parking Rate Calibration

ROCKHAMPTON CBD PARKING

CALIBRATION OF SHORT TERM PARKING DEMAND (2002)

PARKING DEMAND RATE (veh/100sqm)

Retail	Office	Accom	Enterment	Comm	Special	eqiv. overall
1.20	0.55	0.05	0.70	0.90	0.00	0.65

Table C1

ZONE	Calculated Car Parking Accumulation						TOTAL
	Retail	**Office**	**Accom**	**Entment**	**Comm**	**Special**	
1							
2							
3	16	9	0	66	13	0	**104**
3A	0	0	0	0	0	0	**0**
4	35	46	0	6	68	0	**155**
5	26	23	0	14	21	0	**83**
6	14	26	0	1	7	0	**48**
6A	0	0	0	0	0	0	**0**
7							
8							
9	33	2	0	10	34	0	**78**
10	86	0	0	8	24	0	**118**
11	0	47	0	6	12	0	**65**
12	10	57	0	10	32	0	**108**
13	2	21	0	22	10	0	**56**
14							
15							
16							
17	11	74	0	23	3	0	**112**
18	12	7	0	16	29	0	**65**
19	3	21	0	32	37	0	**93**
20	53	0	0	1	7	0	**61**
21	1	21	0	0	22	0	**45**
22							
23							
24							
25	3	0	0	14	8	0	**25**
26	46	5	0	8	17	0	**77**
27	50	0	0	8	7	0	**65**
28							
29							
30							
TOTAL	**401**	**360**	**1**	**245**	**351**	**0**	**1356**

Special Rates	Retail
zone 20	0.4

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

CALIBRATION OF LONG TERM PARKING DEMAND (2002)

PARKING DEMAND RATE (veh/100sqm)

Retail	Office	Accom	Enterment	Comm	Special	equiv. overall
0.80	0.85	0.05	0.20	0.30	0.00	0.69

Table C2

ZONE	Calculated Car Parking Accumulation						TOTAL
	Retail	Office	Accom	Entment	Comm	Special	
1							
2							
3	10	14	0	19	4	0	47
3A	0	0	0	0	0	0	0
4	23	70	0	2	23	0	118
5	17	36	0	4	7	0	64
6	9	41	0	0	2	0	52
6A	0	0	0	0	0	0	0
7							
8							
9	22	3	0	3	11	0	39
10	57	1	0	2	8	0	68
11	0	73	0	2	4	0	79
12	7	87	0	3	11	0	108
13	2	33	0	6	3	0	44
14							
15							
16							
17	7	115	0	7	1	0	130
18	8	11	0	5	10	0	34
19	2	33	0	9	12	0	56
20	474	0	0	0	2	0	477
21	1	32	0	0	7	0	40
22							
23							
24							
25	2	0	0	4	3	0	9
26	31	8	0	2	6	0	47
27	34	0	0	2	2	0	38
28							
29							
30							
TOTAL	**706**	**556**	**1**	**70**	**117**	**0**	**1449**

Special Rates	Retail
zone 20	3.6

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

CALIBRATION TABLE (2002)

PARKING DEMAND RATE (veh/100sqm) *Table C3*

	Retail	Office	Accom	Ent	Comm	Special	equiv. overall calibrated rate	equiv. overall surveyed rate
Short term	1.20	0.55	0.05	0.70	0.90	0.00	**0.65**	
Long term	0.80	0.85	0.05	0.20	0.30	0.00	**0.69**	
Total	2.00	1.40	0.10	0.90	1.20	0.00	**1.34**	**1.33**

ZONE	Short Term Demand survey demand	Short Term Demand calc demand	Short Term Demand diff.	Long Term Demand survey demand	Long Term Demand calc demand	Long Term Demand diff.	Total survey demand	Total calc demand	Total diff.
1									
2									
3	81	104	23	45	47	2	126	151	25
3A	0	0	0	123	0	-123	123	0	-123
4	87	155	68	87	118	31	174	273	99
5	69	83	14	82	64	-18	151	147	-4
6	76	48	-28	14	52	38	90	100	10
6A	0	0	0	114	0	-114	114	0	-114
7									
8									
9	98	78	-20	107	39	-68	205	117	-88
10	76	118	42	186	68	-118	262	187	-75
11	43	65	22	83	79	-4	126	143	17
12	65	108	43	59	108	49	124	216	92
13	77	56	-21	27	44	17	104	100	-4
14									
15									
16									
17	63	112	49	94	130	36	157	241	84
18	89	65	-24	8	34	26	97	98	1
19	50	93	43	59	56	-3	109	148	39
20	52	61	9	460	477	17	512	537	25
21	34	45	11	106	40	-66	140	85	-55
22									
23									
24									
25	34	25	-9	13	9	-4	47	34	-13
26	54	77	23	14	47	33	68	124	56
27	47	65	18	17	38	21	64	103	39
28									
29									
30									
TOTAL	**1095**	**1356**	**261**	**1698**	**1449**	**-249**	**2793**	**2805**	**12**

Special Rates	Retail	Office	Accom	Ent	Comm	Special
zone 20	4.0					

NOTE: shaded cells represent the "survey area"

Appendix D

Future Parking Demand Analysis

ROCKHAMPTON CBD PARKING

CALCULATED DEMAND - BASE CALIBRATED RATES

PARKING DEMAND RATE (veh/100sqm)

Table D1-2

	Retail	Office	Accom	Ent	Comm	Special	option A	option B
Short term	1.20	0.55	0.05	0.70	0.90	0.00	demand rates	demand rates
Long term	0.80	0.85	0.05	0.20	0.30	0.00	increase by	increase by
Total	2.00	1.40	0.10	0.90	1.20	0.00	**25%**	**50%**

	Short Term Demand			**Long Term Demand**			**Total**		
ZONE	**base rate**	**option A**	**option B**	**base rate**	**option A**	**option B**	**base rate**	**option A**	**option B**
1									
2									
3	112	140	168	50	62	75	162	203	243
3A	0	0	0	0	0	0	0	0	0
4	185	231	277	136	170	204	321	401	481
5	116	145	174	87	109	131	203	254	305
6	64	80	96	70	88	105	135	168	202
6A	0	0	0	0	0	0	0	0	0
7									
8									
9	86	108	130	41	52	62	128	160	192
10	131	164	197	77	96	115	208	261	313
11	67	83	100	81	101	122	148	185	222
12	132	165	198	135	168	202	267	334	400
13	59	74	89	48	59	71	107	133	160
14									
15									
16									
17	129	161	193	136	171	205	265	331	398
18	141	176	211	73	92	110	214	267	321
19	118	147	177	72	89	107	189	237	284
20	61	77	92	482	602	722	543	679	814
21	45	56	67	40	51	61	85	106	128
22									
23									
24									
25	32	40	47	11	13	16	42	53	63
26	103	129	155	62	77	92	165	206	247
27	79	99	118	47	59	71	126	158	189
28									
29									
30									
TOTAL	**1660**	**2075**	**2490**	**1648**	**2060**	**2472**	**3308**	**4135**	**4962**

equivalent demand rate per 100sq.m. - based on total floor space in survey area

0.67	0.84	1.01	0.67	0.83	1.00	1.34	1.67	2.00

NOTE: shaded cells represent the "survey area"

Special Rates	Retail	Office	Accom	Ent	Comm	Special
zone 20	4.0					

ROCKHAMPTON CBD PARKING

all unoccupied uses filled
parking demand rates remain as current

CALCULATED CAR PARKING DEMAND/SUPPLY

Table D1

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	112	50	162	156	54	210	48
3A	0	0	0	0	157	157	157
4	185	136	321	103	103	206	-115
5	116	87	203	87	116	203	0
6	64	70	135	109	9	118	-17
6A	0	0	0	0	187	187	187
7							
8							
9	86	41	128	159	103	262	134
10	131	77	208	91	453	544	336
11	67	81	148	50	104	154	6
12	132	135	267	86	71	157	-110
13	59	48	107	140	45	185	78
14							
15							
16							
17	129	136	265	132	109	241	-24
18	141	73	214	154	7	161	-53
19	118	72	189	90	62	152	-37
20	61	482	543	117	647	764	221
21	45	40	85	109	91	200	115
22							
23							
24							
25	32	11	42	98	3	101	59
26	103	62	165	110	18	128	-37
27	79	47	126	75	13	88	-38
28							
29							
30							
TOTAL	**1660**	**1648**	**3308**	**1866**	**2352**	**4218**	**910**

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

all unoccupied uses filled
parking demand rates increase by 25%

CALCULATED CAR PARKING DEMAND/SUPPLY

Table D2-A

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	140	62	203	156	54	210	**7**
3A	0	0	0	0	157	157	**157**
4	231	170	401	103	103	206	**-195**
5	145	109	254	87	116	203	**-51**
6	80	88	168	109	9	118	**-50**
6A	0	0	0	0	187	187	**187**
7							
8							
9	108	52	160	159	103	262	**102**
10	164	96	261	91	453	544	**283**
11	83	101	185	50	104	154	**-31**
12	165	168	334	86	71	157	**-177**
13	74	59	133	140	45	185	**52**
14							
15							
16							
17	161	171	331	132	109	241	**-90**
18	176	92	267	154	7	161	**-106**
19	147	89	237	90	62	152	**-85**
20	77	602	679	117	647	764	**85**
21	56	51	106	109	91	200	**94**
22							
23							
24							
25	40	13	53	98	3	101	**48**
26	129	77	206	110	18	128	**-78**
27	99	59	158	75	13	88	**-70**
28							
29							
30							
TOTAL	**2075**	**2060**	**4135**	**1866**	**2352**	**4218**	**83**

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

CALCULATED CAR PARKING DEMAND/SUPPLY

all unoccupied uses filled
parking demand rates increase by 50%

Table D2-B

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	168	75	243	156	54	210	-33
3A	0	0	0	0	157	157	157
4	277	204	481	103	103	206	-275
5	174	131	305	87	116	203	-102
6	96	105	202	109	9	118	-84
6A	0	0	0	0	187	187	187
7							
8							
9	130	62	192	159	103	262	70
10	197	115	313	91	453	544	231
11	100	122	222	50	104	154	-68
12	198	202	400	86	71	157	-243
13	89	71	160	140	45	185	25
14							
15							
16							
17	193	205	398	132	109	241	-157
18	211	110	321	154	7	161	-160
19	177	107	284	90	62	152	-132
20	92	722	814	117	647	764	-50
21	67	61	128	109	91	200	72
22							
23							
24							
25	47	16	63	98	3	101	38
26	155	92	247	110	18	128	-119
27	118	71	189	75	13	88	-101
28							
29							
30							
TOTAL	2490	2472	4962	1866	2352	4218	-744

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

CALCULATED DEMAND - BASE CALIBRATED RATES

Table D3-4

PARKING DEMAND RATE (veh/100sqm)

	Retail	Office	Accom	Ent	Comm	Special	**option A**	**option B**
Short term	1.20	0.55	0.05	0.70	0.90	0.00	**demand rates**	**demand rates**
Long term	0.80	0.85	0.05	0.20	0.30	0.00	**increase by**	**increase by**
Total	2.00	1.40	0.10	0.90	1.20	0.00	**25%**	**50%**

	Short Term Demand			**Long Term Demand**			**Total**		
ZONE	**base rate**	**option A**	**option B**	**base rate**	**option A**	**option B**	**base rate**	**option A**	**option B**
1									
2									
3	112	140	168	50	62	75	162	203	243
3A	0	0	0	0	0	0	0	0	0
4	197	246	295	146	183	219	343	428	514
5	133	166	199	97	121	145	229	287	344
6	61	76	91	72	90	109	133	166	200
6A	0	0	0	0	0	0	0	0	0
7									
8									
9	85	106	127	41	51	61	125	156	188
10	131	164	197	77	96	115	208	261	313
11	111	139	167	109	137	164	221	276	331
12	129	161	193	140	175	210	269	336	403
13	59	73	88	49	62	74	108	135	162
14									
15									
16									
17	125	157	188	151	189	226	276	345	414
18	115	144	172	111	139	167	226	283	340
19	112	140	168	86	107	128	197	247	296
20	61	77	92	482	602	722	543	679	814
21	45	56	67	40	51	61	85	106	128
22									
23									
24									
25	34	42	50	11	14	17	45	56	67
26	100	125	149	55	68	82	154	193	231
27	75	94	113	42	52	62	117	146	175
28									
29									
30									
TOTAL	**1684**	**2105**	**2526**	**1759**	**2198**	**2638**	**3443**	**4303**	**5164**

equivalent demand rate per 100sq.m. - based on total floor space in survey area

0.68	0.85	1.02	0.71	0.89	1.07	1.39	1.74	2.09

NOTE: shaded cells represent the "survey area"

Special Rates	Retail	Office	Accom	Ent	Comm	Special
zone 20	4.0					

ROCKHAMPTON CBD PARKING

all unoccupied uses filled per precinct strategy
parking demand rates remain as current

CALCULATED CAR PARKING DEMAND/SUPPLY

Table D3

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	112	50	162	156	54	210	48
3A	0	0	0	0	157	157	157
4	197	146	343	103	103	206	-137
5	133	97	229	87	116	203	-26
6	61	72	133	109	9	118	-15
6A	0	0	0	0	187	187	187
7							
8							
9	85	41	125	159	103	262	137
10	131	77	208	91	453	544	336
11	111	109	221	50	104	154	-67
12	129	140	269	86	71	157	-112
13	59	49	108	140	45	185	77
14							
15							
16							
17	125	151	276	132	109	241	-35
18	115	111	226	154	7	161	-65
19	112	86	197	90	62	152	-45
20	61	482	543	117	647	764	221
21	45	40	85	109	91	200	115
22							
23							
24							
25	34	11	45	98	3	101	56
26	100	55	154	110	18	128	-26
27	75	42	117	75	13	88	-29
28							
29							
30							
TOTAL	1684	1759	3443	1866	2352	4218	775

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

all unoccupied uses filled per precinct strategy
parking demand rates increase by 25%

CALCULATED CAR PARKING DEMAND/SUPPLY

Table D4-A

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	140	62	203	156	54	210	**7**
3A	0	0	0	0	157	157	**157**
4	246	183	428	103	103	206	**-222**
5	166	121	287	87	116	203	**-84**
6	76	90	166	109	9	118	**-48**
6A	0	0	0	0	187	187	**187**
7							
8							
9	106	51	156	159	103	262	**106**
10	164	96	261	91	453	544	**283**
11	139	137	276	50	104	154	**-122**
12	161	175	336	86	71	157	**-179**
13	73	62	135	140	45	185	**50**
14							
15							
16							
17	157	189	345	132	109	241	**-104**
18	144	139	283	154	7	161	**-122**
19	140	107	247	90	62	152	**-95**
20	77	602	679	117	647	764	**85**
21	56	51	106	109	91	200	**94**
22							
23							
24							
25	42	14	56	98	3	101	**45**
26	125	68	193	110	18	128	**-65**
27	94	52	146	75	13	88	**-58**
28							
29							
30							
TOTAL	**2105**	**2198**	**4303**	**1866**	**2352**	**4218**	**-85**

NOTE: shaded cells represent the "survey area"

ROCKHAMPTON CBD PARKING

all unoccupied uses filled per precinct strategy
parking demand rates increase by 50%

CALCULATED CAR PARKING DEMAND/SUPPLY

Table D4-B

ZONE	Demand			Existing Supply			Available (Spare) Car Spaces
	short term	long term	TOTAL	on street	off street	TOTAL	no. spare
1							
2							
3	168	75	243	156	54	210	-33
3A	0	0	0	0	157	157	157
4	295	219	514	103	103	206	-308
5	199	145	344	87	116	203	-141
6	91	109	200	109	9	118	-82
6A	0	0	0	0	187	187	187
7							
8							
9	127	61	188	159	103	262	74
10	197	115	313	91	453	544	231
11	167	164	331	50	104	154	-177
12	193	210	403	86	71	157	-246
13	88	74	162	140	45	185	23
14							
15							
16							
17	188	226	414	132	109	241	-173
18	172	167	340	154	7	161	-179
19	168	128	296	90	62	152	-144
20	92	722	814	117	647	764	-50
21	67	61	128	109	91	200	72
22							
23							
24							
25	50	17	67	98	3	101	34
26	149	82	231	110	18	128	-103
27	113	62	175	75	13	88	-87
28							
29							
30							
TOTAL	**2526**	**2638**	**5164**	**1866**	**2352**	**4218**	**-946**

NOTE: shaded cells represent the "survey area"

Appendix E

Current Centres Parking Analysis

ALLENSTOWN CENTRE

Peak Parking Period - Thursday 19th Sept 2002 - 12.30pm

	Floor Space (sqm)				Off Street Parking					On Street Parking				
						Peak		Average			Peak		Average	
Location	Existing Floor Space	Vacant Floor Space	Total Floor Space	Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.
Canning - William & Derby					Surf Shop									
Peak Demand (Entire Centre)	**2369**	**0**	**2369**	**100%**	**8**	**4**	**50%**	**4**	**50%**	**36**	**13**	**36%**	**14**	**39%**
Thursday 10am-1pm (Peak 12:30)					8	4	50%	4	50%	36	13	36%	14	39%
Thursday 4pm-7pm (Peak 4pm)					8	5	63%	4	50%	36	9	25%	13	36%
Saturday 10am-1pm (Peak 12.30)					8	1	13%	3	38%	36	9	25%	12	33%
Canning - Derby & Caroline														
Peak Demand (Entire Centre)					**0**	**0**	**na**	**0**	**na**	**58**	**54**	**93%**	**54**	**93%**
Thursday 10am-1pm (Peak 12:30)					0	0	na	0	na	58	54	93%	54	93%
Thursday 4pm-7pm (Peak 4pm)					0	0	na	0	na	58	45	78%	32	55%
Saturday 10am-1pm (Peak 12.30)					0	0	na	0	na	58	30	52%	34	59%
Dawson - Caroline & Canning					Tavern									
Peak Demand (Entire Centre)	**305**	**133**	**438**	**70%**	**93**	**49**	**53%**	**29**	**31%**	**27**	**22**	**81%**	**21**	**78%**
Thursday 10am-1pm (Peak 12:30)					93	49	53%	29	31%	27	22	81%	21	78%
Thursday 4pm-7pm (Peak 4pm)					93	29	31%	24	26%	27	19	70%	15	56%
Saturday 10am-1pm (Peak 12.30)					93	49	53%	31	33%	27	27	100%	20	74%
Caroline - Dawson & Canning														
Peak Demand (Entire Centre)					**0**	**0**	**na**	**0**	**na**	**32**	**13**	**41%**	**13**	**41%**
Thursday 10am-1pm (Peak 12:30)					0	0	na	0	na	32	13	41%	13	41%
Thursday 4pm-7pm (Peak 4pm)					0	0	na	0	na	32	10	31%	10	31%
Saturday 10am-1pm					0	0	na	0	na	32	11	34%	12	38%
Allenstown Plaza														
Peak Demand (Entire Centre)	**5376**	**25**	**5401**	**100%**	**259**	**197**	**76%**	**184**	**71%**	**0**	**0**	**na**	**0**	**na**
Thursday 10am-1pm (Peak 12:30)					259	197	76%	184	71%	0	0	na	0	na
Thursday 4pm-7pm (Peak 4pm)					259	199	77%	161	62%	0	0	na	0	na
Saturday 10am-1pm					259	185	71%	188	73%	0	0	na	0	na
TOTAL*	**8050**	**158**	**8208**	**98%**	**267**	**201**	**75%**	**188**	**70%**	**153**	**102**	**67%**	**102**	**67%**

* Excludes tavern floor area and parking

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Allenstown Plaza	5376	197	3.7
Balance	2674	106	4.0
Total	**8050**	**303**	**3.8**

Table E1

Allenstown Centre

	Floor Space (sqm)				Off Street					On Street				
						Peak		Average			Peak		Average	
Location	**Existing Floor Space ***	**Vacant Floor Space**	**Total Floor Space**	**Occ.**	**# spaces**	**# spaces occ.**	**Peak Occ.**	**# spaces occ.**	**Av. Occ.**	**# spaces**	**# spaces occ.**	**Peak Occ.**	**# spaces occ.**	**Av. Occ.**
Beserker - Bedford & Elphinstone														
Peak Demand (Entire Centre)	289	0	289	100%	22	11	50%	10	45%	32	16	50%	9	28%
Dentist					8	3	38%	3	38%	0				
Specialty Shop					14	8	57%	7	50%	0				
Beserker - Elphinstone & Mostyn														
Peak Demand (Entire Centre)	376	0	376	100%	53	24	45%	22	42%	22	5	23%	5	23%
Vacant Lot					40	22	55%	20	50%	0				
Corner Shop					13	2	15%	2	15%	0				
Beserker - Mostyn & Edington														
Peak Demand (Entire Centre)	75	0	75	100%	43	8	19%	8	19%	16	4	25%	3	19%
Fruit Market					36	5	14%	5	14%	0				
Butcher					7	3	43%	3	43%	0				
Elphinstone - Nobbs & Berserker														
Peak Demand (Entire Centre)*	1757	0	1757	100%	56	20	36%	18	32%	22	3	14%	3	14%
Chemist					12	4	33%	3	25%	0				
Mitre 10	1259				39	14	36%	14	36%	0				
Pet Shop					5	2	40%	1	20%	0				
Other														
Peak Demand (Entire Centre)	920	139	1059	87%	0	0	na	0	na	0	0	na	0	na
TOTAL*	**3417**	**139**	**3556**	**96%**	**174**	**63**	**36%**	**58**	**33%**	**92**	**28**	**30%**	**20**	**22%**

SUMMARY	**Total Existing Floor Area**	**Total Peak Parked Cars**	**Total Parking Accumulation Rate (spaces/100sqm)**
Balance	3417	91	2.7
Total	**3417**	**91**	**2.7**

Table E2
Elphinstone Centre

	Floor Area (sqm)				Off Street Parking					On Street Parking				
						Peak		Average			Peak		Average	
Location	**Existing Floor Space**	**Vacant Floor Space**	**Total Floor Space**	**Occ.**	**# spaces**	**# spaces occ.**	**Peak Occ.**	**# spaces occ.**	**Av. Occ.**	**# spaces**	**# spaces occ.**	**Peak Occ.**	**# spaces occ.**	**Av. Occ.**
Dean - Kerrigan &Vallis														
Peak Demand (Entire Centre)	**1971**	**237**	**2208**	**89%**	**64**	**46**	**72%**	**40**	**63%**	**33**	**20**	**61%**	**14**	**42%**
Thursday 10am-1pm (Peak 12:15)					64	34	53%	32	50%	33	15	45%	14	42%
Foodstore	332				38	29	76%	25	66%					
Specialty Shops					26	5	19%	7	27%					
Saturday 10am-1pm (Peak 10.30am)					64	46	72%	40	63%	33	20	61%	14	42%
Foodstore	332				38	38	100%	32	84%					
Specialty Shops					26	8	31%	8	31%					
Dean - Vallis & Honour														
Peak Demand (Entire Centre)	**1065**	**0**	**1065**	**100%**	**22**	**9**	**41%**	**8**	**36%**	**39**	**12**	**31%**	**7**	**18%**
Thursday 10am-1pm (Peak 12:15)					22	7	32%	7	32%	39	12	31%	10	26%
Medical Centre	1065				22	7	32%	7	32%					
Tavern	1285				107	47	44%	40	37%					
Saturday 10am-1pm (Peak 10.30am)					22	9	41%	8	36%	39	8	21%	7	18%
Medical Centre	1065				22	9	41%	8	36%					
Tavern	1285				107	25	23%	25	23%					
Other														
Peak Demand (Entire Centre)	**374**	**508**	**882**	**42%**	**0**	**0**	**na**	**0**	**na**	**0**	**0**	**na**	**0**	**na**
Thursday 10am-1pm (Peak 12:15)					0	0	na	0	na	0	0	na	0	na
Saturday 10am-1pm (Peak 11:45)					0	0	na	0	na	0	0	na	0	na
TOTAL*	**3410**	**745**	**4155**	**82%**	**86**	**55**	**64%**	**48**	**56%**	**72**	**32**	**44%**	**21**	**29%**

* excludes floor area and parking of tavern

SUMMARY	**Total Existing Floor Area**	**Total Peak Parked Cars**	**Total Parking Accumulation Rate (spaces/100sqm)**
Total	**3410**	**87**	**2.6**

Table E3
Frenchville Centre

Location	Floor Area (sqm) Existing Floor Space	Vacant Floor Space	Total Floor Space	Occ.	Off Street # spaces	Off Street Peak # spaces occ.	Off Street Peak Peak Occ.	Off Street Average # spaces occ.	Off Street Average Av. Occ.	On Street # spaces	On Street Peak # spaces occ.	On Street Peak Peak Occ.	On Street Average # spaces occ.	On Street Average Av. Occ.
Gladstone -Derby & Stanley (W)					TAB/ANZ									
Peak Demand (Entire Centre)				na	45	22	49%	18	40%	30	4	13%	3	10%
Gladstone - Derby & Stanley (E)														
Peak Demand (Entire Centre)				na	47	43	91%	30	64%	24	9	38%	7	29%
Fruit Market North					23	22	96%	14	61%					
Fruit Market South					24	21	88%	16	67%					
Other														
Peak Demand (Entire Centre)				na	0	0	na	0	na	0	0	na	0	na
TOTAL				**na**	**92**	**65**	**71%**	**48**	**52%**	**54**	**13**	**24%**	**10**	**19%**

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Balance		78	na
Total		**78**	**na**

Table E4
Gladstone Road Centre

	Floor Space (sqm)				Off Street Parking					On Street Parking				
						Peak		Average			Peak		Average	
Location	Existing Floor Space	Vacant Floor Space	Total Floor Space	Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.
Glenmore Shopping Centre Peak Demand (Entire Centre)*	**2092**	**76**	**2168**	**96%**	**202**	**126**	**62%**	**114**	**56%**	**0**	**0**	**na**	**0**	**na**
Thursday 11.30am-2.30pm (Peak 1pm)*					**202**	**112**	**55%**	**94**	**47%**	**0**	**0**	**na**	**0**	**na**
McDonalds	240				28	15	54%	10	36%					
Red Rooster/Tavern	200				61	8	13%	6	10%					
Video/TAB	364				66	33	50%	30	45%					
Shops					42	44	105%	36	86%					
Behind Shops					46	12	26%	12	26%					
Thursday 4pm-7pm (Peak 4.15pm)*					**202**	**116**	**57%**	**106**	**52%**	**0**	**0**	**na**	**0**	**na**
McDonalds	240				28	12	43%	13	46%					
Red Rooster/Tavern	200				61	10	16%	10	16%					
Video/TAB	364				66	44	67%	35	53%					
Shops					42	38	90%	36	86%					
Behind Shops					46	12	26%	12	26%					
Saturday 10am-1pm (Peak 12.30)*					**202**	**126**	**62%**	**114**	**56%**	**0**	**0**	**na**	**0**	**na**
McDonalds	240				28	18	64%	13	46%					
Red Rooster/Tavern	200				61	15	25%	12	20%					
Video/TAB	364				66	40	61%	38	58%					
Shops					42	42	100%	39	93%					
Behind Shops					46	11	24%	12	26%					
TOTAL*	**2092**	**76**	**2168**	**96%**	**202**	**126**	**62%**	**114**	**56%**	**0**	**0**	**na**	**0**	**na**

*excludes floor area and parking (41 spaces) of tavern

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Glenmore Shopping Centre	2092	126	6.0
Total	**2092**	**126**	**6.0**

Table E5
Glenmore Shopping Centre

Location	Floor Area (sqm)				Off Street					On Street				
						Peak		Average			Peak		Average	
	Existing Floor Space	Vacant Floor Space	Total Floor Space	Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.
Musgrave - Macaree & High (West) Peak Demand (Entire Centre)	9300	2332	11632	80%	0	0	na	0	na	84	37	44%	32	38%
Musgrave - High & Macaree (East) Peak Demand (Entire Centre)	4118	302	4420	93%	0	0	na	0	na	67	33	49%	31	46%
TOTAL	**13418**	**2634**	**16052**	**84%**	**0**	**0**	**na**	**0**	**na**	**151**	**70**	**46%**	**63**	**42%**

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Balance	13418	70	
Total	**13418**	**70**	

Table E6
Musgrave Street Centre

Location	Floor Space (sqm)				Off Street					On Street				
						Peak		Average			Peak		Average	
	Existing Floor Space*	Vacant Floor Space	Total Floor Space	Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ. (%)	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.
Main Street - Edgar & Haynes (W)					Post Office									
Peak Demand (Entire Centre)	597	0	597	100%	35	24	69%	23	66%	42	19	45%	14	33%
Main Street - Haynes & Renshaw (E)														
Peak Demand (Entire Centre)*	990	190	1180	84%	12	2	17%	2	17%	38	11	29%	13	34%
Food Store					12	2	17%	2	17%					
Hotel/TAB					102	21	21%	17	17%					
TOTAL*	**1587**	**190**	**1777**	**89%**	**47**	**26**	**55%**	**25**	**53%**	**80**	**30**	**38%**	**27**	**34%**

*excludes tavern/TAB floor area and car park

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Balance	1587	56	3.5
Total	**1587**	**56**	**3.5**

Table E7
Park Avenue Centre

WANDAL CENTRE **Peak Parking Period - Thursday 19th September 2002 - 3.15pm**

	Floor Area (sqm)				Off Street					On Street				
						Peak		Average			Peak		Average	
Location	Existing Floor Space	Vacant Floor Space	Total Floor Space	Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.	# spaces	# spaces occ.	Peak Occ.	# spaces occ.	Av. Occ.
Wandal -Baden Powell & Woodville														
Peak Demand (Entire Centre)*	46	0	46	100%	27	10	37%	8	30%	53	24	45%	19	36%
Australia Post					12	6	50%	4	33%					
Tavern					18	1	6%	2	11%					
Behind Shops					15	4	27%	4	27%					
Wandal - Woodville & Wilkinson					News									
Peak Demand (Entire Centre)	166	0	166	100%	6	2	33%	2	33%	43	11	26%	13	30%
Other														
Peak Demand (Entire Centre)	1181	573	1754	67%	0	0	na	0	na	0	0	na	0	na
TOTAL*	**1393**	**573**	**1966**	**71%**	**33**	**12**	**36%**	**10**	**30%**	**96**	**35**	**36%**	**32**	**33%**

* excludes tavern floor space and parking

SUMMARY	Total Existing Floor Area	Total Peak Parked Cars	Total Parking Accumulation Rate (spaces/100sqm)
Balance	1393	47	3.4
Total	**1393**	**47**	**3.4**

Table E8
Wandal Centre

ROCKHAMPTON CENTRES SUMMARY (SEPTEMBER 2002)

Centre	Floor Space Area (sqm)			On Street Spaces		Off Street Spaces		Parking Accumulation Rate (spaces/100sqm)
	Total Occupied	Total Vacant	% Occupied	# spaces	Peak Occ.	# spaces	Peak Occ.	
Allenstown	8050	158	98%	153	67%	267	75%	3.8
Elphinstone	3417	139	96%	92	30%	174	36%	2.7
Frenchville	3410	745	82%	72	44%	86	64%	2.6
Gladstone Rd				54	24%	92	71%	na
Glenmore	2092	76	96%	0	na	202	62%	6.0
Musgrave	13418	2634	84%	151	46%	0	na	0.0
Park Ave	1587	190	89%	80	38%	47	55%	3.5
Wandall	1393	573	71%	96	36%	33	36%	3.4
Total/Average	33367	4515	88%	698	44%	901	61%	2.7

Appendix F

Rockhampton Existing Land-use Parking Rates Comparison

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Rockhampton Existing Land Use Parking Rates Comparison

	Rockhampton	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council (Draft PS)	Gold Coast City Council (Draft PS)	Brisbane City Council	Bundaberg City Council (Draft PS)	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queensland Transport TAG	Average	Rocky Difference to Average
Population	61,000	44,100	73,000	124,000	91,000	88,000	400,000	864,000	45,000	43,000	77,000	61,000	26,000			
Land Area	187sqkm		1,303sqkm	1,600sqkm	3,726sqkm	118sqkm	1,402sqkm	1,367sqkm		1,267sqkm	90,119sqkm	961sqkm	11,150sqm			
Land Use																
Accomodation Building	1 covered/unit + 0.5/unit (visitor)	1/unit	Various	1/unit in CBD or 1.25/unit outside CBD	1/2 beds +1/4 employees + 1/resident manager	1/unit + 1/10 units (visitor)		1/unit + 1/16sqm GFA dining area + 1/30sqm GFA for non res	1/dwelling unit (covered) + 1/2 units				1.25/unit		1/unit + 1/3unit (visitor)	
eg. 30 units / 4 staff	45	30		38 or 30 (in CBD)	32	33		30	45				38		40	5 spaces extra (+11%)
Bed & Breakfast	1/guest room		1 (resident) + 0.5/staff + 1/bedroom	Detached Dwelling rate + 1/guest room		1/room + 1/ permanent resident	1/guest room + two spaces for the dwelling, one of which must be covered (bed and breakfast and farmstays)				1/bedroom + spaces for dwelling		1/bedroom (50% must be covered)		1/guest room + 2 for dwelling	
eg. 5 rooms	5		7	7		6	7				7		5		7	2 spaces less (-29%)
Bulk Store	1/50sqm GFA		1.75/100sqm GFA + 0.25/100sqm GFA (staff)	Determined by Council	1/100sqm TUA or 1/2 employees			2/tenancy + 1/100sqm GFA	1/45sqm TUA	1/300sqm GFA	1/100sqm GFA or 1/200sqm GFA (when on general industrry site >5000sqm)	Required to undertake a parking study at a similar location to determine demand		10 + 1/60sqm GFA	1/70sqm GFA	
eg. 3,000sqm	60		60		27			32	60	10	30			60	45	15 spaces extra (+25%)
Caretakers Residence	1	1	1	1	1 covered		2 (one covered)		1 (covered)		1 (covered)	1			1 covered space	Nil
Catering Shop	1/15sqm GFA			CBD - 1/30sqm lettable area on ground floor + 1/50sqm on levels other than ground or Outside CBD - 1/25sqm lettable space							1/15sqm GFA or 1/50sqm GFA (where in CBD)		1/15sqm GFA	6/100sqm GFA	1/15sqm GFA or 1/40sqm GFA (CBD areas)	
eg. 200sqm	14			8 or 6 (in CBD)							14 or 4 (in CBD)		14	12	12 or 5 (in CBD)	2 spaces extra (+14%)
Commercial Kennels or Cattery	1/2 employees (min 5 spaces)				1/10 animals	No specific rate	1/employee (min 2) + 1 (visitor)			1/2 employees + 1/10 animals housed (visitor)					1/2 employees + 1/10 animals	
eg. 30 animals + 2 staff	5				3		3			4					4	1 space extra (+25%)
Commercial Premises	1/45sqm	1/30sqm GFA	1/40sqm GFA	In CBD - 1/30sqm ground level + 1/50sqm on other levels, Outside CBD - 1/25sqm	1/30sqm TUA		4/100sqm	Centre where near public transport 1/20sqm GFA ground & 1/50sqm GFA other levels. Other centres, 3/50sqm GFA ground & 1/30sqm GFA other levels	1/30sqm TUA	1/40sqm GFA + 1.5/100sqm public area	1/50sqm GFA	1/40sqm GFA	1/45sqm GFA	6/100sqm GFA	1/25-30sqm GFA	
eg. 300sqm	7	10	8	11 or 9 (in CBD)	9		12	18 or 15 (CBD area)	9	8	6	8	7	18	11	4 spaces less (-36%)
Day care centre	1/employee + pick up/set down area	1/employee + pick up/set down area	0.5/employee + 1/15 child if drive in/set down area or 1/10 child	1/staff + min 3 spaces for pick up/set down area	1/6 children + provision for loading & unloading	1/2 employees+ 1/10 children	1/employee + on stie set down./pick up area for every 5 children	1/5 children (60% is to be designated for staff)	1/employee + 4 additional per space	1/employee + 1/100sqm GFA (set down + pick up area)	1/full-time staff member + 1/10 children + queuing on site for 3 vehicles	1/staff member + set down pick up area (1/10 children)		0.8/employee +0.1/max children enrollment	1/employee + pick up set down area for 1/10 children	
eg. 50 kids + 5 staff /300sqm	5	5	8	8	9	8	15	10	25	8	10	10		9	11	6 spaces less (-55%)
Educational Establishment (Secondary)	1/staff member +1/10 students of driving age + setdown/pick up	1/staff member + 1/10 students of driving age + set down/pick up	0.5/staff + 1/10 pupil	1/2 stafff members	1/2 employees + 1/50sqm GFA of other floor area for public use	1/staff on premises + 1/20 secondary students	1/staff + 1/10 Year 12 students	1/2 staff		1/2 employees + 1/10 students (yrs 11 & 12)	1/employee + provision for loading and unloading of passengers			2/classroom	1/staff + 1/10 Yr 12 students	
eg. 1000 kids + 30 staff / 2000sqm	50	50	115	15	55	80	50	15		55	30				52	2 spaces less (-4%)
Hospital	1/3 beds + 1/2 employees + 2 ambulance	1/3 beds + 1/2 employees + emergency vehicle area	1/bed + 1/bed (staff)	1/4 beds + 1/2 employees + 1/staff Dr + emergency vehicle storage	1/4 beds + 1/2 employees + 1/Dr	No specific rate	As determined by Council (requiring Traffic Report)	50 spaces + 1/65sqm GFA	1/3 beds + 1/2 employees	1/5 beds + 1/2 employees + 1/resident doctor	1/4 beds + 1/employee + storage for emergency vehicles		1/4 beds + 1/2 employees + 1/Dr	50 + 1/65sqm GFA	1/3-4 beds + 1/2employee + 1/Dr staff+storage for emergency vehicles	
eg. 300 beds +50 staff + 10 Drs /10000sqm	132	130	600	110	110			204	130	95	135		110	127	112	20 spaces extra (+15%)

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Rockhampton Existing Land Use Parking Rates Comparison

	Rockhampton	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council (Draft PS)	Gold Coast City Council (Draft PS)	Brisbane City Council	Bundaberg City Council (Draft PS)	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queensland Transport TAG	Average	Rocky Difference to Average
Hotels	1/unit + 1/10sqm GFA lounge +1/3sqm GFA bar + 1/10sqm GFA retail + reservoir of 6 for bottleshop	1/unit + 1/10sqm GFA lounge/dining + 1/2sqm GFA bar + 1/15sqm GFA retail + 8 spaces for drive-in bottleshop	1/room + 1/3.5sqm GFA licensed area +1/10sqm GFA bulk liquor sales + reservoir of 12 for bottleshop + 1/res unit + 0.5/staff	1/10sqm GFA bar + 1/50sqm GFA bulk liquor sales + queuing for 12 vehicles if drivethru bottleshop + 1/guest room (1st 10) + 1/3 guest rooms for remainder	1/2sqm GFA bar floor area + 1/5sqm GFA lounge/beer garden + 1/guest suite + 1 covered for manager	1/unit + 1/30sqm GFA (non res) + queuing for 10 cars if bottleshop provided	1/unit + 10/100sqm GFA (lounge, bar, retail bottleshop etc) + reservoir space for 12 cars in drive thru bottleshop.	1/unit + 1/30sqm GFA for non res	1/guest room + 1/5sqm TUA (lounge, bar, beer garden)		1/10sqm GFA licenced area + 1/50sqm GFA (bulk liquor sales) + 1/guest suite + queing on site for 12 vehicles where drive thru is provided	Applicant required to undertake a parking study in a similar location to determine the number of parking spaces required	1/3sqm GFA (bar area) +1/5sqm GFA (lounge/beer garden) + 1/guest room + 1/3 employees	1/15sqm GFA	1/room + 1/10sqm GFA (licenced area) + 1/50sqm GFA (bulk liquor sales) + queuing for 10 vehicles for drive through bottleshop	
eg. 50 rooms + 20sqm (bar) + 130sqm (lounge) + 200sqm (bottleshop) + 6 staff	90 + reservoir of 6 spaces	87 + reservoir of 8 spaces	116 + reservoir of 12 spaces	43 + reservoir of 12 spaces	87	62 + reservoir of 10 spaces	85 + reservoir for 12 cars	62	85		69 + reservoir for 12 spaces		88	74	78 +reservoir for 11 spaces	12 spaces extra (+13%)
Indoor Entertainments (ecl squash)	1/20sqm TUA	1/20sqm GFA	6/100sqm GFA + 0.5/staff	1/15sqm lettable area	1/10sqm TUA <u>or</u> 1/4 seats	No specific rate	Various	Various	1/20sqm TUA	Various	1/10sqm GFA		1/20sqm GFA	Various	1/15sqm GFA	
eg. 1000 sqm GFA	50	50	62	60	100				45		100		50		68	18 spaces less (-26%)
Industry	1/50sqm GFA <u>or</u> 1/2 employees	1/80sqm TUA (min 5 spaces)	1/100sqm GFA	1/90sqm lettable area	1/100sqm TUA	2/tenancy + 1/100sqm GFA	2.5/100sqm GFA	2/tenancy + 1/100sqm GFA	1/50sqm TUA	1/100sqm GFA	1/100sqm GFA <u>or</u> 1/200sqm GFA (when on general industrry site >5000sqm)	1/100sqm GFA	1/2 workers <u>or</u> 2/100sqm GFA	1.3/100sqm GFA	1/75sqm GFA	
eg. 5000sqm GFA	100	57	50	50	45	52	125	52	90	50	50	50	100	65	65	35 spaces extra (+35%)
Liquid Fuel Depot	1/employee		10% of site for parking and access			1/staff on site at any time	1/employee + 1 (visitor)			4 + 1/2 employees						
Motels	1/unit + 1/3 employees	1/unit + 1/2 employees + 1/20sqm restaurant open to public	1/unit + 0.5/employee + 1/15sqm GFA dining open to public	1/unit (self contained) <u>or</u> 1/unit (1st 10) + 1/3 remainder + 1/manager	1/guest suite + 1/manager + 1/10sqm (restaurant) + 1/50sqm kitchen/prep areas	1.1 /unit + rate for restaurant dining area if applicable	1/room + 1 (manager) + 0.15/seat <u>or</u> 3.5/100sqm GFA (restaurant area)	1/unit + 1/16sqm GFA dining area	1/unit (covered) + 1/2 employees	1/unit + 1/10 seats (restaurant) + 1/2 employees	1/unit (covered) for first 30 units + 1/2 units for remaining units + 1/2 employees + provision for bus parking where more than 30 units + parking for restaurant or other facilities at applicable rates	1/unit + 1/13.2sqm GFA (restaurant/function room) <u>or</u> 1/6 seats + 1/2 employees + 1/manager residence	1/unit + 1/3 employees	1/unit + 1/2 employees (no restaurant) <u>or</u> 1/unit + 1/2 employees + 15/100sqm GFA <u>or</u> 1/3 seats (with restaurant)	1/unit +1/2 employees + restaurant rate	
eg. 30 rooms + 150sqm GFA restaurant + 4 employees	32	40	42	25	41	39	37	40	41	42	42	45	32	58	41	9 spaces less (-22%)
Multiple Dwelling	1 covered/unit + 0.5/unit (visitor)	1 covered/unit + 1/5unit (visitor)	1.5/dwelling (25% to be marked visitor)		as per clause 6.15.1	1/1 bed unit, 1.5/2 bed unit, 2/3 or more bed unit + 1/5 (visitor, or which one is to be car washing bay)	up to 20 - 1/1brm, 2/2brm and larger + 1/4 (visitor) (2, 3 and more brm decided first). Dwellings over first 20 - 1/unit + 1/10 (visitor)	located within 200m public transport: 1/1brm dwelling & 1.25/other dwelling <u>or</u> not located with 200m of public transport: 1.25/dwelling (1brm) & 1.5/other dwellings		1/1 brm unit+ 1.5/2 brm unit + 2/3 brm unit + 1/5 units (visitor)	1.5/unit <u>or</u> 2/unit (1 covered) if accessed from road less than 7.5m width or cul-de-sac		1.25/dwelling	1.5/unit (medium density) <u>or</u> 1.1/unit (high density)	1/unit + 0.75/unit (visitor)	
eg. 10 units	15	12	15			22	23	15		22	20		13	15	18	3 spaces less (-17%)
Place of worship	1/10 seats	1/10 seats	0.3/seat <u>or</u> 1/15sqm net floor area + 2/dwelling + 0.5/staff	1/15sqm net lettable area	1/6 seats	1/8 seats	10/100sqm GFA	1/10sqm GFA	1/5 seats <u>or</u> 1/20sqm TUA	1/10 seats <u>or</u> 1/10sqm of public floor space	1/10sqm GFA		1/10 seats	1/12sqm GFA	1/7 seats <u>or</u> 1/13sqm GFA	
150 seats/300sqm GFA	15	15	45	18	25	19	30	30	14	30	30		15	25	23	8 spaces less (-35%)
Plant Nursery	1/500sqm TUA (min 5 spaces)		1/500sqm (min 5) + 0.5/staff	1/25sqm of sales area + 1/200sqm nursery area		6 + 1/500sqm TUA (exc carparking areas)	10 + 1/100sqm TUA (area over 3000sqm)		1/200sqm TUA (min 6)	wholesale - 1/2 employees <u>or</u> retail - 1/100sqm (display area) + 1/2 employees	1/25sqm (sales area) + 1/200sqm (nursery area)				1/200sqm TUA + 1/2 employees	
eg. 200sqm GFA sales area + 1800sqm site area + 4 staff	5		7	17		10	10		9	22	17				13	8 spaces less (-62%)
Professional Office	1/45sqm GFA <u>or</u> 1/2 employees	1/30sqm GFA	1/40sqm GFA	In CBD - 1/30sqm ground level + 1/50sqm on other levels <u>or</u> Outside CBD - 1/25sqm	2 or as determined by Council	1/25sqm GFA (sub-regional centre zone, neighbourhood or suburban centre) <u>or</u> 1/20sqm other areas	3/100sqm GFA	1/30sqm GFA	1/30sqm TUA	1/40sqm GFA + 1.5/100sqm public area	1/50sqm GFA	1/40sqm GFA	1/45sqm GFA	6/100sqm GFA	1/30sqm GFA	
eg. 300sqm GFA (3 offices)	7	10	8	11 <u>or</u> 9 (in CBD)	6	15 <u>or</u> 12 (in CBD)	9	10	9	8	6	8	7	18	10	3 spaces less (-30%)
Retail Showroom	1/50sqm GFA	1/30sqm GFA	Various	1/50sqm net lettable area	1/40sqm TUA	1/40sqm GFA	2/100sqm GFA	1/50sqm GFA	1/45sqm TUA	3/100sqm GFA	1/40sqm GFA				1/40sqm GFA	
eg. 3000sqm GFA	60	100		54	68	75	60	60	60	90	75				72	12 spaces less (-16%)

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Rockhampton Existing Land Use Parking Rates Comparison

	Rockhampton	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council (Draft PS)	Gold Coast City Council (Draft PS)	Brisbane City Council	Bundaberg City Council (Draft PS)	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queensland Transport TAG	Average	Rocky Difference to Average
Restaurant	1/6 places + 1/employee	1/15sqm GFA	1/3 seats or 1/7sqm dining (not inc seats on footpaths) + 0.5/staff	In CBD - 1/30sqm LA ground level + 1/50sqm other levels or Outside CBD - 1/25sqm	1/10sqm of floor avail to public + 1/50sqm kitchen & prep areas	1/25sqm (sub-regional,neighbourhood or suburban centres zone) or 1/20sqm GFA (local precinct or suburban centre) or 1/8sqm of dining/bar/lounge/customer service area + 1/30sqm other areas)	6.7/100sqm GFA	1/8sqm GFA (<400sqm GFA) or 30 + 1/20sqm GFA (>400sqm GFA)	1/15sqm TUA	1/3 seats + 1/2 employees		1/6.6sqm GFA or 1/ 3 seats		15/100sqm GFA or 1/3 seats	1/11sqm GFA or 1/3seats + 1/2 employees	
eg. 200sqm GFA (ie 50 seats) + 6 staff	16	14	32	8 or 6 (in CBD)	16	25 or 8 (in CBD)	14	25	12	20		31		30	21	5 spaces less (-24%)
Shop	1/20sqm GFA (1st 100sqm) & 7/100sqm thereafter	1/20sqm GFA (1st 100sqm) & 1/15sqm thereafter	3.5/100sqm GFA + 0.5/100sqm GFA	In CBD - 1/30sqm LA ground level + 1/50sqm other levels or Outside CBD - 1/25sqm	1/15sqm total retail area + 1/100 sqm of storage area or 1/10sqm + 1/100sqm (shopping centres)	1/25sqm (sub-regional,neighbourhood or suburban centres zone) or 1/20sqm GFA (other areas)	6.7/100sqm GFA (single shop) or 7/100sqm (0-10000sqm EGFA) or 6.5/100sqm (10000-20000sqm EGFA) or 5/100sqm (20000-30000sqm EGFA) or 4.5/100sqm (>30000sqm EGFA)	3/50sqm GFA	1/15sqm TUA	4.4/100sqm GFA	1/20sqm (<700sqm GFA) or 1/10sqm GFA (>700sqm GFA) or 1/50sqm (located in CBD)	1/23sqm GFLA	1/20sqm GFA (isolated shop) or 3/40sqm GFA (shopping centre)	6/100sqm GFA	1/16sqm GFA	
local 200sqm GFA	12	12	8	8 or 6 (CBD)	12	10	14	12	12	9	10	8	10	12	11	1 space extra (+8%)
med 2000sqm GFA	138	132	80	72 or 60 (CBD)	182	100	140	120	120	88	200	74	150	120	121	17 spaces extra (+12%)
s/c 30000sqm GFA	2098	1999	1200	1080 or 900 (CBD)	2730	1500	1350	1800	1800	1320	3000	1109	2250	1800	1751	347 spaces extra (+16%)
Squash Court	4/court	2/court	3/court	4/court	3/court + one covered for caretaker/ manager	4/court	4/court	6/court	4/court + 1/5 seats	3/court + 1/2 employees	6/court	3/court	4/court	6/court	4/court	
Transport Terminal	1/employee		1/vehicle assoc with devt + 1/2 on site staff	1/25sqm office + truck and loading bays		No specific rate	As determined by Council (requiring Traffic Report)				1/10sqm waiting area	Applicant required to undertake a parking study in a similar location to determine the number of parking spaces required		2/100sqm GFA		
Undertakers Establishment	1/2 employees (min 4) + 1/5 persons accomodated in chapel	1/20sqm TUA	1/40sqm GFA + 0.5/staff	1/employee +1/3 seats in chapel	1/employee + 1/hearse + 1/10 people capable of being seated in chapel (min 10)	1/staff member (min 5) + 1/10 people capable of being seated in chapel	10/100sqm GFA			1/5 seats					1/6 seats + 1/employee	
eg. 300sqm GFA/100seats + 5 staff	24	14	10	38	16	15	30			20					21	3 spaces extra (+12%)
Warehouse	1/50sqm GFA	1/150sqm GFA (min 3 spaces)	1/300sqm GFA + 1/staff	1/90sqm lettable area	1/100sqm TUA	2 + 1/100sqm GFA	2/100sqm GFA	2/tenancy + 1/100sqm GFA	1/2.5 employees or 1/100sqm TUA	1/300sqm GFA	1/100sqm GFA or 1/200sqm GFA (when on general industrry site >5000sqm)	1/100sqm GFA	1/2 employees	10 + 1/60sqm GFA	1/100sqm GFA	
eg. 5000sqm GFA	100	34	22	50	45	52	100	102	45	17	50	50	3	94	50	50 spaces extra (+50%)

Appendix G

Land-Use Parking Rates from Other Local Governments Comparison

Land Use Parking Rates from Other Local Governments Comparison

Land Use	Sub Group	Rockhampton would be assesed as	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council	Gold Coast City Countil	Brisbane City Council	Bundaberg City Council	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queenslad Transport TAG	Average Rate	Rocky Difference in Parking Required
Accom	Hostel	1 covered/unit + 0.5/unit (visitor)	1/2 sleeping rooms	1/5 beds + 0.5/employee	Cairns City/North 1/10 beds, Other Locations 1/5 beds			1/2 hostel units	1/bed		1/10 beds + 1/manager +1/2 employees	1/2 bedrooms	1/10beds + 1/2 employees + 1 ambulance			1/5beds+ 1/2 employees	
	Eg. 8 rooms/24 beds/2employees	12	4	6	5 or 3 (in CBD)			4	24		5	4	4			4	8 spaces extra
	Backpackers	1 covered/unit + 0.5/unit (visitor)		1/5 bed or 1/10 if perm shuttle bus + 0.5/staff					1/100sqmGFA + mini-bus parking			1/2 bedrooms					
	eg. 12 rooms/48 beds/4employees	18		12					10			6				12	6 spaces extra
	Serviced Apartment	1 covered/unit + 0.5/unit (visitor)						1/unit + 0.25/unit (visitor) where spaces not dedicated to indiv units or 1/1brm and 2/2brm and larger units + 0.25/unit (visitor) where spaces are dedicated				1/unit (covered) for first 30 units + 1/2 units for remaining units + 1/2 employees + provision for bus parking where more than 30 units + parking for restaurant or other facilities at applicable rates				1/unit +0.25/unit (visitor)	
	e.g. 15units/6staff	23						19				18				19	4 spaces extra
	Tourist Resort	1/unit + 1/3employees		1/unit + 0.5/staff	1/unit			1/room (1st 75) + 0.1 for each unit after 75 + commercial facilities rates (with 75% relaxation)								1/unit	
	e.g. 30units/12staff	34		36	30			30								32	2 spaces extra (+6%)
Commercial	Commercial Services	1/45sqm GFA	1/30sqm GFA		CBD - 1/30sqm LA ground level + 1/50sqm other levels Outside CBD - 1/25sqm LA			4/100sqm GFA	Centre (within 200m PT) - 1/20sqm GFA ground + 1/50sqm GFA other floors or Centre (other areas) - 3/50sqm GFA (ground) + 1/30sqm GFA (other levels)	1/30sqm TUA	1/40sqm GFA	1/50sqm	1/40sqm GFA			1/30sqm GFA	
	e.g. 500 sqm	11	17		17			20	30	14	13	10	13			16	5 spaces less (-31%)
	Bank/Financial Facility	1/45sqm GFA		1/40sqm GFA		1/15sqm available to public + 1/100sqm storage areas + 1/35sqmother floor areas					1/40sqm GFA + 1.5/100sqm (public area)	1/50sqm			3/50sqm GFA	1/26sqm GFA	
	e.g. 500 sqm	11		13		22					16	10			30	19	8 spaces less (-42%)
	Laundromat	1/45sqm GFA		3.5/100sqm GFA (customer) + 0.5/100sqm GFA (staff)	1/2 washing machines			5/100sqm								1/20sqm GFA	
	e.g. 100sqm (10 machines	2		4	5			5								5	3 spaces less (-60%)
	Medical Centre	1/45sqm GFA or 1/2 employees	3/consulting room (practitioner) or 1/20sqm GFA	4/consulting room (GP), 2/consulting room (specialist) + 2/consulting room (staff)	4/consulting room	1/20sqm GFA or 4/practicitioner + 1/2 employees	1/25sqm GFA (subregional, neighbourhood, suburban centre zone) or 1/20sqm GFA (local precinct) or 4/practicitioner (other)	5/100sqm GFA		1/20sqm TUA or 3/practitioner	1/health care professional + 1/2 employees + 3/surgery/consultation room	4/consulting room	1/practitioner + 1/staff member + 1/40sqm GFA		6/100sqm GFA	4/consulting room or 1/20sqm GFA	
	eg 400sqm/3 Dr/3staff	9	20	18	12	20	16	20		20	14	12	11		24	17	8 spaces less (-47%)
	Real Estate or Travel Agency	1/45sqm GFA or 1/2 employees		1/40sqm GFA												1/40sqm GFA	
	Reception Room	1/45sqm GFA or 1/2 employees	1/15sqm GFA					6/100sqm GFA								1/15sqm GFA	
	Vehicle Hire Premises				min 10 for hire cars + 1/30sqm LA			3.3/100sqm GFA (not including vehicle storage area) (min 4 spaces)								1/30sqm GFA + parking for hire cars	
	Vet	1/45sqm GFA or 1/2 employees		3/consulting room + 2/consulting room (staff)	1/25sqm LA	1/20sqm TUA or 3/vet	1/25sqm GFA	3/practitioner		1/30sqm TUA	4/surgery + 1/2 employees	1/25sqm GFA				1/23sqm GFA or 4/practitioner + 1/staff	
	eg. 300sqm + 2 vets + 3 rooms + 4 staff	7		15	12	15	12	6		10	16	12				13	
	Bottleshop	1/50sqm GFA		3.5/100sqm GFA (customer) + 0.5/100sqm GFA (staff)				10/100sqm GFA retail + reservoir space for 12 cars for drive in			1/6sqm GFA	1/50sqm (bulk liquor sales) + queing lane on site for 12 vehicles where drive through				5/100sqm + reservoir space for 12 cars where drive in exists	
	e.g. 200sqm	4		8				32			33	16				22	18 spaces less
	Hardware Store	1/50sqm GFA			1/30sqm LA							1/25sqm GFA				1/27sqmGFA	
	eg. 200sqm	4			7							8				8	4 spaces less (-33%)
	eg. 3000sqm	60			100							120				110	50 spaces less
	Local Store	1/20sqm GFA (first 100sqm) +7/100sqm GFA	1/25sqm GFA	3.5/100sqm GFA (customer) + 0.5/100sqm GFA (staff)	1/25sqm LA			6.7/100sqm GFA		1/15sqm TUA	5/100sqm GFA	1/20sqm (<700sqm GFA) or 1/10sqm (>700sqm) or 1/50sqm GFA (where in CBD)	1/20sqm GFA			1/20sqm GFA	
	e.g. 200sqm	12	8	8	7			13		11	10	10	10			10	2 spaces extra (+16%)
	Major shopping centre	1/20sqm GFA (first 100sqm) +7/100sqm GFA	6/100sqm GFA		In CBD - 1/30sqm LA ground level & 1/50sqm LA other levels, Outside CBD 1/15sqm LA	1/20sqm GFA (major shopping devt) or 1/10sqm retail + 1/100sqm total storage area (shopping centre)		7/100sqm of EGFA (0-10,000sqm) or 6.5/100sqm EGFA (10,000-20,000sqm) or 5/100sqm EGFA (20,000-30,000sqm) or 4.5/100sqm EGFA (>30,000)	Centre (within 200m PT) - 1/20sqm GFA ground + 1/50sqm GFA other floors or Centre (other areas) - 3/50sqm GFA (ground) + 1/30sqm GFA (other levels)	1/15sqm TUA	4.4/100sqm GFA (dept stores) + 1/35 sqm GFA (specialty shops)	1/15sqm GFA		3/40sqm GFA	6.1/100sqm GLFA (0-10,000sqm) or 5.6/100sqm GLFA (10,000-20,000sqm) or 4.3/100sqm GLFA (20,000-30,000sqm) or 4,1/100sqm GLFA (>30,000sqm)	6/100sqm GFA	
	eg. 25000sqm	1748	1500		1417	1250		1063	1500	1667	838	1667		1875	914	1500	248 spaces extra
	Video Store	1/20sqm GFA (first 100sqm) +7/100sqm GFA		3.5/100sqm GFA + 0.5/100sqm (staff)		1/25sqm TUA									6.1/100sqm GFA	1/20sqm GFA	
	eg. 200sqm	12		8		8									13	10	2 spaces extra (+16%)

Land Use Parking Rates from Other Local Governments Comparison

Land Use	Sub Group	Rockhampton would be assesed as	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council	Gold Coast City Countil	Brisbane City Council	Bundaberg City Council	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queenslad Transport TAG	Average Rate	Rocky Difference in Parking Required
	Home Office	1/45sqm GFA or 1/2 employees (office portion)		1 in addition to parking for dwelling	1 in addition to parking for dwelling		1 in addition to parking for dwelling	1 in addition to parking for dwelling		2		2 + parking required for dwelling				1 + parking required for dwelling	
	Landscape and Garden Supplies	1/500sqm TUA (min 5)			1/50sqm GFA or 1/500sqm site area	1/100sqm TUA or 5	1/200sqm GFA (min 4)	2/100sqm TUA		1/200sqm TUA (min 6)	1/2 employees	1/25sqm (sales area) + 1/200sqm (nursery area)				1/90sqm TUA (min 5)	
	e.g. 1000sqm	5			20	9	5	17		6	4	19				11	6 spaces less
	Boat Showroom	1/50sqm GFA		1/10 displayed boats (min 5 spaces) + 1/staff	1/100sqm lettable area	1/100sqm TUA			2 + 2/5 employees	1/200sqm TUA (min 6)				1/30sqm covered GFA + 1/250sqm other site area		1/100sqm TUA (min 5)	
	Motor Showroom	1/50sqm GFA		1/10 displayed vehicles (min 5 spaces) + 0.5/staff	1/100sqm lettable area	1/100sqm TUA	1/150sqm display area	3.3/100sqm GFA + 0.5/100sqm display area	2 + 2/5 employees	1/200sqm TUA (min 6)	1/200sqm (display area) + 3/workbay	1/40sqm GFA	1/135sqm site area + 6/work bay	1/30sqm covered GFA + 1/250sqm other site area	0.75/100sqm site area + 6/work bay	1/115sqm TUA	
	eg. 500sqm GFA + 2000sqm Display Area + 6 staff	50		23	23	23	13	27	6	11	16	63	25	25	31	22	28 spaces extra
	Outdoor sales				1/30sqm LA (min 4) + 1/500sqm TUA							1/400sqm site area				1/400sqm site area	
	Primary Produce Sales	1/50sqm GFA		2/100sqm GFA + 1/200sqm storage area +0.5/staff						1/45sqm TUA	1/800sqm site area (stockyard sales)					1/50sqm (sales) + 1/500sqm TUA	
	Service Station		4/lubricating bay (min 4 spaces)	4/work bay + 3.5/100sqm retail + 0.5/staff	4/bay + 1/25sqm of shop/restaurant	5 first service bay + 4 each additional bay	1 + 4/bay + 1/20sqm retail GFA	2 + 5/bay + 4/100sqm GFA of shop (less than 150sqm) + 5/100sqm GFA (over 150sqm) + 10/100sqm GFA or restaurant or 0.4/seat	10 + 1/60sqm GFA	4/bay (min 4)	6/work bay + 5/100sqm GFA (convenience shop) + 1/3 seats (restaurant)	4/bay + allocation of spaces for ancillary uses	6/work bay + 1/20sqm GFA (convenience store) + 1/6.6sqm GFA or 1/3 seats (restaurant)	5/first bay + 4/other bays	6/work bay + 5/100sqm GFA (with convenience store and/or restaurant) or 5/100sqm (not work bays or convenience store)	4/work bay + requirements for retail/restaurant if applicable	
	eg. 150sqm (convenience) + 3work bays + 3 employees		12	19	18	13	21	23	13	12	26	20	26	13	26	19	
	Timber Yard	1/50sqm GFA		1/500sqm storage area + 0.5/staff		1/150sqm TUA	1/200sqm GFA (min 4)	1/employee who does not reside on site + 1 visitor parking space	2/tenancy + 1/100sqm GFA	1/45sqm TUA						1/200sqm TUA	
	Trade Supplies	1/50sqm GFA		2/100sqm GFA + 1/200sqm storage area + 1/40sqm showroom + 0.5/staff	1/50sqm LA	1/150sqm TUA	1/200sqm GFA (min 4)			1/45sqm TUA						1/100sqm TUA	
Education	Primary School	1/staff + 1/10 students of driving age + set down/pick up area		1/12 pupil + 0.5/staff	1/2 staff			1/staff	1/2 staff		1/2 employees + 1/100 students (visitor)	1/employee + provision for loading and unloading of passengers on site			5/classroom	1/2 employees	
	Tertiary/Business College	1/staff + 1/10 students of driving age + set down/pick up area		1/5 student + 0.5/staff	1/2 staff + 1/10 students	1/staff + 1/10 students		As determined by Council	1/2 staff + 1/10 students		1/2 employees + 1/10 students	1/employee + 1/10 students + provision for loading and unloading of passengers on site				1/2 staff + 1/10 students	
Industrial	Abbatoir	1/50sqm GFA or 1/2 employees		1/staff							1/2 employees					1/staff	
	Boat repair and service	1/50sqm GFA or 1/2 employees		1/50sqm TUA	1/90sqm LA		4/work bay			1/20sqm TUA						2/50sqm TUA	
	Car repair	1/50sqm GFA or 1/2 employees		4/work bay + 1/staff	5 + 1/90sqm LA		4/work bay		10 + 1/60sqm GFA	1/20sqm TUA	6/work bay	1/50sqm GFA		1/9sqm GFA	1/20sqm GFA (0-300sqm GFA) or 1/60sqm GFA (>300sqm GFA)	6/100sqm TUA	
	e.g.300sqm/4 staff/4workbays	8		20	8		16		15	14	24	6		33	15	16	8 spaces less (-53%)
	Factory	1/50sqm GFA or 1/2 employees		1/100sqm			2/tenancy + 1/100sqm GFA	2.5/100sqm GFA	2/tenancy + 1/100sqm GFA		1/100sqm GFA	1/100sqm GFA or 1/200sqm GFA (when on general industrry site >5000sqm)	1/100sqm GFA	1/2 employees or 2/100sqm GFA	1.3/100sqm GFA	1/85sqm GFA	
	e.g. 4000sqm	80		40			42	100	42		40	40	40	80	52	47	33 spaces more (+41%)
	Heavy Vehicle and Plant Repair	1/50sqm GFA or 1/2 employees		10% of site for parking and access			4/work bay		2 spaces + 2/5 employees	1/20sqm TUA							
	Light Industry	1/50sqm GFA or 1/2 employees	1/60sqm TUA (min 3 spaces)		1/90sqm LA		2/tenancy + 1/100sqm GFA		2/tenancy + 1/100sqm GFA	1/15sqm TUA	1/100sqm GFA	1/100sqm GFA or 1/200sqm GFA (when on general industrry site >5000sqm)		1/2 employees or 2/100sqm GFA		1.8/100sqm GFA	
	eg 1000sqm	20	17		12		12		12	67	10	10		20		18	2 spaces extra
	Mail Centre	1/50sqm GFA		1/0.75 staff												1/0.75 staff	
	Materials Processing/Recycling	1/50sqm GFA or 1/2 employees		10% of site for parking and access	1/employee						1/2 employees + 1/200sqm site area					1/2 employees + 1/200sqm site area	
	Mini Storage	1/50sqm GFA		0.5/staff (min 2)				As determined by Council		1/2.5 employees or 1/100sqm TUA						1/2 employees	
	Motor trade retail outlet (tyres/mufflers etc)	1/50sqm GFA		2/100sqm GFA + 1/200sqm storage area +0.5/staff	1/50sqm LA		1/40sqm GFA	2/100sqm GFA		1/45sqm TUA			1/33sqm GFA or 3/work bay	1/100sqm GFA	3/100sqm GFA or 3/work bay	1/45sqm GFA	
	eg. 1000sqm	20		19	18		25	20		20			30	10	30	22	2 spaces less
	Service Industry	1/50sqm GFA or 1/2 employees						2.5/100sqm GFA				1/50sqm GFA				1/50sqm GFA	
	Showroom	1/50sqm GFA			1/50sqm LA	1/100sqm TUA		2/100sqm GFA	3/50sqm GFA	1/45sqm TUA		1/40sqm GFA		1/30sqm covered GFA + 1/250sqm other site area	10 + 1/60sqm GFA	1/35sqm GFA	
	eg. 1000sqm	20			20	10		20	60	23		25		34	27	28	8 spaces less (-29%)
	Wrecking Yard	1/50sqm + 1/2 employees		10% of site for parking and access + 1/100sqm covered area +1/500sqm outdoor area	1/200sqm TUA (min 5 spaces)	1/150sqm TUA of yard area + 1/20sqm of office		0.7/100sqm TUA (min 5)			1/2 employees + 1/200sqm site area					1/150sqm TUA	
Recreation	Amusement Parlour	1/20sqm TUA		4/100sqm GFA + 0.5/staff			1/25sqm GFA	5/100sqm of GFA			1/3 machines + 1/2 employees			1/20sqm GFA		1/20sqm GFA	
	Bowling	1/20sqm TUA	3/lane	3/lane	5/lane + 1 covered for resident manager		3/lane				3/lane	4/lane	3/lane	3/lane	3/lane	3/lane	
	Bowling green	1/20sqm TUA		15/green	30/green		30/greeen	20/green	30/green		30 (first green) + 15 each additional green		30 (first green) + 15 each additional green		30 (first green) + 15 each additional green	30/green	
	Boating Facility			30/launching lane + 1/30sqm floor space				0.6/wet berth (boats <10m) + 0/8/wet berth (boats 10-15m) + 1/wet berth (boats>15m) + 0.2/dry berth + 0.5/employee +1/50sqm GFA ancillary uses								Various	
	Brothel			1/40sqm GFA			As required in Prostitution Act									1/40sqm GFA	

EPPELL
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PARTNERS

Land Use Parking Rates from Other Local Governments Comparison

Land Use	Sub Group	Rockhampton would be assesed as	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council	Gold Coast City Countil	Brisbane City Council	Bundaberg City Council	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queenslad Transport TAG	Average Rate	Rocky Difference in Parking Required
	Cinema/ Theatre	1/20sqm TUA	1/8 seats	1/10 seats	1/15sqm LA		1/5 seats	As determined by Council	1/10sqm GFA	1/5seats	1/10 seats or 1/10sqm public floor area				3/50sqm GFA	1/9 seats or 1/20sqm GFA	
	eg. 1500 seats/800sqm	40	188	150	54		300		80	300	150				48	159	119 spaces less
	Club	1/20sqm TUA			1/45sqm LA	1/100sqm TUA	1/30sqm GFA						Applicant reequired to undertake a parking study of a similar type of development	1/45sqm GFA		1/30sqm GFA	
	eg. 200sqm	10			5	2	7							5		7	3 spaces extra (+30%)
	Exhibition Centre	1/20sqm TUA		3/100sqm display area + 0.5/staff							1/10 seats or 1/100sqm public floor space					1/50sqm public floor space	
	Function Centre/Hall	1/20sqm TUA		0.3/seat or 1/15sqm of net floor area + 0.5/staff	1/20sqm lettable area	1/10sqm TUA	5 + 1/50sqm GFA	10/100sqm GFA	1/10sqm GFA	1/5seats	1/10 seats or 1/10sqm seating area	1/10sqm GFA				1/15sqm GFA	
	Golf Course			4/hole +1/driving range bay + 0.5/staff	4/tee + club		4/hole	4/hole + 3/100sqm clubhouse or 6/100sqm club house								4/hole + requirements for clubhouse	
	Gymnasium	1/20sqm TUA		6/100sqm GFA + 0.5/staff	1/15sqm LA		1/15sqm GFA	10/100sqm GFA	1/10sqm GFA		1/25sqm GFA + 1/2 employees		1/33sqm GFA (regional) or 1/22.2sqm GFA (sub-regional)		1/6sqm GFA	1/15sqm GFA	
	Marina			0.5/mooring	1/3 berths + 1/50sqm TUA ancillary uses			0.6/wet berth (boats <10m) + 0/8/wet berth (boats 10-15m) + 1/wet berth (boats>15m) + 0.2/dry berth + 0.5/employee +1/50sqm GFA ancillary uses					0.6/wet berth + 0.2/dry storage berth + 0.2 swing mooring + 0.5/employee			0.5/berth + ancillary uses	
	Motor/bike track			1/5 participant/spectator capacity + 0.5/staff					1/5seated persons + 1/5sqm other areas							1/5 spectator capacity + 1/5sqm other areas	
	Nightclub	1/20sqm TUA		0.3/seat or 1/15sqm of net floor area + 0.5/staff	In CBD - 1/30sqm LA ground level & 1/50sqm LA other levels, Outside CBD 1/25sqm LA		1/15sqm GFA	6/100sqm GFA	1/15sqm GFA (<1,500sqm) or 40 + 1/25sqm GFA (>1,500sqm GFA)	1/10sqm TUA (licensed)	1/3.5sqm licenced floor area + 1/2 employees	1/10sqm licenced area	Applicant reequired to undertake a parking study of a similar type of development	1/15sqm GFA		1/14sqm GFA	
	eg. 200sqm	10		18	8		14	12	14	20	62	20		14		15	5 spaces less (-33%)
	Outdoor sport ground			1/5 participant/spectator capacity + 0.5/staff	50/field		25/field	As determined by Council	50/field			As determined by Council		1/400sqm site area		50/field	
	Place of Assembly	1/10 seats		0.3/seat or 1/15sqm of net floor area + 0.5/staff + 2/dwelling		1/40sqm TUA		As determined by Council			1/10 seats or 1/10sqm public floor space			1/10 seats		1/20sqm GFA or 1/8 seats ??	
	Racecourse			1/4 spectator capacity (75% may be unsealed) + 0.5/staff	1/5seats + 1/5sqm of other spectator areas			As determined by Council	1/5seated persons + 1/5sqm other areas							1/5 seats + 1/5sqm of othe areas	
	Swimming Pool			1/50sqm of water	15 + 1/100sqm of useable site area		No specific rate	15 + 1/100sqm TUA	15 + 1/100sqm site area	4					15 + 1/100sqm useable site area	15 + 1/100sqm TUA	
	Tennis Court	4/court	4/court	2/court + 1/6sqm of clubhouse + 0.3/spectator seat	4/court		6/court	4/court	6/court	4/court + 1/5 seats	3/court + 1/2 employees		3/court		6/court	4/court	
	Tourist Facility			1/30sqm GFA + 0.5/staff				As determined by Council								1/30sqm GFA + 0.5/employee	
	Zoo			1/100sqm display area + 0.5/staff			1/staff + 5 spaces									1/100sqm display area + 0.5/staff	
Residential	Caravan Park	1/site + 1/5 sites (visitor)	1/site or cabin + 1/10 sites (visitor)	1/site + visitor - 1/10 long term sites, 1/20 short term, 1/40 camp sites	1/site + 1/5 sites (visitor)	1/site + 1/10 caravans (visitor) + 1/manager + 1/2 employees	1.1/site + 1/10sites (visitor with every tenth car washing)	1/site + 1/10 sites (visitor)	11/10 sites + 1/10 sites (visitor)		1/site + 1/10 sites (visitor)	1/site +1/4 (visitor)	1/site +1/10 long term sites (visitor) + 1/20 short term sites (visitor)		1/site	1/site + 1/10 sites (visitor)	
	eg. 50 sites	60	55	60	60	57	60	55	60		55	63	55		50	58	2 spaces extra (+3%)
	Aged/Disabled Dwelling	1 covered/unit + 0.5/unit(visitor)		0.5/brm, Dept Housing 1/5 dwellings	1/dwelling + 1/4 units (visitor)	1/unit(covered) + 1/4 units	1.2/dwelling +0.5/unit + emergency vehicle area	1/self contained dwelling + 1/10 (visitor)	1/3 dwelling	1/home or self contained unit + 1/4 units (visitor)	<55sqm size, 0.5/unit + 56-85sqm size, 0.85/unit + >85sqm, 1/unit + 1/2 employees + ambulance space	1/self contained unit (covered) + 50% total residential req (visitor)	SEPP 5 Provisions	1.25/unit	11/15 units	1/unit + 1/4 units (visitor)	
	10 units	15		2	13	13	17 + emergency	11	4	13		13		13	11	13	2 spaces extra (+13%)
	Aged/Disabled Care Facility			1/10 beds + 0.5/employee		1/4 unit + 1/6 nursing beds + 1/unit(covered)	1.2/dwelling +0.5/unit+1/4 home beds + emergency vehicle area	1/self contained dwelling + 1/10 (visitor) + 1/2 hostel units + 1/4 nursing home beds & 50% of all spaces avail for visitor parking	1/6 nursing home beds/1/4 hostel bed units + 1/self-contained unit + visitor parking at rate of 50% parking	1/home or self contained unit + 1.5/4 hostel beds + 1/4 units (visitor)	<55sqm size, 0.5/unit + 56-85sqm size, 0.85/unit + >85sqm, 1/unit + 1/2 employees + ambulance space	1/6 beds + 1/4 hostel units + 1/self contained unit (covered) + 50% total residential req (visitor)	SEPP 5 Provisions		1/10 beds + 1/2 beds + 1/ambulance	1/6 nursing beds + 1 self contained unit + 1/5 units (visitor)	
	eg. 30 rooms/beds + 10 staff			6		13	10	11	12	19	20	12			19	15	
	Display Home			1 (employee) + 3 (visitor)	4 (of which 2 must be permanent)	4 (including one covered space)	2/home	As determined by Council	3/50sqm GFA							4 (of which two must be permanent)	
	Dual Occupancy Dwelling		1/unit	1/unit (<125sqm GFA), 2/dwelling (>125sqm GFA)	2/dwelling (may be in tandem)		2 (which may be tandem, one of which must be covered)	2/dwelling (one to be covered) + 1/2 (visitor)		2 (covered) + 2 additional spaces	<125sqm 1/dwelling or >125sqm 2/dwelling		1 (<100sqm GFA) or 2 (>100sqm GFA)	1.25 dwelling	2/dwelling	2/dwelling of which one must be covered	
	Dwelling		1	1 + provision for vehicle to park in driveway	2/dwelling (may be in tandem)		2/dwelling (may be in tandem, one must be covered)	2 (one of which must be covered)			2/dwelling (1 undercover)	2/dwelling (1 covered)	1 (<100sqm GFA) or 2 (>100sqm GFA)		2/dwelling	2/dwelling of which one must be covered	
	Estate Sales Office	1/45sqm GFA or 1/2 employees						5	3/50sqm GFA							3/50sqm GFA	
	Home Occupation							2 for occupation + spaces required for dwelling		2		2 in addition to requirements for dwelling				2 + dwelling requirements	

Land Use Parking Rates from Other Local Governments Comparison

Land Use	Sub Group	Rockhampton would be assesed as	Hervey Bay City Council	Tweed Shire Council	Cairns City Council	Townsville City Council	Toowoomba City Council	Gold Coast City Countil	Brisbane City Council	Bundaberg City Council	Lismore City Council	Mackay City Council	Coffs Harbour City Council	Livingstone Shire Council	Queenslad Transport TAG	Average Rate	Rocky Difference in Parking Required
	Integrated Housing	1/unit (covered) +0.5/unit (visitor)		1/dwelling							1/1 brm unit+ 1.5/2 brm unit + 2/3 brm unit + 1/5 units (visitor)	1.5 spaces/unit or 2/unit if accessed from road less than 7.5m wide or cul-de-sac (1/unit covered)	1 (<100sqm GFA) or 2 (>100sqm GFA)			1/1brm unit, 2/2 & 3 brm unit	
	Nurse Hostel	1 covered/unit + 0.5/unit(visitor)		0.5/resident + 0.5/staff				1/employee + 1/10 residents		1.5/4 hostel beds + 1/4 units (visitor)			1/10 beds + 1/2 employees + 1 for ambulance	1/22sqm gross residential area	1/10 beds + 1/2 beds + 1/ambulance	1/4 residents + 1/employee	
	Nursing Home	1/3 beds +1/2 employees + 2 ambulance		1/5 bed + 1/5 bed (visitor)		1/10 beds + 1/2 employees					1/10 beds + 1/manager + 1/2 employees	1/6 beds + 1/4 hostel units + 1/self contained unit (covered) + 50% total residential req (visitor)			1/10 beds + 1/2 beds + 1/ambulance	1/8 beds + 1/2 employees	
	Relocatable Home Park	1/site + 1/5 sites (visitor)	1/site + 1/5 sites (visitor)		1/site + 1/5 sites (visitor)			1/home + 1/5 (visitor)				1.25/unit				1/site + 1/5 (visitor)	
Restaurants	Café	1/15sqm GFA						6.7/100sqm GFA			1/25sqm GFA (min 2/shop)		1/6.6sqm GFA or 1/3 seats		15/100sqm GFA or 1/3 seats	1/10sqm GFA	
	eg. 200sqm	14						14			8		31		30	21	
	Fast Food Store (Drive Through)	1/15sqm GFA	1/10sqm GFA + queuing space for 5 cars	12/100sqm GFA or 1/4 seats + queuing for 6 cars + 1/staff	1/10sqm LA + queuing space for 10 vehicles		1/10sqm dining,customer service + 1/30sqm remaining floor area + queuing for a min 10 vehicles	queuing for 10 vehicles + 0.4/seat + 1/100sqm GFA or 10/100sqm GFA + 20/100sqm outdoor seating			12/100sqm GFA + 1/5 seats		1/8.3sqm GFA (no seating) or with seating, 1/2 seats (internal) or 1/3 seats (internal and external) + queuing area for 5-12 cars		1/2 internal seats or (1/3 internal seats + 1/external seat) + 5 + queing for 12 vehicles	1/10sqm GFA + queing for 8 vehicles	
	eg 600sqm GFA + 50 seats + 6 staff	40	60	78	67		47	80			82		73			68	28 spaces less (-43%)
	Fast Food Takeaway	1/15sqm GFA		3.5/100sqm GFA + 0.5/100sqm (staff)	1/10sqm LA	1/10sqm floor area avail to public + 1/50sqm of floor for food prep	1/10sqm dining,customer service + 1/30sqm remaining floor area	0.4/seat + 1/100sqm GFA or 10/100sqm GFA + 20/100sqm outdoor seating		1/15sqm TUA	1/25sqm GFA (min 2/shop)		1/8.3sqm GFA (no seating) or 1/8.3sqm GFA + 1/5 internal and external seating or 1/2 seats (internal)		12/100sqm GFA	1/12sqm GFA	
	eg. 150sqm	10		7	15	15	12	10		10	6		19		18	13	3 spaces less (-23%)
	Food Services	1/15sqm GFA	1/15sqm GFA		1/90sqm lettable area (Delivery business)					1/15sqm TUA						1/15sqm TUA	
	Tavern	1/15sqm GFA		1/3.5sqm licensed area +1/10sqm bulk liquor sales + reservoir of 12 for bottleshop + 1/res unit + 0.5/staff	1/10sqm bar + 1/50sqm bulk liquor sales + queuing for 12 vehicles if drivethru bottleshop	1/2sqm bar floor area + 1/5sqm lounge/beer garden		10/100sqmGFA lounge,beer garden,bar + 10/100sqm GFA of retail floor area for bulk liquor sales + reservoir of 12 spaces for drive thru						1/3sqm (bar area) +1/5sqm (lounge/dining) + 1/3 employees		1/6 sqm (bar, lounge, dining) + 1/10 bulk liquor sales + queing for 12 vehicles in bottle shop drive through	
	eg. 20sqm (bar) + 500sqm (dining/lounge)	35		154	52	110		52						110		96	61 spaces less (-63%)
Transport	Bus depot	1/employee plus sufficient to accommodate all vehicles and turnaround space		1/driver + 1/2 on site employees	Determined by Council			as determined by Council			1/20sqm (public area) + 1/2 employees + 3/100sqm (taxi bays)	1/10sqm (waiting area)			2/100sqm GFA (<3000sqm) or 2 + 1/100sqm GFA (>3000sqm)	1/20sqm (public area) + 1/2 employees	
	Train Station	1/employee plus sufficient to accommodate all vehicles and turnaround space		50/platform (commuter) or 20/platform long distance + 1/staff				as determined by Council			1/20sqm (public area) + 1/2 employees + 3/100sqm (taxi bays)	1/10sqm (waiting area)			2/100sqm GFA (<3000sqm) or 2 + 1/100sqm GFA (>3000sqm)	1/15sqm (waiting area) + 1/2 employees	

Appendix H

Summary of Land-Use Parking Survey Results

Carparking Survey Results

Job No: 4398
Date Printed: 9-Dec-03

Reference Number	Land Use Type	City	Name	Size (1)	Size (2)	Size used	Number of available spaces	Survey Time	Peak No. of cars parked	Peak parking demand rate
1-1	accommodation building	Townsville CC	The Grande Apartment (Quest)	4,101 m sq (GFA)	72 Units	72 Units		weekday 4 - 7pm	Manager requested the property not to be surveyed	Manager requested the property not to be surveyed
1-2		Rockhampton CC	City Ville	6 double key units		6 units	16	weekday 4 - 7pm	3	0.5 /unit
1-3		Rockhampton CC	Cosmopolitan	37 units		37 units	35	weekday 4 - 7pm	18	0.5/unit
1-4	multi unit development	Townsville CC	(Multiple Dwelling)	4 units		4 units	4	weekday 4 - 7pm	2	0.5/unit
1-5	multi unit development - CBD	Townsville CC	Metro Quays	32,719.97 m sq (GFA)	92 units	92 units	348	weekday 4 - 7pm	153	1.67/unit
2-1	hospital	Townsville CC	Mater Misericordiae Hospital	161 Beds (visiting hours vary depending on ward but are between 10am and 8pm)	18,621 m sq (GFA)	161 beds	435	weekday 10 - 2 pm	242	1.5/bed
2-2		Rockhampton CC	Mater Hospital	140 beds (visiting hours - 10am-1:30pm, 3:30pm - 8:00pm)		140 beds	280	weekday 10 - 2 pm	246	1.75/bed
3-1	industry	Mackay CC	Downie Cranes	684 m sq		684 m sq	9 in carpark, 10 off street	weekday 8 - 10am	8 in carpark, 10 in offstreet	2.6/100 m sq (GFA)
3-2		Mackay CC	Jarvie Engineering	603 m sq		603 m sq	7	weekday 8 - 10am	2	.3/100 m sq (GFA)
3-3		Mackay CC	Johnson Screens	1002 m sq		1002 m sq	4	weekday 8 - 10am	3	.3/100 m sq (GFA)
3-4		Mackay CC	2 Central Park Drive	1040 m sq		1040 m sq	6	weekday 8 - 10am	5	.5/100 m sq (GFA)
3-5		Mackay CC	9 Central Park Drive	882 m sq		882 m sq	4	weekday 8 - 10am	1	.1/100 m sq (GFA)
3-6		Townsville CC	Vinidex Tubemakers Pty Ltd	1454 m sq		1454 m sq	7	weekday 8 - 10am	8	.5/100 m sq (GFA)
3-7		Rockhampton CC	Hastings Deering	5044 m sq (GFA)	unable to survey	5044 m sq (GFA)	unable to survey	weekday 8 - 10am	unable to survey	unable to survey
4-1	restaurant	Townsville CC	Taiping Chinese Restaurant	183 m sq		183 m sq	12	Friday 5 - 8pm	4	2.2/100 m sq (GFA)
4-2		Rockhampton CC	Pacino's	333 m sq (GFA)		333 m sq (GFA)	Unable to survey	Friday 5 - 8pm	Unable to survey	Unable to survey
4-3		Rockhampton CC	Thai Taste Restaurant	516 m sq (GFA)		516 m sq (GFA)	21	Friday 5 - 8pm	20	3.9/100 m sq (GFA)
4-4	restaurant attached to motel	Mackay CC	Mackay Resort Motel	1813 m sq (complex area)		1813 m sq	44	Friday 5 - 8pm	22	1.2/100 m sq (GFA)
4-5		Mackay CC	Reef Resort	3143 m sq (GFA) (complex area)		3143 m sq (GFA)	37	Friday 5 - 8pm	14	.4/100 m sq (GFA)
4-6		Rockhampton CC	Malcolm's Restaurant	436 m sq (GFA)		436 m sq (GFA)	25	Friday 5 - 8pm	1	.2/100 m sq (GFA)
5-1	hostel/backpackers	Mackay CC	Paradise Lodge	3204 ft sq & Laundry 240 ft sq	12 Units	12 Units	9	weekday 4 - 7pm	3	0.25/unit
5-2		Townsville CC	Aboriginal Hostels Ltd	787 m sq	24 units	24 units	4	weekday 4 - 7pm	6	0.25/unit
6-1	bottleshop	Townsville CC	Federal Bottleshop	1101m sq (GFA)	1869 m sq (TLA)	1101m sq (GFA)	13	Friday 5 - 8pm	13	1.2/100 m sq (GFA)
6-2		Townsville CC	Federal Bottleshop	1101m sq (GFA)	1869 m sq (TLA)	1101m sq (GFA)	13	Saturday 11 - 2pm	6	.5/100 m sq (GFA)
7-1	boat/car repair	Townsville CC	Nu Wave Marine	173 m sq (GFA)	1012 m sq (site area)	173 m sq (GFA)	4	Saturday 10 - 1pm	3	0.3/100 m sq (Site Area)
7-2		Townsville CC	Allcar Repairs	680 m sq (GFA)	1083 m sq (site area)	680 m sq (GFA)		Saturday 10 - 1pm	Unable to survey (location change, not open on Saturday)	Unable to survey (location change, not open on Saturday)
7-3		Rockhampton CC	Lawrence's	70 m sq (GFA)	22650 m SQ (site area)	70 m sq (GFA)	74	Saturday 10 - 1pm	40	57.0/100 m sq (GFA)
8-1	cinema	Mackay CC	Greenfield Screens	2685 m sq	1076 seats (6 cinemas)	1076 seats	214	Tuesday 6 - 10pm	161	0.15/ seat or 6/100 m sq (GFA)
8-2		Mackay CC	Greenfield Screens	2685 m sq	1076 seats (6 cinemas)	1076 seats	214	Saturday 1 - 5pm	144	0.13/ seat or 4.25/100 m sq (GFA)
8-3		Townsville CC	Warrina Cineplex	660 m sq (GFA)	714 seats	714 seats	69	Tuesday 6 - 10pm	35	0.05/seat or 5.3/100 m sq (GFA)
8-4		Townsville CC	Warrina Cineplex	660 m sq (GFA)	714 seats	714 seats	69	Saturday 1 - 5pm	45	0.06/seat or 6.8/100 m sq (GFA)
8-5		Rockhampton CC	Birch Carroll & Coyle	990 seats		990 seats	260	Tuesday 6 - 10pm	229	0.2/seat
8-6		Rockhampton CC	Birch Carroll & Coyle	990 seats		990 seats	260	Saturday 1 - 5pm	254	0.3/seat

Carparking Survey Results

Reference Number	Land Use Type	City	Name	Size (1)	Size (2)	Size used	Number of available spaces	Survey Time	Peak No. of cars parked	Peak parking demand rate
9-1	outdoor sports ground	Rockhampton CC	Jardine Park	150 seats		150 seats	37	Saturday 10 - 1pm	24	0.16/seat
10-1	fast food	Mackay CC	McDonalds	668 m sq		668 m sq	59	Thursday 5 - 8pm	35	5.2/100 m sq (GFA)
10-2		Mackay CC	McDonalds	668 m sq		668 m sq	59	Saturday 11 - 2pm	49	7.3/100 m sq (GFA)
10-3		Mackay CC	McDonalds	344 m sq		344 m sq	28	Thursday 5 - 8pm	13	3.8/100 m sq (GFA)
10-4		Mackay CC	McDonalds	344 m sq		344 m sq	28	Saturday 11 - 2pm	24	7.0/100 m sq (GFA)
10-5		Rockhampton CC	McDonalds	415 m sq (GFA)		415 m sq (GFA)	59	Thursday 5 - 8pm	30	7.2/100 m sq (GFA)
10-6		Rockhampton CC	McDonalds	415 m sq (GFA)		415 m sq (GFA)	59	Saturday 11 - 2pm	45	10.8/100 m sq (GFA)
11-1	commercial	Rockhampton CC	Rockhampton Post Office	560 m sq (GFA)		560 m sq (GFA)	10	weekday 10 - 1pm	9	1.6/100 m sq (GFA)
11-2		Rockhampton CC	Westpac Bank	756 m sq (GFA)		756 m sq (GFA)	14	weekday 10 - 1pm	8	1.1/100 m sq (GFA)
12-1	hotel/tavern	Mackay CC	Shamrock Hotel	1900 m sq (GFA)		1900 m sq (GFA)	70	Wednesday 6 - 9pm	43	2.3/100 m sq (GFA)
12-2		Mackay CC	Shamrock Hotel	1900 m sq (GFA)		1900 m sq (GFA)	70	Saturday 11 - 2pm	39	2.0/100 m sq (GFA)
12-3		Mackay CC	Lamberts Beach Tavern	2246 m sq		2246 m sq	67	Tuesday 3 - 6pm	22	1.0/100 m sq (GFA)
12-4		Mackay CC	Lamberts Beach Tavern	2246 m sq		2246 m sq	67	Saturday 5 - 8pm	37	1.6/100 m sq (GFA)
12-5		Mackay CC	Andergrove Tavern	1530 m sq		1530 m sq	186 marked, (92 unmarked) = 278 total	Friday 11 - 2pm	23 marked, (48 unmarked) = 71 total	4.6/100 m sq (GFA)
12-6		Mackay CC	Andergrove Tavern	1530 m sq		1530 m sq	186 marked, (92 unmarked) = 278 total	Friday 5 - 8pm	50 marked, (30 unmarked) = 80 total	5.2/100 m sq (GFA)
12-7		Townsville CC	Vale Hotel	5491 m sq (GFA)	24620 (site area)	5491 m sq (GFA)	97 +	Friday 5 - 8pm	106	1.9/100 m sq (GFA)
12-8		Rockhampton CC	Berserker Tavern	862 m sq (GFA)		862 m sq (GFA)	116	Friday 5 - 8pm	100	11.6/100 m sq (GFA)
12-9		Rockhampton CC	Allenstown Hotel	600 m sq (GFA)		600 m sq (GFA)	50	Friday 5 - 8pm	43	7.2/100 m sq (GFA)
13-1	plant nursery	Townsville CC	Day Dawn Nursery / Garden Lovers Nursery	230 m sq (GFA)	6900 m sq (site area)	230 m sq (GFA)	4	Saturday 10 - 1pm	1	0.4/100 m sq (GFA) or 0.01/100 m sq (site area)
13-2		Rockhampton CC	CQ Garden Centre	36 m sq (GFA)	600 m sq (site area)	36 m sq (GFA)		Saturday 10 - 1pm	4	11.1/100 m sq (GFA) or 0.7/100 m sq (site area)
14-1	shop	Mackay CC	Oak Street local shops at Andergrove	1600 m sq (GFA)		1600 m sq (GFA)	48 total	Thursday 5 - 8pm	17 on right, 7 on left (22 at peak total)	1.4/100 m sq (GFA)
14-2		Mackay CC	Oak Street local shops at Andergrove	1600 m sq (GFA)		1600 m sq (GFA)	48 total	Saturday 10 - 1pm	25 on right, 6 on left (31 at peak total)	1.9/100 m sq (GFA)
14-3		Townsville CC	Mr Mudcrab and Fruit and Vege Shop	311 m sq (GFA)	506 m sq (site area)	311 m sq (GFA)	5	Thursday 5 - 8pm	3	1.0/100 m sq (GFA)
14-4		Townsville CC	Mr Mudcrab and Fruit and Vege Shop	311 m sq (GFA)	506 m sq (site area)	311 m sq (GFA)	5	Saturday 10 - 1pm	4	1.3/100 m sq (GFA)
14-5		Rockhampton CC	Video Ezy	537.58 m sq (GFA)		537.58 m sq (GFA)	30	Thursday 5 - 8pm	13	2.4/100 m sq (GFA)
14-6		Rockhampton CC	Video Ezy	537.58 m sq (GFA)		537.58 m sq (GFA)	30	Saturday 10 - 1pm	20	3.7/100 m sq (GFA)
14-7		Rockhampton CC	Night Owl, Subway, Baskin	314 m sq (GFA)		314 m sq (GFA)	19	Thursday 5 - 8pm	11	3.5/100 m sq (GFA)
14-8		Rockhampton CC	Night Owl, Subway, Baskin	314 m sq (GFA)		314 m sq (GFA)	19	Saturday 10 - 1pm	18	5.7/100 m sq (GFA)
14-9		Rockhampton CC	Shops	1313 m sq (GFA)		1313 m sq (GFA)	115	Thursday 5 - 8pm	44	3.3/100 m sq (GFA)
14-10		Rockhampton CC	Shops	1313 m sq (GFA)		1313 m sq (GFA)	115	Saturday 10 - 1pm	60	4.6/100 m sq (GFA)
14-11		Rockhampton CC	bottle shop/baker/shop	172 m sq (GFA)		172 m sq (GFA)	54	Friday 5 - 8pm	42	24.4/100 m sq (GFA)
14-12		Rockhampton CC	bottle shop/baker/shop	172 m sq (GFA)		172 m sq (GFA)	54	Saturday 11 - 2pm	43	25.0/100 m sq (GFA)
14-13		Toowoomba CC	Mort Estate Shopping Centre	726m sq (GLA)		726m sq (GLA)	28	Saturday 10 - 1pm	19	2.6/100 m sq (GFA)
14-14		Toowoomba CC	Mackenzie Row	no data provided			10	Saturday 10 - 1pm	9	

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Carparking Survey Results

Job No: 4398
Date Printed: 9-Dec-03

Reference Number	Land Use Type	City	Name	Size (1)	Size (2)	Size used	Number of available spaces	Survey Time	Peak No. of cars parked	Peak parking demand rate
15-1	medical centre	Mackay CC	Day Surgery	905 m sq		905 m sq	20	weekday 10 - 1pm	5	.6/100 m sq (GFA)
15-2		Mackay CC	Grays Chiro and Pathology	198 m sq (GFA)		198 m sq (GFA)	10	weekday 10 - 1pm	7	3.5/100 m sq (GFA)
15-3		Townsville CC	Northside Family Physicians	533 m sq (GFA)	1471 m sq (site area)	533 m sq (GFA)	22	weekday 10 - 1pm	22	4.1/100 m sq (GFA)
15-4		Rockhampton CC	Imbina Medical Centre	397 m sq (GFA)		397 m sq (GFA)	14	weekday 10 - 1pm	8	2.0/100 m sq (GFA)
15-5		Toowoomba CC	Baker Medical Complex	no data provided			6	weekday 10 - 1pm	5	
15-6		Toowoomba CC	Bridge Medical Practice	122 m sq (GFA)	2 Practitioners	122 m sq (GFA)	8	weekday 10 - 1pm	8	6.6/100 m sq (GFA)
15-7		Toowoomba CC	Leichhardt House Medical Clinic	171m sq (GFA)	2 Practitioners	171m sq (GFA)	9	weekday 10 - 1pm	3	1.8/100 m sq (GFA)
15-8		Toowoomba CC	Toowoomba 7 Day Medical Centre	1133 m sq (GFA) & 34m sq (GFA) Pharmacy	5 Practitioners	1167m sq (GFA)	43	weekday 10 - 1pm	43	3.7/100 m sq (GFA)
16-1	vehicle showroom	Townsville CC	Parry Nissan	1259 m sq (GFA)	3036 m sq (site area)	3036 m sq (site area)	34	Saturday 10 - 1pm	34	1.1/100 m sq (site area)
16-2		Rockhampton CC	DC Motors Nissan	225 m sq (GFA)	1411 m sq (site area)	1411 m sq (site area)	4	Saturday 10 - 1pm	4	0.3/100 m sq (site area)
16-3		Rockhampton CC	DC Motors Chrysler	225 m sq (GFA)	1411 m sq (site area)	1411 m sq (site area)	16	Saturday 10 - 1pm	11	0.8/100 m sq (site area)
17-1	light industry	Mackay CC	Heinrich Court Business	4020 m sq (GFA)		4020 m sq (GFA)	10 marked, (9 unmarked) = 19 total	weekday 8 - 10am	9 marked, (7 unmarked) = 16 total	.4/100 m sq (GFA)
17-2		Mackay CC	Fire Systems North QLD	866 m sq		866 m sq	10	weekday 8 - 10am	4	.5/100 m sq (GFA)
17-3		Mackay CC	Century Batteries and Coll Plumbing	527 m sq		527 m sq	4	weekday 8 - 10am	3	.6/100 m sq (GFA)
17-4		Mackay CC	McGuires Air Conditioning	498 m sq		498 m sq	4	weekday 8 - 10am	1	.2/100 m sq (GFA)
17-5		Mackay CC	Consolidated Plastics and Epoxy	470 m sq (GFA)		470 m sq (GFA)	8	weekday 8 - 10am	4	.9/100 m sq (GFA)
17-6		Mackay CC	Jayhire	180 m sq (GFA)	660 m sq (site area)	180 m sq (GFA)	5	weekday 8 - 10am	0	.0/100 m sq (GFA)
17-7		Mackay CC	Carige Cabinetmakers	550 m sq (GFA)		550 m sq (GFA)	3	weekday 8 - 10am	1	.2/100 m sq (GFA)
17-8		Townsville CC	Beehive Vinyl Products Pty Ltd	1590 m sq (GFA)	2466 m sq (site area)	1590 m sq (GFA)		weekday 8 - 10am	12	.8/100 m sq (GFA)
17-9		Rockhampton CC	Grower's Own Ready Fresh	912 m sq (GFA)		912 m sq (GFA)	15	weekday 8 - 10am	8	.9/100 m sq (GFA)
17-10		Rockhampton CC	Filter Resources Qld.	468 m sq (GFA)		468 m sq (GFA)	8	weekday 8 - 10am	5	1.1/100 m sq (GFA)
17-11		Rockhampton CC	Followmount Transport	1270 m sq (GFA)		1270 m sq (GFA)	20	weekday 8 - 10am	16	1.3/100 m sq (GFA)
18-1	function centre/hall	Rockhampton CC	Heritage Village	980 m sq (GFA)		980 m sq (GFA)	103	Saturday 5 - 8pm	43	4.4/100 m sq (GFA)
19-1	aged care	Mackay CC	Westminster House	23 Units		23 Units	14	weekday 2 - 6pm	9	0.4/unit
19-2		Mackay CC	Retirement Village - Carlyle Gardens	59 units & community centre 1061 m sq		59 units	12	weekday 2 - 6pm	1	0.02/unit
19-3		Mackay CC	Retirement Village - Eaglemount Heights'	90 units & community centre 4313 m sq		90 units	6	weekday 2 - 6pm	2	0.02/unit
19-4		Townsville CC	St James Retirmement Village	10009.16 m sq (GFA)	142 units	142 units	120	weekday 2 - 6pm	39	0.27/unit
19-5		Rockhampton CC	Village Life Rockhampton	53 units		53 units	22	weekday 2 - 6pm	10	0.19/unit

Carparking Survey Results

Job No: 4398
Date Printed: 9-Dec-03

Reference Number	Land Use Type	City	Name	Size (1)	Size (2)	Size used	Number of available spaces	Survey Time	Peak No. of cars parked	Peak parking demand rate
20-1	retail showroom	Mackay CC	Bunnings Warehouse Greenfields	9400 m sq		9400 m sq	217	weekday 10 - 1pm	106	1.1/100 m sq (GFA)
20-2		Mackay CC	Bunnings Warehouse Greenfields	9400 m sq		9400 m sq	217	Saturday 10 - 1pm	168	1.8/100 m sq (GFA)
20-3		Mackay CC	Spotlight - Greenfields	2581 m sq		2581 m sq	135	weekday 10 - 1pm	54	2.1/100 m sq (GFA)
20-4		Mackay CC	Spotlight - Greenfields	2581 m sq		2581 m sq	135	Saturday 10 - 1pm	79	3.1/100 m sq (GFA)
20-5		Mackay CC	Good Guys - Northpoint Retail Building 1	2910 m sq		2910 m sq	69	weekday 10 - 1pm	25	.9/100 m sq (GFA)
20-6		Mackay CC	Good Guys - Northpoint Retail Building 1	2910 m sq		2910 m sq	69	Saturday 10 - 1pm	34	1.2/100 m sq (GFA)
20-7		Townsville CC	Super Amart: Furniture and Bedding Superstore	4750 m sq (GFA)	8013 m sq (site area)	4750 m sq (GFA)	59	Saturday 10 - 1pm	39	.8/100 m sq (GFA)
20-8		Rockhampton CC	Harvey Norman	2923 m sq (GFA)		2923 m sq (GFA)	60	Saturday 10 - 1pm	47	1.6/100 m sq (GFA)
20-9		Rockhampton CC	A-Mart All Sports	900 m sq		900 m sq	25	Saturday 10 - 1pm	25	2.7/100 m sq (GFA)
20-10		Toowoomba CC	Bernoth Centre	2342m sq (GFA)		2342m sq (GFA)	84	Saturday 10 - 1pm	67	2.9/100 m sq (GFA)
20-11		Toowoomba CC	The Good Guys	3020m sq (GFA)		3020m sq (GFA)	56	Saturday 10 - 1pm	53	1.8/100 m sq (GFA)
20-12		Toowoomba CC	Bernoth Electrical	no data provided			31	Saturday 10 - 1pm	27	
21-1	shopping centre	Mackay CC	Caneland Shopping Centre (Regional)	35146 m sq (GLA)		35146 m sq (GLA)	2176	Thursday 5 - 8pm	951	2.7/100 m sq (GLA)
21-2		Mackay CC	Caneland Shopping Centre (Regional)	35146 m sq (GLA)		35146 m sq (GLA)	2176	Saturday 10 - 1pm	1678	4.8/100 m sq (GLA)
21-3		Mackay CC	Mt Pleasant Shopping Centre (Sub Regional)	22500 m sq (GLA)		22500 m sq (GLA)	1355	Thursday 5 - 8pm	575	2.6/100 m sq (GLA)
21-4		Mackay CC	Mt Pleasant Shopping Centre (Sub Regional)	22500 m sq (GLA)		22500 m sq (GLA)	1355	Saturday 10 - 1pm	1026	4.6/100 m sq (GLA)
21-5		Rockhampton CC	Rockhampton Shopping Fair	38280 m sq (GLA)	includes 3390sqm cinema	38280 m sq (GLA)	1947	Thursday 5 - 8pm	1015	2.7/100 m sq (GLA)
21-6		Rockhampton CC	Rockhampton Shopping Fair	38280 m sq (GLA)	includes 3390sqm cinema	38280 m sq (GLA)	1947	Saturday 10 - 1pm	1558	4.1/100 m sq (GLA)
21-7		Rockhampton CC	Rockhampton Shopping Fair	46130 m sq (GFA)	includes 3390sqm cinema	46130 m sq (GFA)	1947	Thursday 5 - 8pm	1015	2.2/100 m sq (GFA)
21-8		Rockhampton CC	Rockhampton Shopping Fair	46130 m sq (GFA)	includes 3390sqm cinema	46130 m sq (GFA)	1947	Saturday 10 - 1pm	1558	3.4/100 m sq (GFA)
22-1	motel	Mackay CC	Mackay Resort Motel	1813 m sq	40 rooms	40 rooms	44	weekday 7 - 11am	22	0.6/room or 1.2/100 m sq (GFA)
22-2		Mackay CC	Mackay Resort Motel	1813 m sq	40 rooms	40 rooms	44	Saturday 4 - 7pm	20	0.5/room or 1.1/100 m sq (GFA)
22-3		Mackay CC	Reef Resort	3143 m sq (GFA)	34 units	34 units	37	weekday 7 - 11am	14	0.4/units or 0.4/100 m sq (GFA)
22-4		Mackay CC	Reef Resort	3143 m sq (GFA)	34 units	34 units	37	Saturday 4 - 7pm	16	0.5/unit or 0.5/100 m sq (GFA)
22-5		Mackay CC	Windmill Hotel	3290 m sq	42 units	42 units	60	weekday 7 - 11am	18	0.4/unit or 0.5/100 m sq (GFA)
22-6		Mackay CC	Windmill Hotel	3290 m sq	42 units	42 units	60	Saturday 4 - 7pm	22	0.5/unit or 0.7/100 m sq (GFA)
23-1	Child Care Centre	Toowoomba CC	Cherubs Child Care Centre	684m sq (GFA)		684m sq (GFA)	12	weekday 7 - 10am	7	1.0/100 m sq (GFA)

Appendix I

Comparison of Parking Contribution Rates

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Area	Average Contribution	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10
Rockhampton		Core Area	Balance Area								
	$3,000	$4,000	$2,000								
Bundaberg City Council		Precinct 5a - Commercial Central Activity Area	Precinct 5b - Commercial Riverfront & 5c Commercial City Frame	Precinct 3c - Commercial	Other						
	$6,904	$11,500	$6,690	$5,850	$3,575						
Coffs Harbour City Council		All									
	$1,424	$1,424									
Gold Coast City Council		Broadbeach	Bundall, Coolangatta, Burleigh Heads	Chevron Island	Kirra, Miami, Nobbys Beach, Paradise Point, Tugun	Mermaid Beach	Mudgeeraba & all other areas	Nerang	Palm Beach	Southport	Surfers Paradise
	$13,059	$24,775	$12,940	$21,380	$10,025	$10,800	$6,640	$8,670	$11,095	$15,755	$27,295
Lismore City Council		Dawson/ Magellan	Conway Street	Victoria Street	Glasgow Lane						
	$8,384	$7,990	$6,200	$6,200	$13,130						
Livingstone Shire Council		Yeppoon	Emu Park	Rest of Shire							
	$2,667	$4,500	$2,500	$1,000							
Mackay City Council		CBD	Four Ways								
	$7,750	$12,500	$3,000								
Toowoomba City Council		All Areas									
	$8,000	$8,000									
Townsville City Council		Central Traffic Area	Outside Central Traffic Area								
	$7,500	$10,000	$5,000								
Tweed Heads Shire Council		Tweed Heads CBD	Murwillumbah	Kingscliff	Bogangar/Cabarita Beach	Pottsville	Fingal Head				
	$10,062	$15,460	$9,190	$11,500	$10,840	$10,015	$3,366				
Warwick Shire Council		City Centre, City East, and City Frame									
	$2,000	$2,000									

Appendix J

Planning Scheme Provisions

ROCKHAMPTON CITY COUNCIL	PLANNING SCHEME POLICIES

TITLE: OFF-STREET PARKING CONTRIBUTION POLICY NO. X

ADOPTED:

AMENDED:

Intent

The intent of this Policy is to identify areas where Council may accept a contribution for any shortfall in a developments car parking provision and stipulate the amount of such contribution.

Scope

This Policy applies to all assessable development within the Planning Scheme areas defined as either the Central Business District (CBD), a District Centre or a Local/Neighbourhood Centre.

Provisions

Where the Council agrees to accept a contribution in lieu of the provision of car parking spaces, the contribution in respect of each such parking space foregone shall be the amounts as follows for the respective described areas.

Area	Contribution per Space
CBD Core Area	$12,500
CBD Frame Area	$ 4,000
District or Local/Neighbourhood Centre	$ 2,500

These amounts take into account the relative significance and cost of construction of parking required to be provided in the respective areas. However, such contributions may also be expended towards other works including (where appropriate): streetscape works and/or pedestrian facilities.

Any contribution required to be paid in pursuance of this Policy, shall be lodged with the Council prior to commencement of the use on the site and as determined by the applicable GFA (Gross Floor Area) of the building proposed.

Notwithstanding this Policy, it shall normally be a requirement that for sites within the described areas the majority of car parking spaces required shall be provided on-site. Council will not normally accept a contribution in lieu of providing on-site car parking spaces for sites outside the nominated areas unless there are exceptional circumstances to warrant such consideration.

PARKING AND ACCESS CODE

1 Purpose of the Code

The purpose of this code is to plan and manage development that involves access, parking and manoeuvrability to ensure development:

- Allows vehicles to access and move within a site in a safe and efficient manner;
- Encourages and facilitates all relevant transport modes, including walking, cycling and public transport;
- Provides car parking that is sufficient to meet the demand likely to be generated by the development;
- Achieves a high standard of urban design and integration with the function and appearance of the development;
- Provides car parking that does not impact on the efficient and safe functioning of the transport network; and
- Has a layout and design that is functional.

2 Application of the Code

This code applies to assessable development involving the access, parking or manoeuvring of motor vehicles on a site, as well as the requirements for pedestrians and cyclists.

3 Definitions

The road system or network refers to the roads and streets that comprise the vehicle movement system in the City. The function of roads in that road network is defined in the Road Hierarchy.

4 Explanation

This code sets out the performance criteria that must be met by all development to ensure safe and convenient access arrangements. This code adopts and relies on Council's the Australian Standards referred to in this code.

5 Performance Criteria and Acceptable Solutions

Performance Criteria		Acceptable Solutions	
Public Transport			
P1	Development is designed to encourage customers and employees to walk, cycle or use public transport to and from the development instead of using a car.	**A1.1**	The proposal provides convenient and safe pedestrian and cyclist facilities: ▪ For access to and from the site; and ▪ For safe movement within the site. **AND** The proposal provides convenient and safe access from existing and proposed public transport facilities and public areas.
P2	Development is located on roads appropriate to the type and size of the development and / or must be located appropriately in relation to public transport facilities to encourage their use.	**A2.1**	Commercial uses and community facilities are located within 400 metres of a bus stop.
Access			
P3	Access driveways are located to avoid conflicts and designed to operate efficiently and safely, taking into account: ▪ The size of the parking area; ▪ The volume, frequency and type of vehicle traffic; ▪ Service vehicles; ▪ The type of use and the implications on parking and circulation e.g. long-term or short-term car parking; ▪ Frontage road function and conditions; and ▪ The capacity and function of the adjoining street system.	**A3.1**	Access driveways are located and designed, except for Houses, in accordance with the provisions of Australian Standards AS 2890.1-1986 and AS2890.2-1989. **AND** Service Vehicles access via laneways where available. **AND** Sites with more than one road frontage (excluding laneways) has access from the lower order road only. **AND** Access driveways are not located within: ▪ 25 metres of a signalised road intersection; ▪ 20 metres of an unsignalised road intersection in an Industrial or Commercial Area or 10 metres otherwise; ▪ 2 metres of any adjoining property access, including shared property accesses, at the property line; ▪ 1 metre of any street signage , power poles, street lights, manholes, stormwater gully pits or other Council asset; and ▪ the turning area at the end of a Cul-de-sac. **AND** Access driveways do not: ▪ require the modification, relocation or removal of any infrastructure (eg street trees, fire hydrants, water meters); ▪ front a traffic island, speed control device, car parking bay, bus stop or other infrastructure within the roadway; ▪ require any change to footpath / verge profiles; ▪ access an informed or unkerbed road; and ▪ cause undue impact on pedestrian flows.

Performance Criteria		Acceptable Solutions	
P4	Access driveways are located to minimise impacts on amenity of premises in the vicinity.	**A4.1**	Access Driveways do not generate non residential traffic in residential streets.
P5	Development does not impact on the safety, operation and function of the road system.	**A5.1**	Vehicle manoeuvring areas provided, except for Houses, are in accordance with the design guidelines in AS 2890.2-1989. **AND** All vehicles, except for Houses, must be able to use the site and to enter and exit the site in forward gear. **AND** There is to be no direct access to arterial routes. **AND** Major traffic generators are only accessed from district or suburban roads.
Vehicle Parking			
P6	The layout for car parking must achieve adequate provision for on-site vehicle parking that is clearly defined, safe and easily accessible and which is designed to contain potential adverse impacts within the site.	**A6.1**	Parking bays, manoeuvring areas and driveways, except for Houses, are designed with the dimensions and to the Australian Standards AS 2890.1-1986 and AS 2890.2-1989. **AND** For development for any of the uses listed in Column 1 of the attached Table 1 'Carparking Requirements', on-site car parking complies with column 2 of the Table. Calculations resulting in a fraction are to be rounded up to the next whole number. **AND** The number of car parking spaces required by Table 1 are provided, except where development involves: ▪ an existing building and adequate on-site parking cannot reasonably be provided; or ▪ where a redevelopment proposal is to retain part or all of an historical building identified by Council as being significant or provision of a complimentary façade on an adjoining site; or ▪ where a proponent can prove cross utilisation or differing times of peak demands in multi-use developments (i.e. temporal cross usage); or ▪ a non-residential purpose and satisfactory parking is to be provided on other land within 100 metres of the subject site; or ▪ a non-residential purpose in the Central Business District (CBD) and parking or facilities are better provided on public land for which the applicant pays a contribution in-lieu in accordance with the Off-Street Parking Contribution Policy. **AND** 2 percent of the total car parking spaces required are marked and signed areas for motorcycles, with at least one space provided for any development.

P7	Parking spaces are provided (and therefore) designated exclusively to meet the demands of vehicle occupants with disabilities.	**A7.1**	Parking spaces for vehicle occupants with disabilities are provided at a rate of 1 space per 100 ordinary parking spaces, except for the following uses: **Business:** A minimum of 1 space per 4,500m^2 of GFA (Gross Floor Area) **Bank:** A minimum of 2 spaces **Restaurant/ Club:** A minimum of 1 space per 300m^2 of GFA (Gross Floor Area)
P8	Parking areas are illuminated in a manner that maximises user safety but minimise its impact on adjoining residents.	**A8.1**	Parking areas used at night are illuminated at between 10 and 20 lux.
P9	Car parking must address the potential impacts on adjoining sites in terms of noise, odour, glare and/or runoff.	**A9.1**	Parking areas are built with, except for Houses: ▪ a gradient in accordance with the relevant provisions of Australian Standards AS 2890.1-1986 and AS 2890.2-1989; ▪ covered with a suitable dust free surface and a pavement thickness that has a 20 year lifecycle, as determined by a suitable qualified person; ▪ adequate drainage of stormwater to the kerb and channel; and ▪ adequate screening to any nearby Residential Areas.
P10	Safe and convenient access for service vehicles must be provided.	**A10.1**	Access for service vehicles are located and designed in accordance with the provisions of Australian Standards AS 2890.1-1986 and AS 2890.2-1989.

Table 1: CARPARKING REQUIREMENTS

Use / Activity	Car Park Requirements	Additional Requirements
Rural Use		
Animal Keeping	As determined by Council	▪ A minimum of 5 spaces
Farming	None specified	
Forestry	None specified	
Intensive Animal Husbandry	As determined by Council	▪ A minimum of 5 spaces
Residential Use		
Accommodation Building: (a) apartments or flats (b) hostel/backpackers (c) motel or serviced apartments	(a) 1 covered space per residential unit (b) the greater of 1 space per 2 bedrooms or 1 space per 4 beds (c) 1 covered space per residential unit	▪ Visitor Parking: 0.25 spaces per residential unit ▪ 1 space per 3 employees, plus ▪ Provision for bus parking where containing more than 30 residential units
Aged Care Accommodation	0.5 spaces per residential unit for first 25 units, and 0.25 spaces per residential unit thereafter	▪ Visitor Parking: 1 space per 6 beds
Bed and Breakfast	Spaces required for a House plus 1 space per bedroom approved for Bed and Breakfast	
Caravan / Cabin Park	1 space per caravan site or cabin	▪ Visitor Parking: 1 space per 4 caravan sites or cabins
Caretaker's Residence	1 covered space	
Construction Camp	As determined by Council	
Display Home / Office	Spaces required for a House	
Duplex	2 spaces per residential unit	
Home Based Business	2 spaces in addition to parking required for a House	
Home Occupation	Spaces required for a House	
House	2 spaces, one of which is covered (spaces may be in tandem)	
Multi Unit Dwelling	1 covered space per residential unit	▪ Visitor Parking: 0.5 spaces per residential unit
Small Lot House	2 spaces, one of which is covered (spaces may be in tandem)	
Special Needs Accommodation Building	0.5 spaces per residential unit for first 25 units, and 0.25 spaces per residential unit thereafter	▪ Visitor Parking: 1 space per 6 beds
Commercial Use		
Bottleshop	1 space per $20m^2$ or part thereof of GFA (Gross Floor Area)	▪ Reservoir space for 12 cars where drive-in exists
Car Park	As determined by Council	
Car Wash	As determined by Council	▪ Queuing lane on-site for 3 spaces
Cinema*	1 space per 5 seats	
Club*	1 space per $12.5m^2$ or part thereof of GFA (Gross Floor Area)	
Commercial Premises*	1 space per $30m^2$ or part thereof of GFA (Gross Floor Area)	
Hotel*	1 covered space per residential unit	▪ 1 space per $15m^2$ of non-residential GFA (Gross Floor Area), plus ▪ Queuing for 12 spaces for a drive-thru bottle shop

Use / Activity	Car Park Requirements	Additional Requirements
Market	1 space per $100m^2$ of TUA (Total use Area)	
Nightclub*	1 space per $12.5m^2$ or part thereof of GFA (Gross Floor Area)	
Nursery / Garden Centre	1 space per $200m^2$ or part thereof of TUA (Total use Area)	▪ Minimum of 5 spaces
Professional Office	1 space per $30m^2$ or part thereof of GFA (Gross Floor Area)	
Restaurant*	1 space per $20m^2$ or part thereof of GFA (Gross Floor Area)	
Restricted Premises*	1 space per $20m^2$ or part thereof of GFA (Gross Floor Area)	
Service Station	4 spaces per service bay	▪ Spaces for ancillary uses such as Shop and Restaurant as required under relevant use/activity listed herein
Shop*: (a) Development less than 2,000sq.m GFA (b) Development greater than 10,000sq.m GFA	(a) 1 space per $20m^2$ of GFA (b) 1 space per $20m^2$ or part thereof of GLA (Gross Leasable Area)	
Showroom*	1 space per $40m^2$ or part thereof of GFA (Gross Floor Area)	
Take-away Food Store*	1 space per $12m^2$ or part thereof of GFA (Gross Floor Area)	▪ Queuing for 8 spaces for a drive-thru fast food outlet
Vehicle Showroom	1 space per $100m^2$ of TUA (Total Use Area)	
Veterinary Clinic	1 space per $50m^2$ or part thereof of GFA (Gross Floor Area)	▪ Minimum of 3 spaces
Industry Use		
Boat/Car Repair	1 space per $50m^2$ of TUA (Total Use Area)	
Brothel	As determined by Council	
Bulk Store	1 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	
Extractive Industry	As determined by Council	▪ A minimum of 5 spaces
High Impact Industry	1 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	▪ Sufficient area to accommodate and turn all vehicles
Landscape Supplies	1 space per $400m^2$ of TUA (Total Use Area)	▪ A minimum of 5 spaces
Low Impact Industry	1.5 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	
Medium Impact Industry	1 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	▪ Sufficient area to accommodate and turn all vehicles
Transport Terminal	1 space per $10m^2$ GFA (Gross Floor Area) of waiting area	▪ Sufficient area to accommodate and turn all vehicles on the site
Vehicle Depot	1 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	▪ Sufficient area to accommodate and turn all vehicles on the site
Vehicle Showroom	1 space per $100m^2$ of TUA (Total Use Area)	
Warehouse	1 space per $100m^2$ or part thereof of GFA (Gross Floor Area)	▪ Sufficient area to accommodate and turn all vehicles on the site
Community / Recreation Use		
Cemetery	As determined by Council	
Child Care Centre	1 space per full-time employee plus 1	▪ Queuing lane on-site for 3 vehicles

Use / Activity	Car Park Requirements	Additional Requirements
	space per 5 children	
Crematorium	1 space per $12.5m^2$ or part thereof of GFA (Gross Floor Area)	
Educational Establishment	1 space per full-time employee	▪ 1 space per 10 students of driving age, plus ▪ Provision for set down areas for the loading and unloading of passengers as determined by Council
Emergency Services	As determined by Council	
Function Centre/Hall	1 space per $20m^2$ or part thereof of GFA (Gross Floor Area)	
Health Care: (a) medical centre (b) hospital	 (a) 1 space per $20m^2$ or part thereof of GFA (Gross Floor Area) (b) 2 spaces per bed	 ▪ 2 emergency ambulance spaces
Indoor Sport and Recreation*: (a) court game or bowling (b) other activities	 (a) 4 spaces per court or lane (b) 1 space per $15m^2$ or part thereof of TUA (Total Use Area)	
Outdoor Sport and Recreation: (a) court game or bowling (b) other activities	 (a) 4 spaces per court or lane (b) 50 spaces per outdoor sports field	 ▪ As determined by Council
Park	As determined by Council	
Place of Worship*	1 space per $12m^2$ or part thereof of GFA (Gross Floor Area)	
Miscellaneous Use		
Public Facility	As determined by Council	
Stable	As determined by Council	▪ A minimum of 5 spaces
Telecommunication Facility / Tower	As determined by Council	
Tourist Facility	As determined by Council	
Veterinary Hospital	1 space per $50m^2$ or part thereof of GFA (Gross Floor Area)	
Any other use not specified in this Table	As determined by Council	

* Where:
- located in the Central Business District 'Car Park Requirements' for non-residential GFA (Gross Floor Area) shall be required to be provided at the rate of 1 space per $50m^2$ or part thereof of GFA; or
- located in a District Centre or Local/Neighbourhood Centre (except Glenmore Village Shopping Centre) 'Carpark Requirements' for non-residential GFA (Gross Floor Area) shall be required to be provided at the rate of 1 space per $25m^2$ or part thereof of GFA.