Taktics4
Mundijong District Structure Plan

Activity Centres Background Paper

Shire of Serpentine Jarrahdale
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Contact

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1 INTRODUCTION

Council, at its Special Council meeting on 1 December 2009 resolved to initiate a District Structure Plan for Mundijong Whitby. To enable the completion of a District Structure Plan in accordance with Councils resolution, the Shire engaged Taktics4 to prepare a Retail and Property Economics Background Paper and to provide ongoing input into the District Structure Plan.

Approach

Findings in this background paper reflect:
- analysis of the future market demand for commercial activity in Mundijong
- assessment of the spatial distribution options for commercial activity
- definition of commercial characteristics to promote the efficient commercial and effective planning outcomes for various activity centres
- calculation of employment opportunities and self sufficiency in accordance with State Planning Policy requirements

The project was completed in accordance with the requirements of the agreed proposal and brief which included:

Stage 1: Review and comment on existing documentation
- Review of existing studies and reports
- Review of EBD workshop Outcomes Report.
- Review of the Activity Centre's Strategy

Stage 2: Site visit
- Visit Mundijong/Whitby to familiarise with the DSP area.

Stage 3: Prepare a Background Paper that includes the following:
- Amount and type of floorspace, types of centres and a series of options for the distribution of retail floorspace.
- Employment rates and opportunities (provision, extent, type, location, sources and/or localities other than structure plan area of employment for the future population)
- Land use distribution i.e. Retail, mixed use, commercial, educational institutions, government, civic entertainment, home-based business, business.

Stage 4: Input into District Structure Plan report
- Attend a Structure Plan Framework collaborative session.
- Attend a Community Information Session.
- Attend two Project Control Group Meetings.
- Provide written input into the relevant section/s of the District Structure Plan.
- Responses to employment/retail/commercial issues raised in public/government agency submissions on the DSP

Stage 5: Liaison with other consultants and Shire staff
- Liaison is to occur with other technical consultants as necessary to ensure a coordinated approach.
- Liaison is to occur with the Shire Senior Project planner as necessary to ensure that any modifications or updates to the Report are consistent with the Shire's objectives.

<u>Assumptions</u>

Analysis was formulated on a range of fundamental assumptions including:

- A review of the starting point based on the desired outcomes produced during the EBD design workshop
- Recognition of the preferred/target population base of 30,000 residents within the study area
- That planning for commercial activity should be considered in the context of a range of staged relocation or alternate decisions relating to the future of the freight and passenger alignment through Mundijong, including:
    - Retention of freight and passenger rail on existing alignment through middle of Mundijong
    - Realignment of freight rail adjacent to Tonkin Highway reserve
    - Termination of passenger services to a station north of the study area within or adjacent to existing rail alignment

2 MARKET DEMAND

The size, function and sustainability of retail and commercial activity will be directly related to the size and needs of the ultimate Mundijong community.

Population/Dwellings

Small area data recorded by the 2006 Census revealed Mundijong and Whitby comprised 1,650 persons residing in 550 occupied dwellings. An estimated 10% increase in dwellings developed in the catchment since 2006 suggests a current population of around 1,800 persons in 600 dwellings at an average of 3 persons per dwelling.

As stated in the earlier assumptions, the purpose of this background paper is to identify demand for commercial activity based on an ultimate population base of 30,000. Analysis of demand starts with this ultimate base and works backward to consider staging and timing of activity.

It is reasonable to assume that the average household occupancy size in Mundijong will decrease to WA averages of 2.6 persons as the population climbs toward 30,000 people. Based on existing demographic profiles a population base of 30,000 will be accommodated in around 11,500 private dwellings.

	2006	2010	Ultimate Catchment Development
Dwellings	550	600	11,538
Average household occupancy size	2.9	2.9	2.6
Population	1,650	1,800	30,000

Census (ABS 2006)
EBD Design Workshop (SJ 2009)

Consumer Spending

Serpentine Jarrahdale residents are estimated to spend an average of 2.6% above WA average spending on retail goods. Mundijong residents are thought to spend less than WA average on Personal and Miscellaneous goods and services, similar amounts on grocery and leisure goods and services and above average spending on fashion and household goods.

Spending Retail Categories	Average Weekly Spend		Difference	
	Serpentine Jarrahdale	WA average	$	% from WA average
Misc	$44.60	$47.82	-$3.22	-6.7%
Personal	$87.14	$88.09	-$0.95	-1.1%
Leisure	$123.80	$121.97	$1.83	1.5%
Grocery	$148.85	$144.91	$3.94	2.7%
Fashion	$42.93	$41.29	$1.64	4.0%
Household	$144.32	$132.82	$11.50	8.7%
Total	$591.64	$576.90	$14.74	2.6%

Household Expenditure Survey (ABS 2003-04)
CPI (ABS 2004-2009)
SpendInfo Small Area spending software (NIEIR 2008)

The ultimate Mundijong population is estimated to generate in excess of $316.95M p.a. on retail goods and services. Including nearly $190M p.a. on convenience based goods including food and grocery and personal services and $100M on comparison goods such as household, fashion and leisure goods. The remaining expenditure is spent on large format goods such as furniture, appliances, and floor coverings.

Mundijong is a relatively contained catchment. We expect that Byford residents will also be relatively self contained and share a similar retail offer to Mundijong. It is unlikely that Byford residents will need to or want to shop regularly at Mundijong. We estimate that the Mundijong catchment is capable of retaining up to 90% of convenience based spending and 55% of comparison goods spending.

Retailers in Mundijong should therefore be able to trade to a potential resident spending pool of $225M p.a. including $169M p.a. in convenience and $56M p.a. in comparison spending.

	Aggregate Mundijong Spending	Retention	Ultimate	Spending by Other Sources	Aggregate Available Retail Spending
Convenience Spending	$190M p.a.	90%	$170M p.a.	5%	$179M p.a.
Comparison Spending	$100M p.a.	55%	$55M p.a.	5%	$58M p.a.
Combined Retail Spending	$290M p.a.	77.5%	$225M p.a.	5%	$237M p.a.

Household Expenditure Survey (ABS 2003-04)
CPI (ABS 2004-2009)
SpendInfo Small Area spending software (NIEIR 2008)

The hinterland catchment and visitors will be expected to generate at least 5% of the aggregate resident spending adding a further $12M p.a. to the aggregate expenditure for Mundijong retailers.

<u>Commercially Sustainable Floorspace</u>

The aggregate retail expenditure is capable of sustaining up to 32,000sqm of retail floorspace including:

- A single store for both full line supermarkets at 3,500sqm each (7,000sqm)
- Up to 3 smaller supermarkets at 1,500sqm (4,500sqm)
- A single Discount Department Store operator at 7,000sqm (7,000sqm)

Nearly 60% of the retail floor space (18,500sqm) is allocated to major tenants leaving 13,500sqm to be allocated to specialty shops. The majority of this space will be located in the full line supermarket and DDS based centre(s).

3 DISTRIBUTION OPTIONS

The distribution of commercial activity throughout Mundijong catchment will depend on the:

- Government policy
- Preferred number and configuration of activity
- Accessibility between catchments and activity
- Commercial location and siting requirements of major tenants

Philosophy

The spatial distribution of commercial activity is ideally developed to achieve a sustainable balance that delivers commercial efficiency, spatial equity and effective and achievable planning outcomes. The commercial sustainability of urban activity centres is generally reliant on the vitality of the retail activity. Typically, a vital retail activity is conducive to a healthy range of commercial and community activity.

It is also a commercial reality that the most successful retail centres are underpinned by at least one of the major retailers such as supermarkets and Discount Department Stores. A robust distribution of commercial activity should ideally consider the commercial trading needs and implications of these major tenants.

Precincts/Market segments

The study area comprises four distinct and relatively equal sized quadrants delineated by a range of natural features and physical infrastructure.

It is imperative to the successful performance of commercial activity that residents from each quadrant are able to readily access commercial activity in each of the quadrants. In other words, residents from one quadrant can easily access the commercial activity in each of the other quadrants. This requirement is more important for higher order centres providing a district commercial role.

- The east and west study area is delineated by the north south alignment of the railway alignment and Paterson Street/Soldiers Road.
- The north and south sections of the study area are delineated by the natural waterways flowing east west across the site.

A range of district distributor roads providing direct access across the natural and physical infrastructure barriers through the centre of each quadrant will contribute to the successful performance of all commercial activity nodes.

Existing Commercial Activity

There is limited retail and commercial activity in the study area. The majority of retail activity in Mundijong is located in the existing designated Mundijong Town Centre along the west side of Paterson Street between Whitby and Richardson Streets. Commercial activity within the existing designated Mundijong Town Centre includes:

- IGA delicatessen
- PO
- Service station

- Cafes
- The shire offices are also located further south on Paterson Street.

This offer represents an understandably small retail base that reflects the current small consumer catchment in Mundijong.

<u>Future Distribution Options</u>

The distribution of centres will need to accommodate both full line supermarkets (Coles and Woolworths) and a range of smaller supermarkets (typically associated with IGA distributors). There will also need to be a single centre capable of accommodating a single Discount Department Store.

- A DDS based centre (If ever developed) will require a catchment that incorporates the entire Mundijong District Structure Plan Area. A typical DDS operator trades successfully predominantly from a 3.5km catchment
- Full line supermarket based centres typically require a catchment encompassing a 1.5km radius.
- Smaller supermarket based centres typically require a catchment encompassing a 1 km radius.

It should be noted that if the preferred option includes two centres – each with a full line supermarket – i.e. one with a Coles and one with a Woolworths – they will both generate sales from within the entire Mundijong District Structure Plan.

The following distribution options were assessed as part of this background paper.

<u>Option 1 – Single Central Centre</u>

Involves a single centre centrally located to entire catchment which:

- would incorporate Coles and Woolworths supermarkets
- may ultimately incorporate a DDS
- could be located on or in close proximity to the main north-south road alignment
- could also be located further south (toward Mundijong Town Centre) or further north as this centre would attract a significant proportion of all trips
- would therefore require direct access from all quadrants of the study area

This is the most commercially efficient option. However, the study area is approximately 5km square which means that residents on the outer fringe of the study will have to travel further than most urban residents to access their retail goods and services. It also proved difficult to identify a suitable central site in the catchment given proximity of natural features and physical barriers and land uses which are not conducive to higher density urban development around the centre.

<u>Option 2 – two separate full line supermarket based centres</u>

Involves two centres at either end of the study area where:

- Each centre would incorporate a full line supermarket – Coles in one and Woolworths in the other
- One may ultimately incorporate a DDS while the other would not

- Both would be located in close proximity to the north south road alignment
- The southern option may be incorporated within the Mundijong Town Centre

There is a risk associated with this option. A DDS may not develop in the catchment until very late in the development of the catchment, if at all. Under this scenario there will be two centres with the same role and function. This will effectively create duplication of commercial activity and may lead to confusion over the role and function of both centres by customers, tenants and developers.

The other concern about a full line supermarket based centre in the Mundijong Town Centre. The 4,500sqm size of this centre would require a land holding of 1.5Ha or dimensions of 100m by 150m. It is also doubtful whether the existing rural village theme and amenity desired by the community, is able to be retained with a centre of this size in the Mundijong Town centre.

<u>Option 3 – Smaller Centre Network</u>

Involves the equitable distribution of smaller supermarket based centres serving smaller catchments, where:

- There may be up to seven centres evenly distributed throughout the study area
- Each will contain a supermarket of 1,000sqm – 1,500sqm and 5-10 shops
- They will serve a catchment of 800 metres
- There will be no opportunities for a DDS based centre
- There will be no opportunities for a Coles or Woolworths supermarket

The obvious risk associated with this option includes the continued pressure by the major tenants to access a site in the catchment. If the major tenants are successful in securing access into the catchment other surrounding centres may not develop creating an inequitable distribution of commercial activity in the catchment.

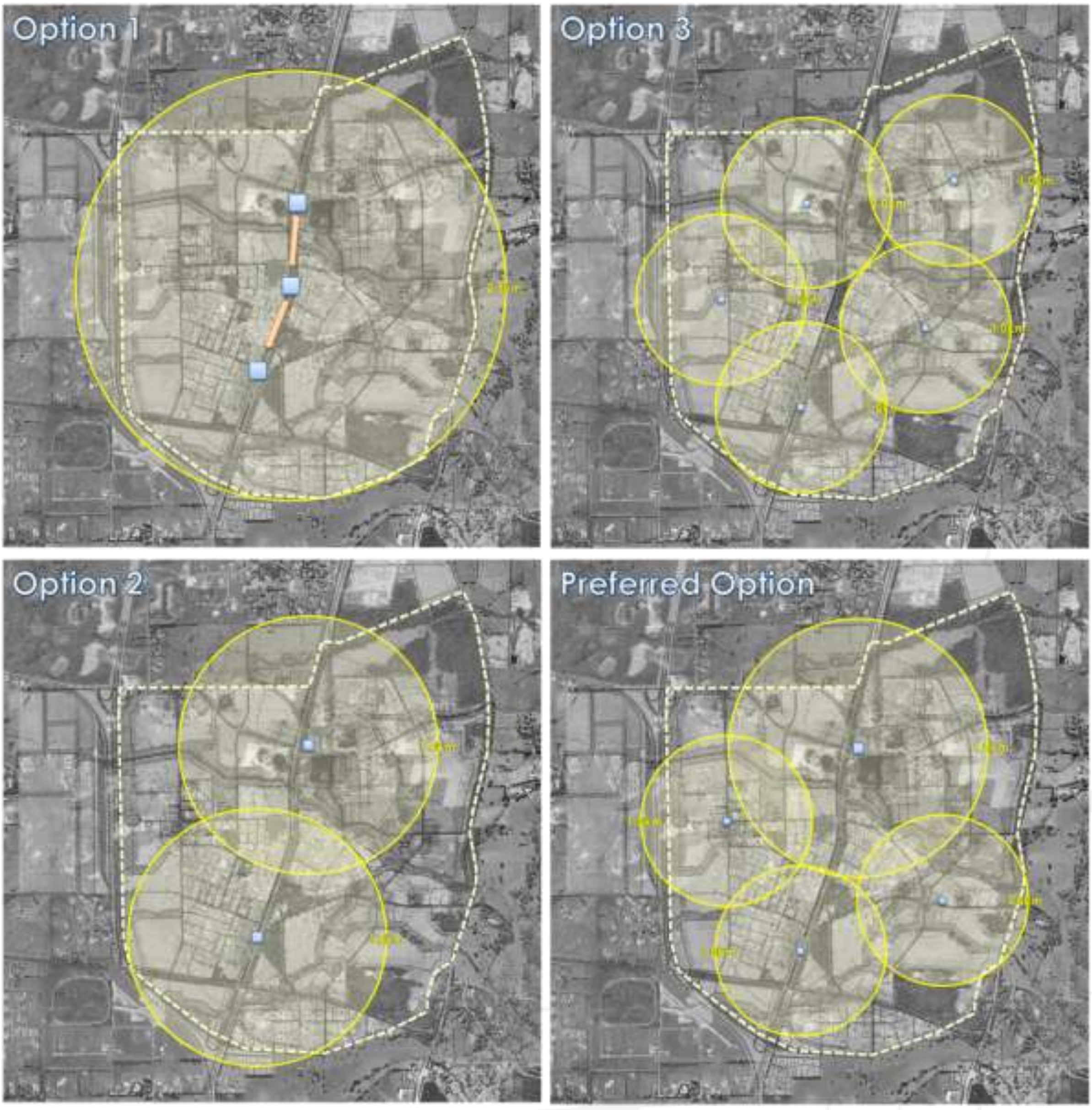
Alternatively, without opportunities for these tenants, customers will still be required to travel to Byford and beyond to access these retail goods and services.

<u>Preferred Distribution Pattern</u>

The preferred distribution option for Mundijong involves a balanced combination of Option 1 and 3.

A single centre capable of comprising two full line supermarkets and a potential DDS located to the north of the catchment will create the opportunities necessary to accommodate the major tenants for Mundijong residents.

The location of the single centre to the north of the study area allows for a reduced number (three) of smaller supermarket based centres to be distributed evenly throughout the east, west and southern catchments – including in the Mundijong Town Centre.


Option 1
Option 3
Option 2
Preferred Option

4 CENTRE CHARACTERISTICS

The centres should be planned with consideration to the following characteristics.

Northern Village Centre

Location	North Eastern Quadrant (western side)
Role/function	District Centre
Catchment	Serving the entire Mundijong catchment
Anchor	Two full line supermarkets up to 3,500sqm each One DDS up to 8,000sqm 7,500sqm (75 shops) of specialty retail
Total size	22,500sqm of retail activity
Land Area	Uniform land area of 6Ha.
Configuration	Hybrid centre incorporating Main street and free standing mall
Commercial	10,000 sqm office space
Community	High school education site TAFE site Community facilities
Access	Direct access to all areas of the Mundijong catchment
Staging	Stage 1 - single supermarket with 15 shops Stage 2 – second supermarket with 25 shops Stage 3 – a DDS with additional 15 shops
Timing	as determined by development and tenant sector
Risks/threats	This centre requires direct at grade access to the western sector of the catchment. Failure to achieve at grade access across the rail alignment and Soldiers Road reduces the ability of this centre to trade successfully.
Alternatives	Without direct at grade access across the rail alignment and Soldiers Road the centre will develop as either a full line or small supermarket based centre. Under this scenario the larger district centre role will best be suited to the Mundijong Village – albeit with the associated risks listed under the distribution options.

Mundijong Village Centre

Location	South Western Quadrant (eastern side)
Role/function	Neighbourhood/Local Centre
Catchment	Predominantly serving a 1km catchment
Anchor	A small supermarket up to 1,500 sqm each 3,000sqm (15-20 shops) of specialty retail
Total size	4,500sqm of retail activity
Land Area	Uniform land area of 1.5Ha.
Configuration	Small single sided main street
Commercial	Nil
Community	Shire Offices
Access	Strong direct east west access to both southern quadrants
Staging	Stage 1 - single supermarket with 15 shops
Timing	as determined by developer and tenant sector
Risks/threats	This centre needs to remain small and focused on the local/neighbourhood role. The risk is that the commercial development will be allowed to continue to expand along Paterson street.

East Village and West Village

Location	West Village – southern section of North West quadrant East Village – northern section of South East quadrant
Role/function	Neighbourhood/Local Centre
Catchment	Predominantly serving a 1km catchment
Anchor	A small supermarket up to 1,500 sqm each 1,000sqm (10-15 shops) of specialty retail
Total size	2,500sqm of retail activity
Land Area	Uniform land area of 0.75Ha.
Configuration	Small single sided main street
Commercial	Nil
Access	Strong and direct north south access to both north south quadrants
Staging	Stage 1 - single supermarket with 15 shops
Timing	as determined by developer and tenant sector
Risks/threats	Nil

5 EMPLOYMENT OPPORTUNITIES

Over 18,000 of the expected 30,000 residents within the Mundijong Structure Plan Area community will be expected to participate in the labourforce.

Dwellings	11,538
Persons/dwelling	2.6
Population	30,000
Resident labourforce (%)	60%
Resident labourforce (persons)	18,000

<u>Employment Opportunities</u>

Employment opportunities in and around Mundijong are calculated in the following table. It highlights that Mundijong is capable of providing opportunities for up to 55% of its resident labourforce. Employment opportunities are relatively diverse with opportunities for 12% of the resident labourforce to be employed within the commercial sector, opportunities for 10% in home based businesses, and 29% in the industrial and Mixed business areas provided adjacent (west and North) to the District structure Plan Area. The level of self sufficiency falls below preferred levels of up to 60%. However, this figure should be considered in the context of significant agriculture based activity available to the labourforce in the surrounding rural environment.

Employment Category	**Floorspace (sqm)**	**Floorspace/ employee (sqm)**	**Total Employees**	**Employment Self Sufficiency**
Retail Villages	32,000	25	1,280	7%
Commercial	12,500	15	833	5%
Community	5,000	75	67	0%
Commercial Employment	**49,500**	**23**	**2,180**	**12%**

Employment category	% of dwellings	Home based business	Employees/ business	Total Employees	Employment Self Sufficiency
Home Based Employment	**10%**	**1,154**	**1.5**	**1,731**	**10%**

Employment Category	**Average Employees**	**Number**	**Total Employees**	**Employment Self Sufficiency**
Primary schools	40	8	320	2%
Secondary schools	80	3	240	1%
TAFE	200	1	200	1%
Education Employment		**12**	**760**	**4%**

Employment Category	**land area (Ha)**	**floorspace (sqm)**	**Floorspace/ employee (sqm)**	**Total Employees**	**Employment Self Sufficiency**
Industrial*	375	900,000	250	3,600	20%
Mixed Business (Cardup)	100	240,000	150	1,600	9%
Industry/Mixed Business	**475**	**1,140,000**	**219**	**5,200**	**29%**

* based on 80% developable land and 30% plot ratio

Total Employment Opportunities	**9,871**	**55%**