



Alkimos Eglinton District Structure Plan. Appendix 6 Retail Assessment.



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ALKIMOS/EGLINTON RETAIL ASSESSMENT

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- A: Selected Retail Modelling result tables for Option A
- B: Selected Retail Modelling result tables for Option B

GLOSSARY

NSA	= Net Selling Area including display cabinets, checkout areas etc. Defined as any area where shoppers are permitted to go + display space.
GLA	= Gross Leasable Area = Net Selling Area + storage space & other areas on which rent is usually paid.
REGION	= Study Region, comprising all areas shown in map 1.
SUB-REGION (SR)	= Cluster of Suburbs within the region used for presentation of data.(=SR)
MAIN	= "Inner" study region shown in map 1. This is NOT the same as traditional "Primary" catchment. See website for concept definition & explanation.
CATCHMENT	
FRINGE	= Outer areas of the Region not in the Main Catchment.(Coloured Yellow in Map 1a) = adjoining LGA's
SITE + CIRCA	= Refers to persons shopping in the site under consideration, including all shops within walking distance (i.e. usually about 0.3 Kms)
AREA	= Local Govt Area, Postcode or part Postcode, suburb or SLA
LGA	= Local Government Area
SLA	= Statistical Local Area (ABS concept) usually part of an LGA
ABS	= Australian Bureau of Statistics
CLIENT/ Majors	= Alkimos SC and all major traders plus all traders operating out of major shopping centres. (Labelled ALK+ Mjrs in Tables)
COMPTRS	= All other retailing in the defined categories within the study Region
SYNERGY	= The generation effect of complementary retailing, whereby increasing supply and/or improving the range and level of services has the effect of itself increasing the level of demand. Similarly the coincidence of other factors such as transport etc. have a cumulative non linear impact on demand.
RxYx	= Is a shorthand notation for modelling Run"x", Result year "1" or "2"
aab123	= Superscript refers to greater details on Page 123 about "aaa"
bbbA123	= Superscript refers reader to greater details in Appendix A123 about "bbb"
Perth + 2M	= Perth + Mandurah & Murray

All \$ values in this report for 2006 and after are in fiscal 2006\$ unless otherwise specified. Data for all years up to 2006 are expressed in current years dollars unless otherwise stated. eg. 2005\$ values are expressed in 2005\$.

Note that the IBECON definition of retail is wider than PLUC definitions generally used in WA as the IBECON definition applies to all true retail including any bulky goods retail including for example large hardware and other stores which make "retail" sales and which hence compete with other smaller retailers and which are included in all definitions of retail spending based on ABS Household Expenditure Surveys.

Detailed descriptions of IBECON Systems and Databases can be viewed at our website: www.ibecon.com.au

EXECUTIVE SUMMARY

IBECON has been commissioned to assess the retail requirements for the Alkimos/Eglinton Region of Perth to enable assessments of the proposed staged development of retail facilities in the suburbs of Alkimos and Eglinton in the City of Wanneroo.

This review has been prompted by various reports including the Butler-Jindalee District Structure Plan Centres Strategy Study prepared by Shrapnel Urban Planning dated April 2004 and the Revised Final version dated January, 2005. The recommendations in that study involve the movement of Butler/Brighton Regional Centre to the north and substantial reductions in retail locations in Alkimos. No assessment is made in that study of retail facilities for Eglinton.

2 Retail Floorspace Options/Scenarios used for Evaluation

After preparing population, jobs and other relevant data and projections such as resident and worker spending profiles, two scenarios were assessed using a retail evaluation model. These two options/scenarios assessed used, firstly, a smaller provision of retail floorspace (=Option A) then, secondly ,a larger provision of retail floorspace (=Option B), with a slightly different configuration. Both of these scenarios are listed and compared in Tables S.1 (A) and S.2 (B) below.

Summary of Results and Conclusions

1. It is projected that Alkimos will reach an ultimate population of 25,125 by about 2025/26, with Eglinton reaching an ultimate population of 33,635 by about 2031/32, a total for the two suburbs of 58,760.
2. This population could then support approximately 108,550 M² Net Selling Area (NSA), equivalent to 144,700 M² retail Gross Leasable Area (GLA), which depending on definitions used, is significantly less than Net Lettable Area (NLA) using WA definitions.

Option A Retail Floorspace Scenario and Results

3. The main and other centres simulated in this study at the ultimate population for Option A were as shown in following table S.1:-

Table S.1 M² Floorspace Evaluated Option A

Centre/Location	Suburb (Map 2)	M ² GLA	Code #	Map 2 Locid #
Alkimos Regional Centre	Alkimos SE	65,000	949	3301-3306
Alkimos Coastal Village	Alkimos SW	2,500	6303	3310
Alkimos Nth Coastal Village	Alkimos NE/SW	1,500	6301	3308
Alkimos Nbhd	Alkimos SW	300	5571	3307
Alkimos Nbhd	Alkimos SW	300	6302	3309
Alkimos Nbhd	Alkimos SE	300	6311	3311
Romeo	Alkimos SE	300	5	3321
Romeo E	Alkimos SE	400	6	3322
Romeo W	Alkimos SE	800	4	3326
Total Alkimos (Above only)		71,400		
Eglinton District Centre	Eglinton SE	20,000	na	3401-3403
Eglinton Nbhd	Eglinton SW	4,000	na	3405
Eglinton Nbhd	Eglinton Nth	4,000	na	3406
Total Eglinton (Above only)		28,000		
Total Alkimos + Eglinton		99,400		

Code # = City of Wanneroo ID #, Locid #=IBECON Location ID # in Table B1 @ page 9 + Map 2

4. Total proposed retail floorspace assessed in detail in this study for the Alkimos/Eglinton sub-region under option A was 99,400 M² retail GLA.
5. There is a shortfall of retail floorspace in the Alkimos/Eglinton sub-region of over 45,000 M² retail GLA, when ultimate population supportable floorspace is compared with proposals assessed in this study.
6. It is recommended that initially about 20,000 M² be developed as bulk retail adjacent to the Alkimos Town Centre. Once the sub-regions population is fully developed this bulk retail floorspace could be converted to other commercial or community facilities.
7. Option A indicated that a further 5-10,000 M² should be allowed for as local/neighbourhood centres, spread throughout the Alkimos/Eglinton subregion, or possibly 5,000 M² added to Eglinton District Centre..
8. These additional local centres would be best located on substantial roads in the suburbs shown in Map 1 as Alkimos SW, Alkimos NE, Eglinton Nth and Eglinton SW.

Option B Retail Floorspace Scenario and Results = Recommended Option

9. The main and other centres simulated in this study at the ultimate population for Option B were as shown in following table S.2:-

Table S.2 M² Floorspace Evaluated Option B

Centre/Location	Suburb (Map 2)	M² GLA	Code #	Map 2 Locid #	<>Option A
Alkimos Regional Centre	Alkimos SE	65,000	949	3301-3306	=
Alkimos Coastal Village	Alkimos SW	3,000	6303	3310	+500M ²
Alkimos Nth Coastal Village	Alkimos NE/SW	1,500	6301	3308	=
Alkimos Nbhd	Alkimos SW	2,000	5571	3307	+1,700M ²
Alkimos Nbhd	Alkimos SW	0	6302	3309	-300M ²
Alkimos Nbhd	Alkimos SE	1,500	6311	3311	+1,200M ²
Romeo Rd	Alkimos SE	1,000	5	3321	+700M ²
Romeo Nbhd	Alkimos SE	3,000	6	3322	
Romeo W	Alkimos SE	0	4	3326	-800M ²
Total Alkimos (Above only)		77,000			
Eglinton District Centre	Eglinton SE	20,000	na	3401-3403	=
Eglinton Marina & Coastal Village	Eglinton SW	4,000	na	3405	=
Eglinton Nbhd	Eglinton Nth	4,000	na	3406	=
Eglinton Nbhd	Eglinton SW	500	na	3407	+500M ²
Eglinton Nbhd	Eglinton Nth	1,500	na	3408	+1,500M ²
Total Eglinton (Above only)		30,000			
Total Alkimos + Eglinton	(Excl Bulk retail)	107,000			
+ Bulk Retail	Eglinton SE	20,000	na		
Total including Bulk Retail	Alkimos+Eglinton	127,000			

Code # = City of Wanneroo ID #, Locid #=IBECON Location ID # in Table B1 @ page 9 + Map 2

10. In addition to standard retail, a further 20,000 M² GLA of bulk retail floorspace was considered as appropriate for a location adjacent to the Town centre.
11. This scenario (option B) resulted in continuing deficiencies of shop floorspace throughout the evaluation period, with a deficiency of 35,000 M² NSA, not including the bulk retail (of 10,000 M² NSA) with ultimate population in 2031, or 25,000 M² NSA if the bulk retail is included. This is equivalent to a deficiency of approximately 30-35,000 M² GLA which is equal to over 20% of the sub regions supportable retail floorspace.
12. All of the proposed Option B retail components would trade viably and are recommended.

A. Introduction

IBECON has been commissioned to assess the market potential for retail facilities in the Alkimos/Eglinton Region of Perth to enable, *inter alia*, feasibility, impact and other assessments of the proposed staged development of retail facilities in the suburbs of Alkimos and Eglinton in Wanneroo Local Government Area.

A detailed study has been undertaken providing a comprehensive analysis and forecasts of the Regions' demography, retail needs, plus sales forecasts and impact assessments for all shops in the Region.

The retail modelling reported in this study has been undertaken using comprehensive retail models which cover Alkimos/Eglinton, the balance of Wanneroo and suburbs in other adjoining LGAs as well as all suburbs in Perth & all other SLAs in WA. Relevant parts and suburbs for this Alkimos study have been extracted from that Statewide and wider regional analysis. In addition a more comprehensive analysis of suburbs in the North of Perth from the Swan River to Yanchep and Swan LGA has been undertaken using our North Perth Retail model calibrated to match sales levels in 2006 derived from the Perth and WA wide model.

A.1 Response to Centres Strategy Study

This review has been prompted by various reports including the Butler-Jindalee District Structure Plan Centres Strategy Study prepared by Shrapnel Urban Planning dated April 2004 and the Revised Final version dated January, 2005. The recommendations in that study involve the movement of Butler/Brighton Regional Centre to the north and substantial reductions in retail locations in Alkimos. No assessment is made in that study of retail facilities for Eglinton. This study briefly reviews the general methodology applied in the Centres Strategy Study and, in particular, its conclusions in relation to the various retail proposals in Alkimos and Eglinton.

A.2 Main Data Sources and other Documents

This report takes into account results available from the 2001 Population Census, 2005 ABS Estimated Resident Population (ERP) and other more recent data, including retail sales data published by ABS and other updating of retail floorspace databases by IBECON.

Data used in the preparation of this report includes the following:-

- IBECON's Retail Floorspace Database for Perth as at June 2006. This data base has been derived as a combination of the numerous IBECON audits of the region, the Western Australian Planning Commission (WAPC) Database for 1999→2001 and checking update audits conducted by IBECON in late 2003/4, 2006 and partially in June 2006 (North West of Perth only). .
- Numerous ABS statistical reports, surveys and censes.
- Tourism and jobs databases developed specifically by IBECON.
- Current and recent actual sales data for some of the major shops and/or shopping centres in this Region.
- *The Butler-Jindalee District Structure Plan Centres Strategy Study* prepared by Shrapnel Urban Planning for Satterley Property Group, dated April 2004.
- City of Wanneroo Centres Strategy revised Final, dated January, 2005.

A.3 Options/Scenarios Evaluated in this Study

The following scenarios have been simulated to assess effects of the various possible changes. Details of Alkimos.Eglinton proposals for Option A and other new retail are provided in Table B1 at page 9. Similar scenarios were assessed for option B.

SCENARIO	DESCRIPTION	Year
A	Region as is in 2006 and 2009 with all known proposed developments. This is used as a base case for calibration of the models and as a reference for future scenarios.	2006-2009
B.1	2011-2016 assuming limited additions to Alkimos/Eglinton	2011-16
B.2	2021-2026 assuming most of the additions to Alkimos/Eglinton	2021-26
B.3	2031.1 assuming all of the additions to Alkimos/Eglinton 2031.2 adding a further 15,000 M2 to Alkimos Town Centre	2031

In all years from 2006 onwards substantial additions to competing shop floorspace throughout the Region have been assumed. Details of these assumptions are provided in the body of the report. The retail modelling reported in this study has been undertaken using a comprehensive retail model which covers all of Northern Perth. Relevant parts and suburbs for this Alkimos/Eglinton Study have been extracted from that wider regional analysis. It is based on the full 2001 Census data, and more recent Estimated Resident Population data for 2005 published by ABS.

B. The Region

Definitions of the Study Region, Main Catchment and Sub-regions or Districts within the Main Catchment, for presentation of summary data are illustrated in Map 1. The Study Region has been defined, as shown in Map 1, to include all suburbs in the North of Perth as well as some fringe Suburbs/LGAs in the South of Perth. An Inner Region, referred to as the **Main Catchment**, comprising all suburbs as shown in Map 1 have been used to simplify presentation of summary data. Of particular relevance to this study are the Alkimos and Eglinton Sub-Districts and the Alkimos/Eglinton Sub-Regions and Wanneroo NW and Wanneroo Region, which includes Joondalup Nth. .

Comparison of Alkimos/Eglinton with these sub-regions and the remainder of the region shows deficiencies of shop floorspace in Alkimos/Eglinton District and throughout the sub-region. This deficiency continues even after allowing for all proposed developments listed in this report.

This to some extent reflects the retail hierarchy. It is typical for sub-regions on the fringe of existing urban areas of major metropolitan cities to have deficiencies of shop floorspace. There is not the concentration of people in locations as occurs in inner urban areas to warrant the provision of regional, and in many cases sub-regional or district shopping centres.

Map 2 provides a detailed description of the locations and definitions of Alkimos/Eglinton and surrounding areas. The existing retail hierarchy in the region are illustrated in Maps 2 & 3. These maps show the size and location of all shopping centres and locations in the Region. Detailed data showing size and composition of some of these retail locations is provided in Appendix A.

Maps 2 & 3 show the low provision of retail floorspace in suburbs in the North West of Perth compared with the high provision to the South and East of the Inner region. This largely reflects the existing retail hierarchy and results in substantial escape spending from North West of Perth and in future years the Alkimos/Eglinton sub-region, if retail requirements are not adequately met locally.

Suburbs & locations in an Inner Region, referred to as the **Main Catchment**, have been grouped into several Sub-Regions and cumulative sub-totals , labelled as follows, are used in this report to present summarised tables and results.

Suburb	Sub-region; Cumulative Sub Total
Alkimos SE, Alkimos NE, Alkimos SW	Alkimos
Eglinton SW, Eglinton E, Eglinton Nth	Eglinton; Alkimos+Egltn
Nowergup, Carabooda, Yanchep E, Wanneroo NE	Near East; Wanneroo NREST
Butler, Jindalee, Merriwa, Quinns Rocks, Ridgewood	Butler-Quinns; Wanneroo BTLR
Clarkson,Mindarie,Tamala Park	Clarkson; Wnro SE CLRKSN
St Andrews, Yanchep Coast, Yanchep SE, Yanchep Nth, Two Rocks	Yanchep2Rocks; Wanneroo NWST
Joondalup,Burns,Connolly,Currambine,Edgewater,Heathridge,Illuka,Kinross,Ocean Reef,	Joondalup Nth; Wanneroo SW
Wanneroo W ,Maraginiup, Ashby, Tapping Nth ,Tapping Sth, Banksia Grove ,Sinagra, Carramar ,Hocking, Pearsall, Badgerup , Gnangara	Bal Wanneroo; Wanneroo Region

B.1 Other Proposed Retail Developments

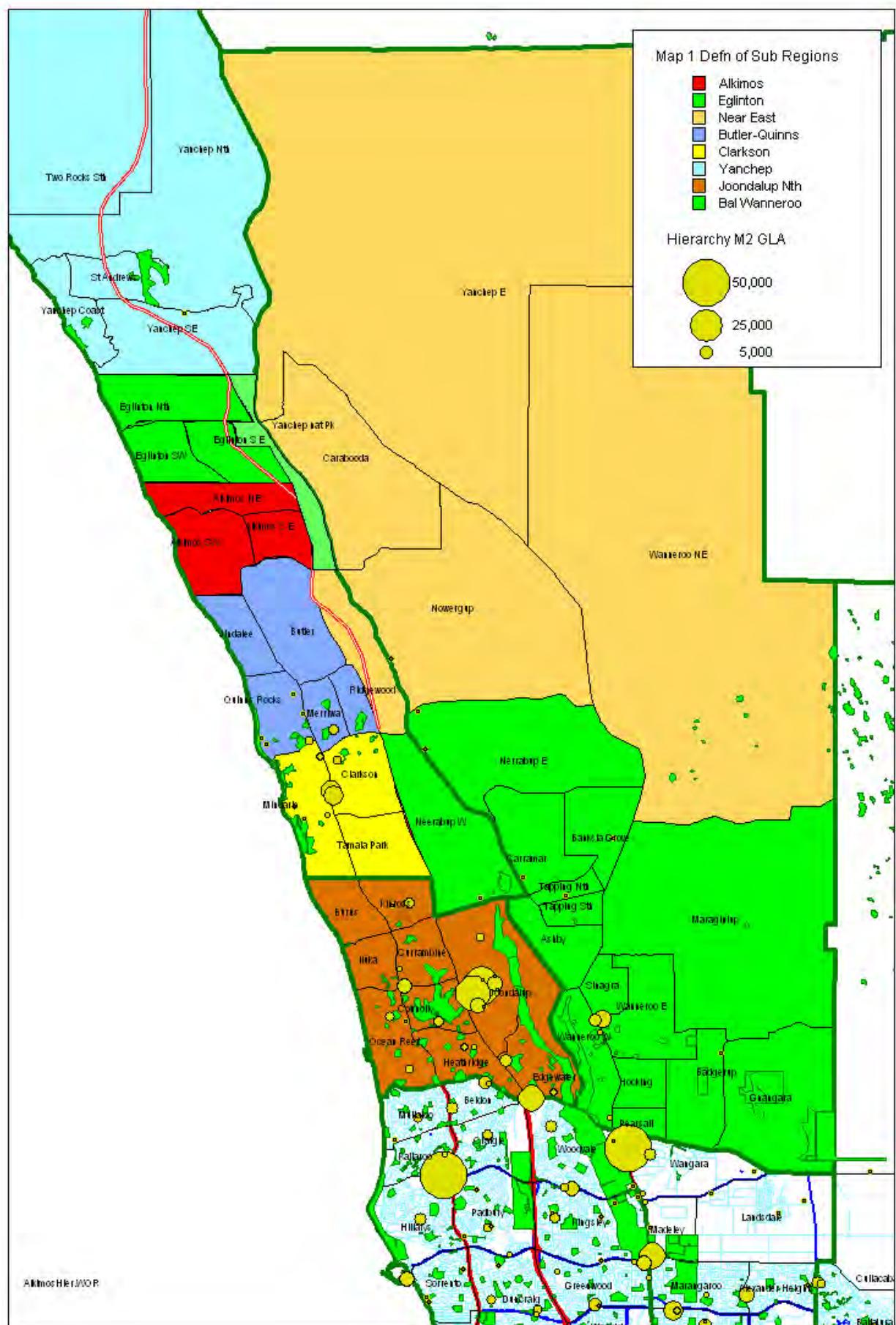
There are a number of possible developments in this study region. Details of all proposals in the North of Perth assumed in this report are provided in Attachment A. The proposals as specified in the Wanneroo Centres Strategy are summarised in the following Table B.1. In the case of Alkimos and Eglinton a number of changes have been made to sizes of centres as used in the modelling in this study. The details of all proposals are summarised later in this report and in Appendix A. The years of opening shown in this table are in many cases nominal only and have been adjusted in the modelling as shown for Alkimos/Eglinton Sub-Region in Attachment A.

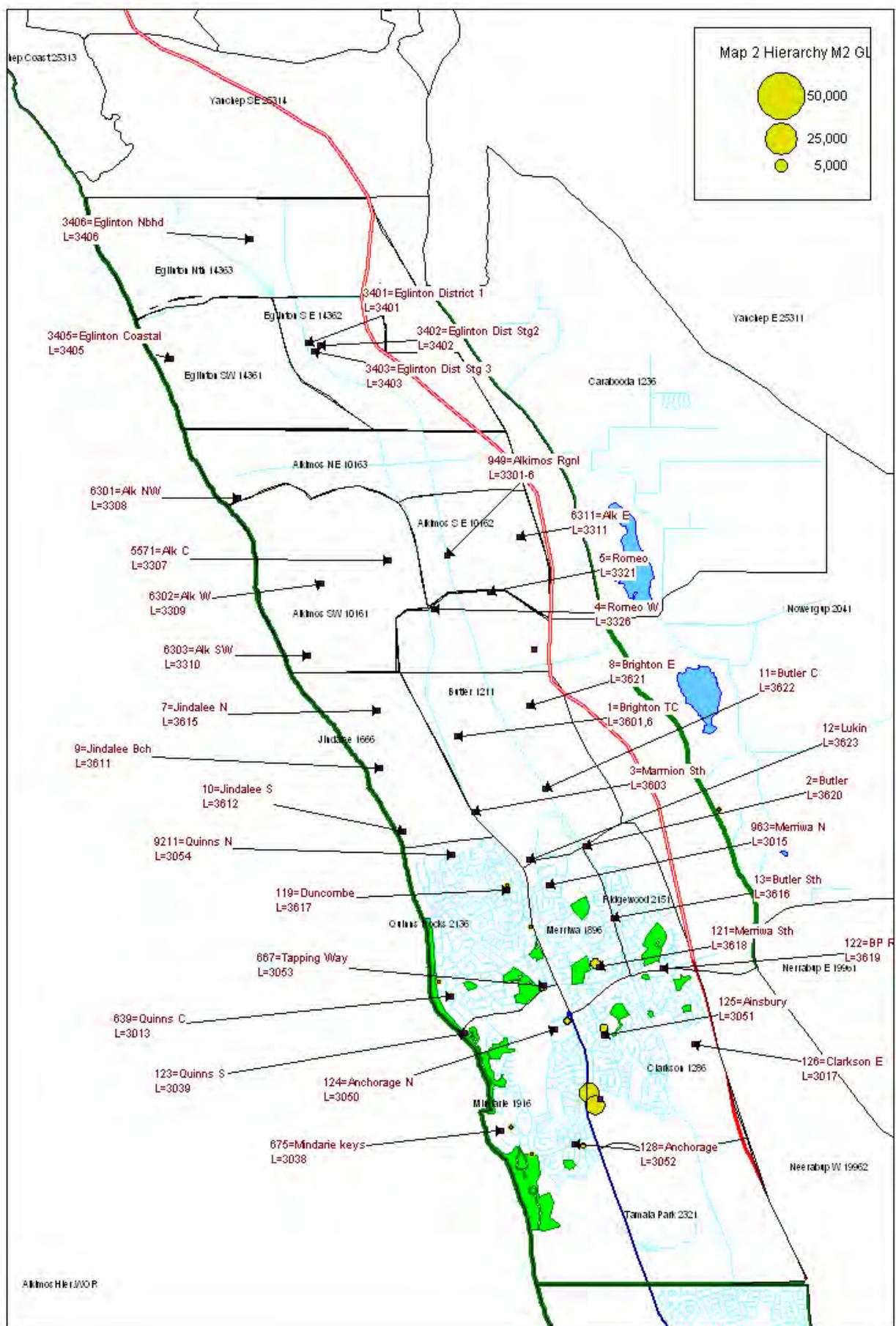
Table B.1 Assumed Additional Retail Floorspace

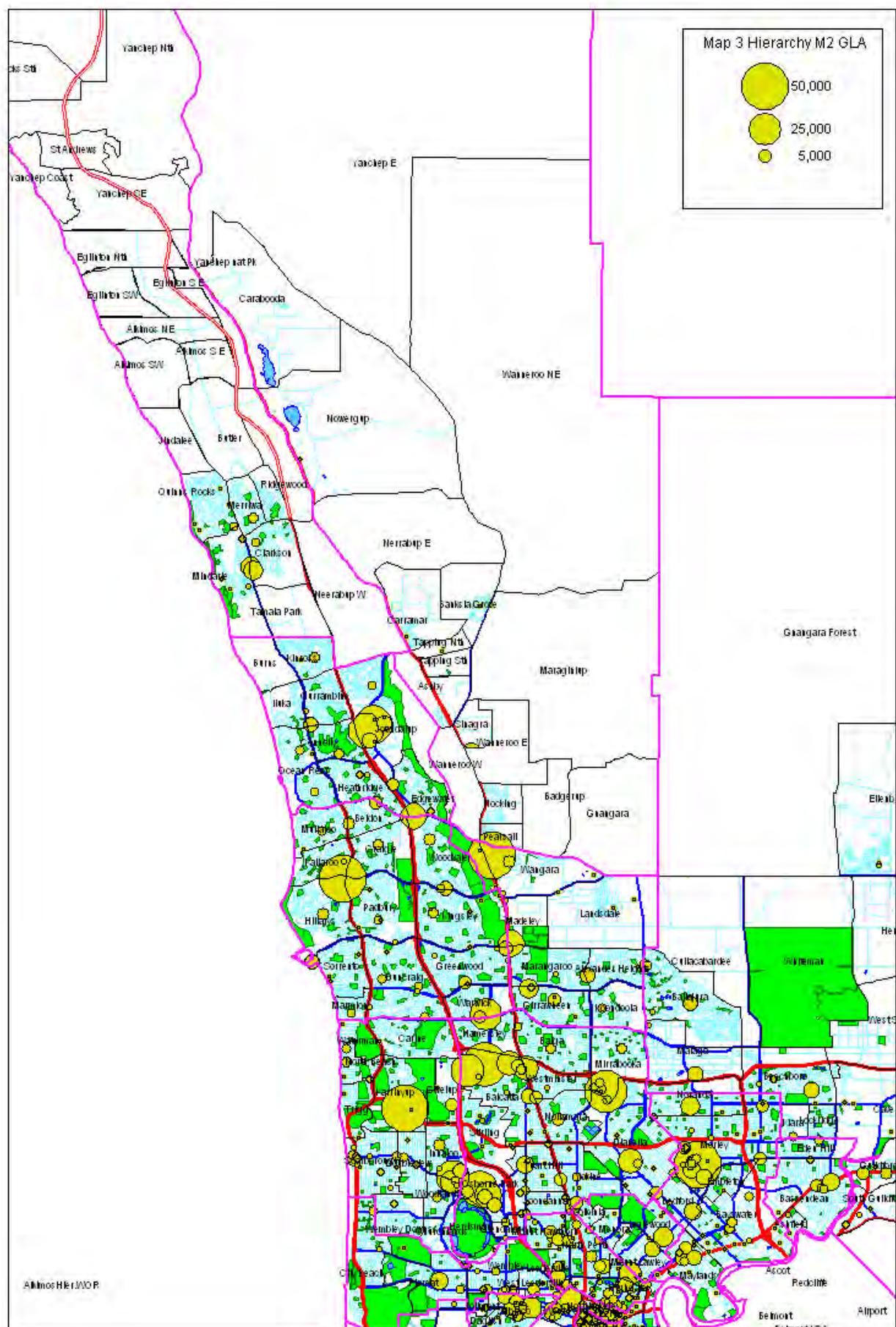
PCD	Suburb	sla	LOCIDn	Year	Location Name	NSA	GLA	Comment
6065	1041	8761	6525	2011	ASHBY	1582	2200	Subject to Change
6031	1081	8761	3103	2011	Banksia Grove	139	200	
6031	1081	8761	3106	2017	BANKSIA GROVE DC	7443	10000	
6031	1081	8761	3109	2011	Banksia Grove	0	0	
6031	1256	8761	3105	2015	CARRAMAR EAST	3449	4300	
6031	1256	8761	3107	2008	Carramar West	3292	4600	
6026	1621	8761	2612	2007	HOCKING	525	700	
6065	1771	8761	6520	2011	DARCH SC	2020	2800	
6065	1821	8761	6521	2011	MADELEY SC	2164	3000	
6065	2101	8761	6522	2011	PEARSALL	1515	2101	
6065	2231	8761	6524	2011	SINAGRA	1726	2400	Subject to Change
6031	2326	8761	3108	2009	Tapping	180	200	
					Wanneroo NE	24035	32501	
6030	2136	8764	3039	2006	QUINNS ROCKS (123)	0	0	
6065	24012	8761	6501	2015	WANNEROO CENTRAL	6231	8500	
6036	1211	8764	3601	2009	BRIGHTON/Butler R(1)	4338	6001	
6036	1211	8764	3602	2008	BUTLER LOCAL 1	0	0	
6036	1211	8764	3603	2006	MARMION STH (3)	3638	5000	
6036	1211	8764	3606	2011	BUTLER R STG2+3 (1)	12051	16502	
6036	1211	8764	3608	2026	BUTLER REGIONAL STG4	7376	10000	
6036	1211	8764	3610	2026	BUTLER REGIONAL STG5	8580	11502	
6036	1211	8764	3620	2011	BUTLER (2)	1095	1500	
6036	1211	8764	3621	2011	BRIGHTON E (8)	730	1000	
6036	1211	8764	3622	2011	BUTLER C (11)	695	952	
6036	1211	8764	3623	2011	LUKIN (12)	695	952	
6030	1286	8764	3011	2020	Ainsbury (125)	675	900	
6030	1286	8764	3017	2009	CLARKSON 11	2193	3000	
6030	1286	8764	3020	2009	OCEAN KEYS STG2(672)	7908	10721	
6030	1286	8764	3021	2015	OCEAN KEYS STG3(672)	6059	8400	

PCD	Suburb	sla	LOCIDn	Year	Location Name	NSA	GLA	
6036	1666	8764	3605	2008	JINDALEE N(7)	365	500	
6036	1666	8764	3611	2006	JINDALEE (9)	2160	3001	
6036	1666	8764	3612	2006	JINDALEE (10)	244	351	
6036	1666	8764	3615	2011	JINDALEE (7)	244	351	
6036	1896	8764	3618	2011	MERRIWA STH(121)	2876	4000	
6030	1916	8764	3038	2007	Mindarie keys(675)	348	501	
6030	1916	8764	3050	2007	ANCHORAGE N(124)	361	501	
6030	1916	8764	3052	2011	Anchorage (128)	1443	2000	
6030	2136	8764	3053	2008	Tapping Way(667)	1489	2039	
6030	2136	8764	3054	2007	Quinns N(9211)	365	500	
6036	2136	8764	3617	2011	DUNCOMBE(119)	348	501	
6036	2151	8764	3616	2011	BUTLER STH(13)	348	501	
6036	2151	8764	3619	2011	BP RIDGEWOOD(122)	213	250	
6033	10161	8764	3307	2011	ALKIMOS NBHD(5571)	217	302	Option A
6033	10161	8764	3309	2021	ALKIMOS NBHD(6302)	217	302	Option A
6033	10161	8764	3310	2015	ALKIMOS NBHD(6303)	2150	2500	Coastal
6033	10162	8764	3301	2010	ALKIMOS STG1(949)	4438	6000) Option A
6033	10162	8764	3302	2015	ALKIMOS STG2(949)	6657	9000) Option A
6033	10162	8764	3303	2019	ALKIMOS STG3(949)	10995	15000) Option A
6033	10162	8764	3304	2023	ALKIMOS STG4(949)	7438	10000) Option A
6033	10162	8764	3305	2029	ALKIMOS STG5(949)	7438	10000) Option A
6033	10162	8764	3306	2032	ALKIMOS STG6(949)	10971	15000) $\Sigma=65,000$
6033	10162	8764	3311	2016	ALKIMOS NBHD(6311)	219	300	Option A
6033	10162	8764	3321	2016	ROMEO (5)	219	300	Option A
6033	10162	8764	3322	2016	ROMEO E (6)	292	400	Option A
6033	10162	8764	3326	2016	ROMEO W (4)	584	800	Option A
6033	10163	8764	3308	2015	ALKIMOS NBHD(6301)	1200	1500	Coastal
					Alkimos Total	53035	71404	Option A
6034	14361	8764	3405	2021	EGLINTON NBHD	2775	4000	Option A
6034	14362	8764	3401	2021	EGLINTON DIST STG1	4158	5750) Option A
6034	14362	8764	3402	2026	EGLINTON DIST STG2	6838	9251) Option A
6034	14362	8764	3403	2031	EGLINTON DIST STG3	3618	5002) $\Sigma=20,000$
6034	14363	8764	3406	2026	EGLINTON NBHD	2775	4000	Option A
					Eglinton Total	20164	28003	Option A
					Alkimos + Eglinton	73199	99407	=1.72 M ² GLA/Cap
6035	25313	8764	3506	2012	YANCHEP 97	1080	1500	
6035	25314	8764	3505	2025	YANCHEP REGIONAL	37000	50000	
6035	25314	8764	3507	2015	YANCHEP 96	694	1000	
6035	25314	8764	3508	2009	YANCHEP LOCAL	3021	4156	
					Wanneroo NW	188062	255989	
6064	1006	8767	6411	2008	Alexander Hts STG2	3144	4401	
					Wanneroo Total	215241	292891	
6028	1201	4170	2820	2010	BURNS	3642	5000	
6028	1351	4170	2813	2009	CURRAMBINE NTH	2208	3000	
6027	1676	4170	2716	2009	LAKESIDE JOONDALUP	16227	22246	
6027	1676	4170	2717	2015	LAKESIDE JOONDALUP	24911	33628	
6020	1861	4170	2001	2010	MARMION VILLAGE	1176	1581	
6028	1746	4170	2815	2008	SELKIRK/KINROSS	2209	3000	
6026	2521	4170	2608	2007	WOODVALE BOULEVARDE	800	1000	
					JOONDALUP	51173	69455	
					Other LGAs	143393	197538	
					Total	409807	559884	

In addition there is scope for some bulk retail in the commercial area of Alkimos Town Centre, and other local centre retail floorspace in various suburbs, but this has not been included in the modelling.

**Map 1 The Region**

**Map 2 Proposed NW Retail Hierarchy**



Map 3 Existing Retail Hierarchy North Perth

C. Population Growth and Income Levels

Wanneroo NW SLA comprises most of the Catchment for the proposed Alkimos & Eglinton Centres. In total, population has risen from 5,855 total in 1991 to 26,487 in 2001 and subsequently to 36,628 in 2005. IBECON has assumed that there will be a continuation of strong growth in population over the period to 2006 to a total of 41,500 with continued strong growth thereafter to 75,000 in 2011 with continuing growth thereafter. By 2032 “ultimate” population would be approaching 558,760 in the Alkimos/Eglinton Sub-region.

As part of this study IBECON reviewed various projections both for Alkimos and adjoining suburbs & LGA's and for specific suburbs and locations within Alkimos and the Region. The resulting projections for suburbs and locations within Alkimos and adjoining suburbs in the Region are provided in Table C.1. The following Table C.1 presents a summary of the results of this analysis and forecasts. It compares historical ABS data and IBECON population projections for Alkimos/Eglinton Sub-regions. Note that projections for 2031 are population projections representing “ultimate” populations in these areas. In some instances these populations will not be reached by this date but these numbers have been used for the purposes of planning retail requirements.

Table C.1 Population Data & Projections for Alkimos Sub-region

Suburb/Sub Regn	2001	2005	2006	2011	2016	2021	2026	2031	Ultimate
	ABS	ABS	IBECON	IBECON	IBECON	IBECON	IBECON	IBECON	
Alkimos									
Alkimos SW	73	71	70	5629	5629	5629	5629	5629	5629
Alkimos SE	73	71	70	296	1684	3109	5021	5023	5023
Alkimos NE	73	71	70	6575	14475	14475	14475	14475	14475
Alkimos	219	213	210	12500	21788	23213	25125	25127	25127
Eglinton									
Eglinton SW	73	71	70	70	70	9212	9212	12761	12761
Eglinton SE	73	71	70	70	3213	4838	4838	6749	7227
Eglinton Nth	73	71	70	70	70	70	10913	12715	13648
Eglinton	219	213	210	210	3353	14120	24963	32225	33636
Alkimos+Egltn	438	426	420	12710	25141	37333	50088	57352	58763

The following Table C.2 presents a summary of the results of this analysis and forecasts. It compares earlier Ministry for Planning (MFP) and current IBECON population projections for Wanneroo LGA.

Table C.2 Population Data and Projections for the Wanneroo LGA

LGAD	1996	2001	2005	2006	2011	2016
SOURCE	CENSUS	CENSUS	ABS	IBECON	IBECON	IBECON
ABS/IBECON (a)	64,999	84,492	107,317	117,000	163,000	197,000
MFP 2005 (b)				114,600	146,800	na
IB-MFP				+2,400	+16,200	na

(a) IBECON June 2006 (b) Medium Scenario

The difference between the 2001 and 2005 ABS Census total population and the MFP forecast for these years needs to be adjusted out of differences in future years such that by the year 2011 for instance, the IBECON forecast is about 16,000 more than the earlier MFP medium forecast. IBECON projections then converge towards earlier MFP projections for these later years beyond 2011, reflecting our assessment that high costs of living and difficulties with housing in locations on the eastern seaboard will continue to cause a reversion to the former higher growth rate in Perth, progressively increasing over future years.

Detailed demographic characteristics are provided in Table K.3 & Appendix A. The age structure of the population of Wanneroo NW SLA is younger than the WA and Perth Average. At the 2001 Population Census, the percentage of population aged 65 years + in Wanneroo NW was 8.3% compared with 11.2% for Perth and 11.1% for WA in total. Similarly the number of persons aged 18 or less in Wanneroo NW is above average. At 2001 Census it was 29.6% compared to 20.6% for all of Perth. This increases food spending and reduces discretionary non food spending available in the region and has been allowed for in the modelling.

In the 2001 Census average household incomes of the Wanneroo NW, at \$951/wk (in 2001\$), were slightly below the national average of \$968/wk and the WA average of about \$999/wk and the Region average of \$946/wk. Household incomes in the Alkimos/Eglinton sub-region in future years are assumed to be approximately equal to the average for Wanneroo NW.

D. Population & Total Spending Capacity of the Region & Main Catchment.

D.1 Trends in Real Spending per Capita in the Region and WA.

Figure 1 shows real spending per capita in Western Australia derived from ABS monthly retail sales, Consumer Price Index and Estimated Resident Population data from 1966 to 2005, with IBECON trend projections for future years. The strongest growth categories are supermarkets and homemaker shops - the latter including shops such as furniture, white goods, small electrical, kitchenware etc.

Figures 2 and 2a show comparable information for Australia. The significant differences are in the volatility of the categories in WA compared with more even growth in Australia overall. Care should be exercised when making comparisons as there are a number of definitional issues, and differences in retail structures between WA and the rest of Australia, which can affect the translation of ABS data to IBECON categories.

Table D1 shows estimated spending levels at 2006 in 2006\$, including indicative spending rates for new suburbs in Alkimos and Eglinton, based on assumed average household incomes.

Table D.1 Average SPENDING x Number = Total SPENDING by Type 2006 (2006\$)

District	Average SPENDING BY			X Number of			= Total SPENDING by Type			
	\$/Rsdnt	\$/Wrkfc	\$/Onite	#.Rsdnt	#.Wrkfc	#.Onite	\$./Rsdnt	\$./Wrkfc	\$.Onite	\$.TOTAL
Alkimos SW	8718	2900	0	64	10	0	558	29	0	587
Alkimos SE	8750	3000	0	64	20	0	560	60	0	620
Alkimos NE	8734	2900	0	64	10	0	559	29	0	588
Alkimos	8734	2950	0	192	40	0	1677	118	0	1795
Eglinton SW	8781	2400	0	64	5	0	562	12	0	574
Eglinton SE	8781	2400	0	64	5	0	562	12	0	574
Eglinton Nth	8812	2400	0	64	5	0	564	12	0	576
Eglinton	8791	2400	0	192	15	0	1688	36	0	1724
Alkimos+Egltn	8763	2800	0	384	55	0	3365	154	0	3519
Carabooda	9555	1822	0	945	90	0	9030	164	0	9194
Nowergup	8979	0	0	245	0	0	2200	0	0	2200
Yançep E	8358	2847	0	209	184	0	1747	524	0	2271
Wanneroo NE	8727	1769	0	165	195	0	1440	345	0	1785
Near East	9218	2202	0	1564	469	0	14417	1033	0	15450
Butler	9465	3135	0	4974	81	0	47081	254	0	47335
Jindalee	9615	3135	0	65	81	0	625	254	0	879
Merriwa	7357	3130	0	5968	184	0	43907	576	0	44483
Quinns Rocks	9633	3125	0	7156	368	0	68936	1150	0	70086
Ridgewood	9868	2928	0	1986	139	0	19598	407	0	20005
Butler-Quinns	8940	3096	0	20149	853	0	180147	2641	0	182788
Clarkson	9117	3196	0	8458	1150	0	77116	3676	0	80792
Mindarie	11112	3110	71	7463	460	6126	82930	1431	435	84796
Tamala Park	10718	2578	0	96	19	0	1029	49	0	1078
Clarkson	10056	3165	71	16017	1629	6126	161075	5156	435	166666
Whro SE CLRKSN	9419	2988	71	38114	3006	6126	359004	8984	435	368423
Two Rocks	6590	3554	0	2185	478	0	14400	1699	0	16099
St Andrews	6658	0	0	721	47	0	4801	0	0	4801
Yançep Cstl	6738	2851	0	1986	47	0	13383	134	0	13517
Yançep SE	6666	0	0	192	0	0	1280	0	0	1280
Yançep Nth	3854	0	0	96	47	0	370	0	0	370
Yançep2Rocks	6608	2961	0	5180	619	0	34234	1833	0	36067
Wanneroo NWST	9082	2984	71	43294	3625	6126	393238	10817	435	404490
Burns	7419	3018	0	2841	160	0	21079	483	0	21562
Connolly	10889	3225	0	3706	400	0	40355	1290	0	41645
Currambine	10916	3241	0	6917	800	0	75507	2593	0	78100
Edgewater	10992	3325	0	4830	998	0	53093	3319	0	56412
Heathridge	9402	3270	0	7024	599	0	66046	1959	0	68005
Iluka	10706	3037	0	3787	160	0	40546	486	0	41032
Joondalup	10973	3336	0	7390	3996	0	81095	13334	0	94429
Kinross	11194	3203	0	6657	320	0	74520	1025	0	75545
Ocean Reef	10802	3258	0	9477	599	0	102379	1952	0	104331
Joondalup Nth	10538	3291	0	52629	8032	0	554620	26441	0	581061
Wanneroo SW	9881	3196	71	95923	11657	6126	947858	37258	435	985551
Bal Wanneroo	9033	2723	51	31105	2198	61753	281001	5986	3166	290153
Wanneroo Region	9673	3121	53	127028	13855	67879	1228859	43244	3601	1275704
North Perth	9310	3083	52	1277012	711141	8172796	11889189	2192507	431595	14513291

Figure 1 shows the high growth in real spending per capita (ie excluding inflation) in WA in recent years. Eg from 2001 to 2006 it averaged approx +35% in actual \$ terms which reduces to 28% in real terms, equivalent to an average rate of 5.5% pa. While these rates cannot be sustained indefinitely, the use by IBECON of rates of only 2.5% pa to 2010, then down to 1.0% pa to 2020 and zero% thereafter is conservative.

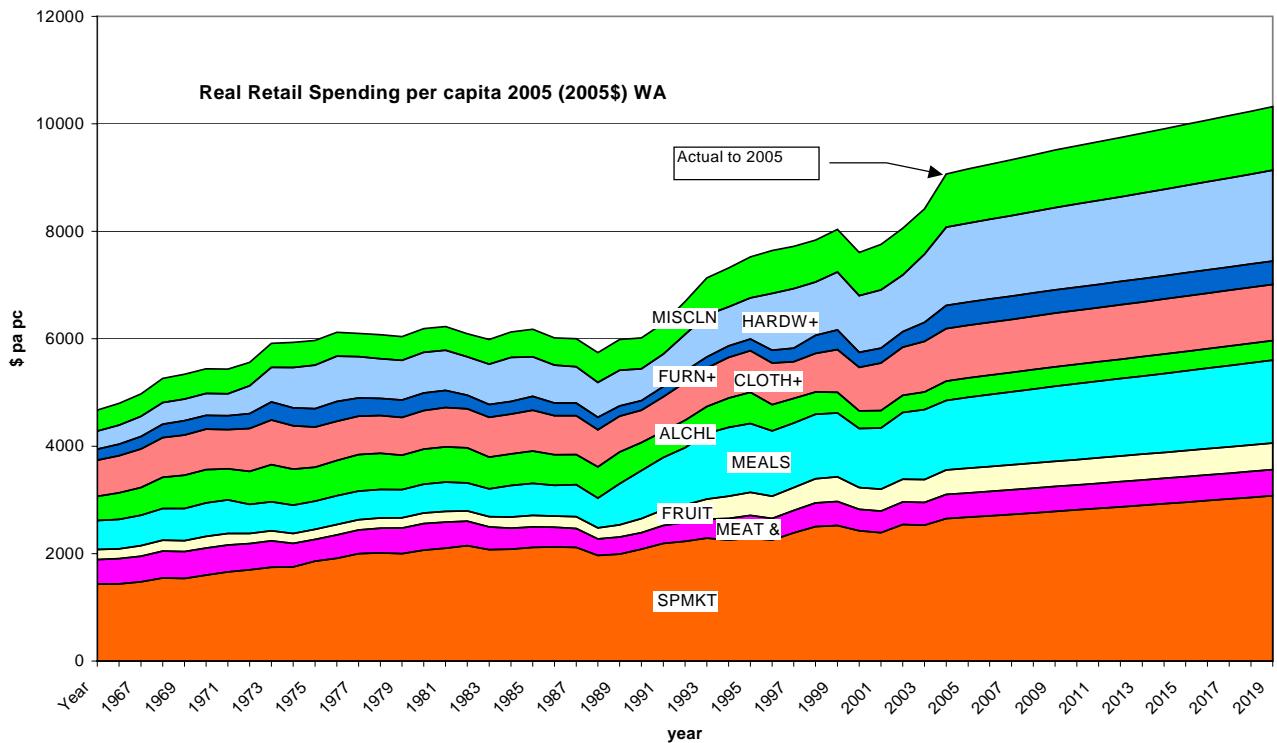
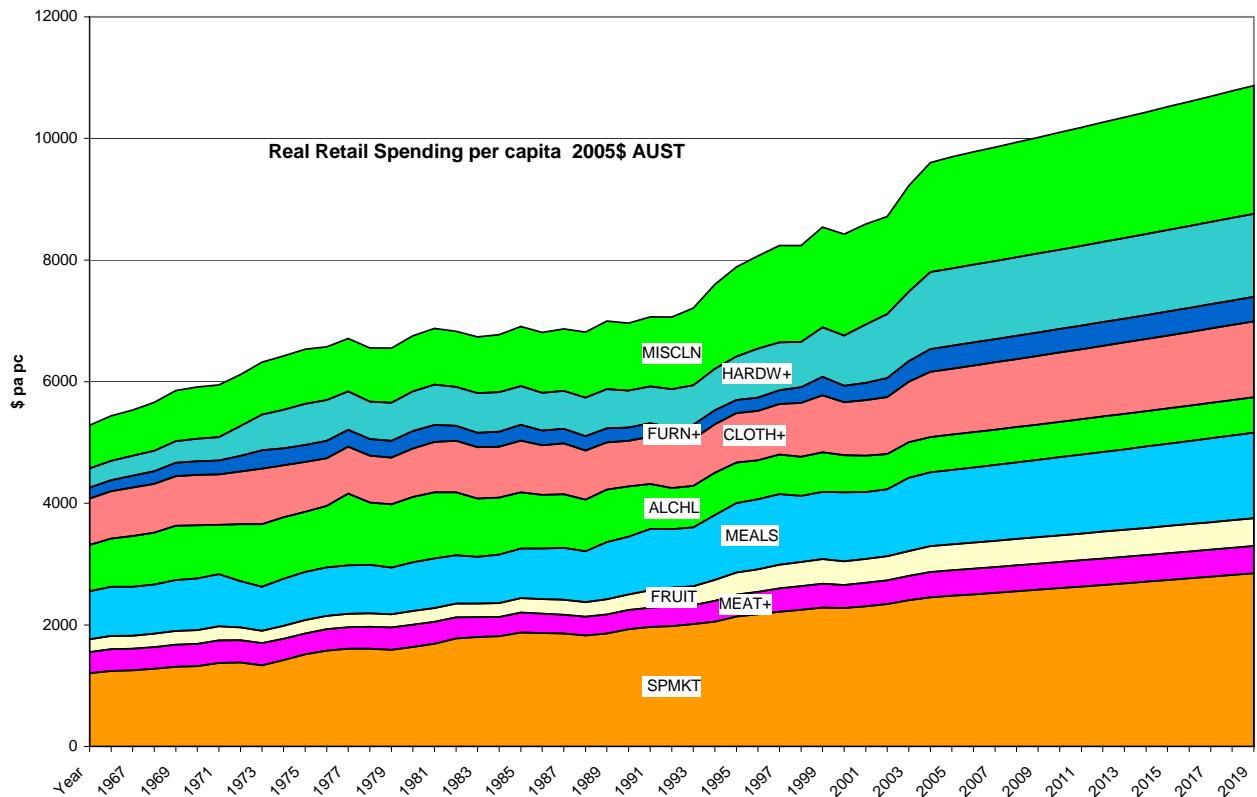
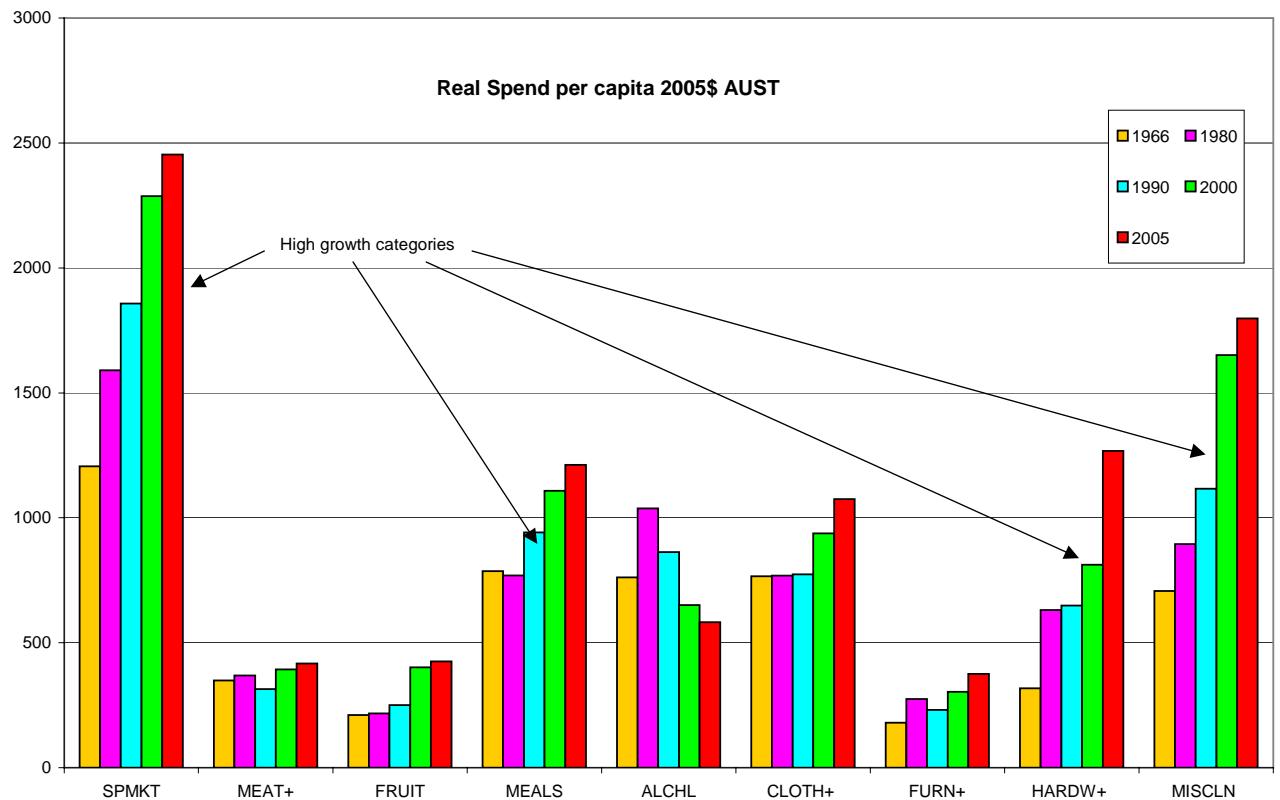
Figure 1 Real Retail Spending per capita WA**Figure 2 Real Retail Spending per capita AUSTRALIA**

Figure 2a Real Retail Spending per capita AUSTRALIA

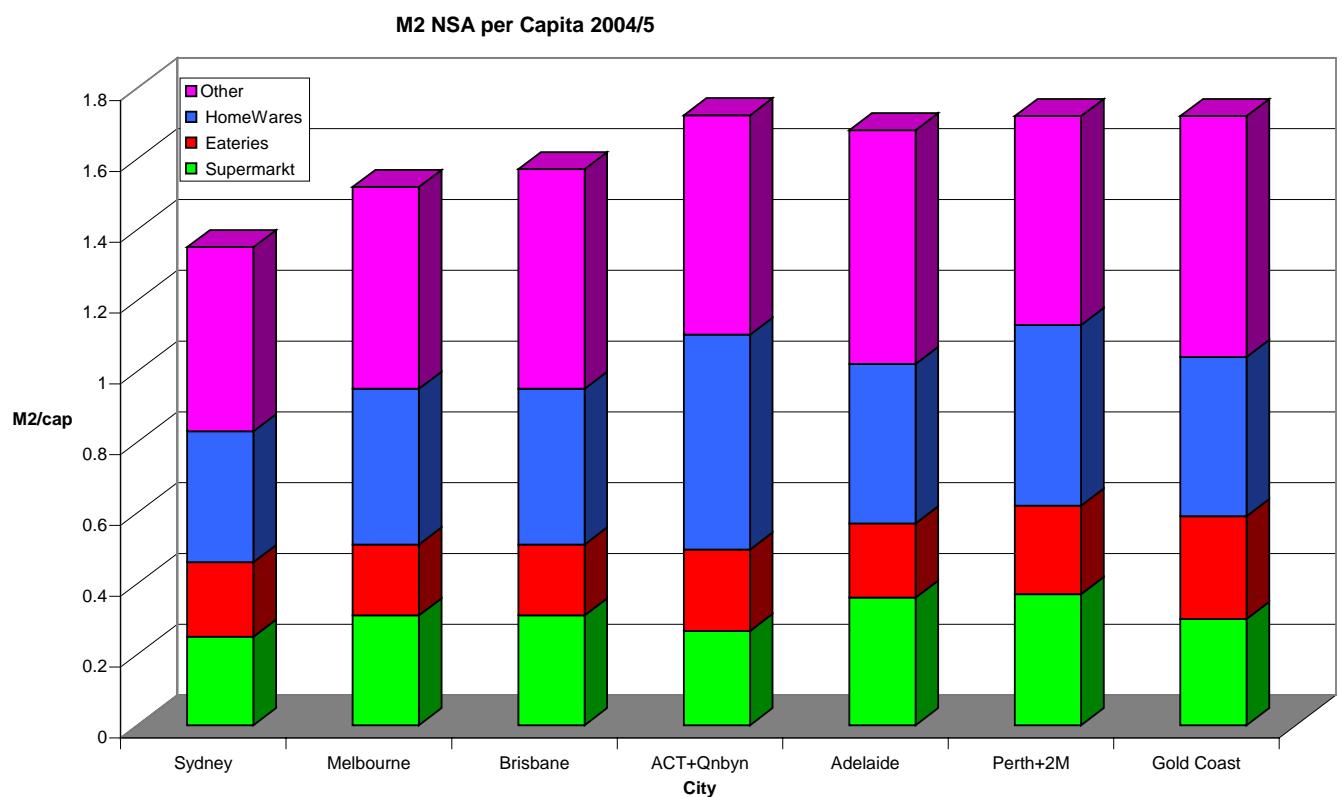
D.2 Provision of Retail Floorspace per Capita in Perth and other Cities.

Table D.2 shows the relative provision of floorspace throughout WA to be reasonably even. Of significance for this study are the ratios of NSA and GLA per capita in Perth + Mandurah & Murray (PERTH+2M) and similar ratios excluding Perth CBD. This data includes both vacant retail floorspace and Bulk Retail. The most relevant benchmark is 1.58 M² NSA per capita or 2.08 M² GLA per capita.

Table D.2 M² per capita Perth and WA regions

Area	#Pop	NSAM2	NSAM2	GLAM2
	Totl	Exist	Per Cap	Per Cap
PERTH+2M	1582101	2668609	1.69	2.23
SOUTH WEST	149831	248173	1.66	2.19
GREAT STHRN	73129	143587	1.96	2.59
MIDLANDS	53609	77631	1.45	1.91
STH EASTERN	55979	101032	1.80	2.38
CENTRAL	64195	117570	1.83	2.42
PILBARA	39623	69506	1.75	2.32
KIMBERLEY	37866	37970	1.00	1.32
WA by SLA	2056333	3464078	1.68	2.22
Deduct				
Perth CBD	6103	182767	29.95	39.53
Perth+2M-CBD	1575998	2485842	1.58	2.08

Figures 3 shows M² NSA per capita in Perth plus Mandurah and Murray (=Perth + 2M) compared with other Australian Cities derived from IBECON retail floorspace databases and ABS Estimated Resident Population.

Figure 3 M² NSA per capita Australian Cities

This chart shows data for a mix of 2004, 2005 and 2006 as some retail floorspace data for other cities is more recent than others. ACT data has been fully updated more recently than other cities, with Melbourne having some parts the most out of date. This has the effect of marginally increasing ACT data compared with other cities (by about 3%). This data includes bulk retail locations in all cities. The general pattern is that the smaller cities where cost structures are lower tend to have a higher provision of retail floorspace per capita. It should also be noted that this data is for Square Metres of Net Selling Area. To convert this to Gross Leasable or Net Lettable Area involves the addition of approximately 30-33% depending on the city. NSA & GLA (=NLA approx) data for this study region is provided in Appendix A.

D.3 Population Growth

Table D.3 provides a summary of projected population growth in the Region and relevant subregions.

Table D.3 Total Population & % Increase p.a. over period 2009 - 2031 ('000)

	2009	2021	2031	2006⇒2021	2021⇒2031
Study Region (a)	1336.8	1517.4	1620.9	+1.1%	+0.7%
Alkimos/Eglinton Sub-region (b)	7.8	37.3	58.7	+13.9%	+4.6%
Alkimos District	7.6	23.1	25.1	+9.7%	+0.8%
Eglinton District	.2	14.1	33.6	..	+9.1%

(a) See Appendix A /A002 for list of suburbs and LGAs

(b) Ultimate Population for Alkimos and Eglinton, which is marginally higher than forecast for 2031.

In 2006 the widely defined Study Region has 1,218,000 people spending \$11,316m (in 2005\$), increasing to 1,1337,000 by 2009, spending \$16,2517m In \$2006. (See Table E.1).

In 2009 the Alkimos/Eglinton sub district has 7,800 people spending \$73m, increasing to 58,700 people by 2031/2 spending \$722m.

E. Analysis of Spending Trends in Region, Main Catchment and Alkimos/Eglinton

The following Table E.1 shows total spending dollars available and projected total percentage increases over the period from 2009 to 2031, for the Study Region, Main Catchment and Alkimos/Eglinton sub-region and district.

Table E.1 Total Spending All Retail \$m (2006) % Increase p.a. over period

	2009	2021	2031	2009⇒2021	2021⇒2031
Study Region (a)	16251	20102	22234	+1.8%	+1.0%
Alkimos/Eglinton Sub-region (b)	73.1	436.8	721.8	+16.1%	+5.2%
Alkimos District	71.2	278.5	324.0	+12.0%	+1.5%
Eglinton District	1.9	158.3	397.8	..	+9.7%

Footnotes see Table D3 above

F. Over/Under Supply of Shops Based on Option A

The following Tables F.1-F.4 show projections of total population, spending, floorspace which can be supported and the net over/under supply for the years 2006– 2031 Apart from the assumed additions to Alkimos/Eglinton, a substantial number of other competing centres are expanded or added. A full listing of these is provided as Attachment A. An additional 377,000M² NSA equivalent to approximately 503,000M² GLA is added to the Main Catchment. This includes the Alkimos/Eglinton proposals totalling approximately 99,400M² GLA Retail. The major additions are in existing and proposed Town Centres with a number of additions and expansions spread along the north west corridor. Results presented in this section are based on Option A Retail floorspace. Tables showing summary results for Option B are provided in Appendix B

Table F.1 Demand for Shops 2006 (2006\$) (TOTAL RETAIL) ABSOLUTE

2006 (\$2006)	Resident Population	Spending \$000	Shops M2 Required	Shops M2 Existing	Shops M2 Surp.Def
Alkimos	192	1795	274	0	-274
Eglinton	192	1724	261	0	-261
Alkimos.Eglinton	384	3519	535	0	-535
Near East	1564	15450	2414	507	-1908
Butler-Quinns	20149	182788	28546	5005	-23541
Clarkson	16017	166666	26087	23246	-2842
Yançep2Rocks	5180	36067	5526	1804	-3722
Joondalup Nth	52629	581061	91558	100404	8844
Bal Wanneroo	31105	290153	45581	10880	-34701
Subtotal	127028	1275704	200247	141846	-58405
Main Catchment	759936	8710136	1378052	1493390	115338
Region Total	1277012	14513291	2300258	2283655	-16602

At 2006 there is an oversupply of shop floorspace in the Main Catchment, which is offset by deficiencies in fringe areas so that the North Perth region is approximately in balance in absolute terms.

Table F.2 Demand for Shops 2011 (2006\$) (TOTAL RETAIL) ABSOLUTE

2011 (\$2006)	Resident Population	Spending \$000	Shops M2 Required	Shops M2 Existing	Shops M2 Surp.Def
Alkimos	12483	129517	19523	4658	-14866
Eglinton	195	2139	329	0	-329
Alkimos.Eglinton	12678	131656	19852	4658	-15195
Near East	2015	21038	3295	507	-2789
Butler-Quinns	31540	326822	50785	34749	-16037
Clarkson	22436	251026	39402	35504	-3899
Yançep2Rocks	7777	58307	8918	5522	-3397
Joondalup Nth	55634	663610	104443	124695	20250
Bal Wanneroo	41527	432077	67522	19918	-47604
Sub Total	173607	1884536	294217	225553	-68671
Main Catchment	834163	10387215	1640311	1691633	51320
Region Total	1376711	17208200	2721179	2496558	-224621

By 2011 with only a local centre and some small shops in Alkimos there would be a substantial deficiency of shop floorspace in the Alkimos Eglinton Sub-region resulting in a high level of escape spending, as shown in the table G.1 at page 24.

Table F.3 Demand for Shops 2016 (2006\$) (TOTAL RETAIL) ABSOLUTE

2016 (\$2006)	Resident Population	Spending \$000	Shops M2 Required	Shops M2 Existing	Shops M2 Surp.Def
Alkimos	21770	246398	36909	16033	-20877
Eglinton	3338	33091	5009	0	-5009
Alkimos.Eglinton	25108	279489	41918	16033	-25886
Near East	2410	25803	4050	507	-3543
Butler-Quinns	36639	389482	60451	36910	-23542
Clarkson	23344	268944	42305	41563	-743
Yançep2Rocks	16369	120988	18350	6602	-11749
Joondalup Nth	56136	689890	108778	149608	40828
Bal Wanneroo	47492	509693	79800	29599	-50202
Sub Total	207498	2284289	355652	280822	-74837
Main Catchment	891948	11368437	1795069	1746902	-48167
Region Total	1450586	18723080	2961561	2570278	-391284

By 2016 even with the proposed additional shops in Alkimos there would be a substantial deficiency of shop floorspace in the Alkimos Eglinton Sub-region resulting in a continuing high level of escape spending, as shown in the table G2 at page 25.

Table F.4 Demand for Shops 2021 (2006\$) (TOTAL RETAIL) ABSOLUTE

2021 (\$2006)	Resident Population	Spending \$000	Shops M2 Required	Shops M2 Existing	Shops M2 Surp.Def
Alkimos	23198	278485	41890	27247	-14644
Eglinton	14103	158324	23650	6935	-16715
Alkimos.Eglinton	37301	436809	65540	34182	-31359
Near East	2785	30095	4728	507	-4221
Butler-Quinns	38919	424654	65963	36910	-29053
Clarkson	23050	269705	42408	42238	-171
Yançep2Rocks	26967	203554	30852	6602	-24250
Joondalup Nth	56466	710753	112222	149608	37384
Bal Wanneroo	51369	566756	88891	37042	-51851
Sub Total	236857	2642326	410604	307089	-103521
Main Catchment	945004	12297650	1941913	1778240	-163673
Region Total	1517449	20101768	3181061	2601616	-579445

By 2021 even with the proposed additional shops in Alkimos there would be an increased substantial deficiency of shop floorspace in the Alkimos Eglinton Sub-region resulting in a continuing high level of escape spending, as shown in the table G2 at page 25.

Table F.5 Demand for Shops 2031 (2006\$) (TOTAL RETAIL) ABSOLUTE

2031 (\$2006)	Resident Population	Spending \$000	Shops M2 Required	Shops M2 Existing	Shops M2 Surp.Def	M2 NSA Per cap
Alkimos	25110	324058	49046	53099	4052	2.11
Eglinton	33621	397870	59506	20168	-39339	0.60
Alkimos.Eglinton	58731	721928	108552	73267	-35287	1.25
Near East	3583	38862	6104	507	-5597	0.14
Butler-Quinns	41484	462825	72085	52868	-19218	1.27
Clarkson	25298	306828	48285	42238	-6048	1.67
Yançep2Rocks	43515	340061	51627	43602	-8026	1.00
Joondalup Nth	57135	733277	115873	149608	33733	2.62
Bal Wanneroo	55106	621973	97533	37042	-60493	0.67
Sub Total	284852	3225754	500059	399132	-100936	1.40
Main Catchment	1025063	13717246	2165828	1870283	-295545	1.82
Region Total	1620943	22235532	3520022	2693659	-826363	1.66

By 2031, assuming the ultimate population for planning purposes, even with the proposed additional shops in Alkimos and the increase of Alkimos Town Centre to 65,000 M² GLA, there would be an increased substantial deficiency of shop floorspace in the Alkimos Eglinton Sub-region resulting in a continuing high level of escape spending, as shown in the table G2 at page 25. The provision of M2 NSA per capita for the Alkimos Eglinton Subregion @ 1.25 is below the Wanneroo North Subtotal and well below the Main Catchment and region provisions. It is also well below the current Perth + 2M level of 1.69 M² NSA/Cap

There will of course be other proposed retail developments of various sizes and type, which are not yet on the drawing boards. However, the continuing large deficiency of shop floorspace at all subregional levels even after allowing for the proposals listed in this report, provides ample scope for these to occur, without affecting the proposals for Alkimos and Eglinton.

These tables are calculated in Net Selling Area terms to enable more valid comparisons between bulk retail and other retail. M² NSA can be converted to GLA approximately by adding about 32%.

Appendix A provides several tables which detail the difference between the optimum number M² of shops floorspace required and that which is existing, by category of retail and summed by major sub-region.

The following Table F.6 shows the net over/under supply of shops measured in M² Net Selling Area in the Alkimos/Eglinton Study Region for each sub-region @ 2011.

Table F.6 Under(-)/Over(+) Supply of Shops (M² NSA) in Sub-region in 2011

District	SPMKT	MEALS	HOMEWARES	OTHER	TOTAL
Alkimos SW	-2600	-1107	-2768	-2417	-8896
Alkimos SE	2914	70	-4	576	3556
Alkimos NE	-2709	-1187	-2945	-2680	-9526
Alkimos	-2395	-2223	-5717	-4520	-14865
Eglinton					
Eglinton SW	-27	-11	-29	-26	-98
Eglinton SE	-30	-19	-39	-40	-132
Eglinton Nth	-27	-12	-29	-26	-99
Eglinton	-84	-42	-97	-92	-329
Alkimos+Egltn	-2479	-2265	-5814	-4612	-15194
Near East	-620	-182	-971	-997	-2788
Butler-Quinns	841	-3226	-9598	-4050	-16039
Clarkson	-1480	-2710	1340	-1048	-3899
Yançep2Rocks	1020	-293	-2322	-1786	-3396
Wanneroo NWST	-2706	-8673	-17357	-12485	-41312
Joondalup Nth	96	-6681	19027	7811	20249
Wanneroo SW	-2597	-15354	1678	-4672	-21061
Bal Wanneroo	-8777	-5837	-16773	-16157	-47604
Wanneroo Region	-11374	-21191	-15097	-20829	-68665
Main Catchment	-19708	-16749	23054	64724	51320
North Perth	-74789	-76771	-53475	-19582	-224621

This table shows that in absolute terms, ie before taking into account the quality and nature of some of the floorspace, the Region overall is undersupplied in all categories in 2011. There is an undersupply in all broad categories of retail floorspace in Alkimos/Eglinton District, and generally throughout the Wanneroo region (including Joondalup Nth with its huge amount of bulk retail and Lakeside). Weighting the floorspace for its type and quality would slightly increase the effective floorspace in Supermarket categories and reduce it significantly in Homewares, resulting overall in an increased deficiency in total. .

Table F.7 Under(-)/Over(+) Supply of Shops (M² NSA) in Sub-region in 2021

District	SPMKT	MEALS	HOMEWARES	OTHER	TOTAL
Alkimos SW	-2428	-501	-2852	-1709	-7493
Alkimos SE	6303	262	1846	8163	16577
Alkimos NE	-7179	-2916	-7160	-6468	-23728
Alkimos	-3304	-3153	-8165	-15	-14644
Eglinton SW	-3038	-1222	-4134	-3725	-12123
Eglinton SE	477	-926	-2359	-1669	-4479
Eglinton Nth	-29	-15	-34	-31	-113
Eglinton	-2587	-2163	-6527	-5425	-16715
Alkimos+Egltn	-5891	-5316	-14692	-5440	-31359
Near East	-955	-407	-1366	-1476	-4221
Butler-Quinns	-1217	-5300	-13316	-9212	-29053
Clarkson	-407	-2341	2224	348	-172
Yançep2Rocks	-4678	-3035	-8440	-8076	-24251
Joondalup Nth	455	-5775	25000	17707	37383
Bal Wanneroo	-5635	-8719	-20203	-17241	-51850
Wanneroo Region	-18290	-30892	-30771	-23379	-103518
Main Catchment	-69091	-53549	-33886	-7143	-163673
North Perth	-152815	-137364	-147876	-141385	-579445

By 2021 there is still a deficiency in all categories in Alkimos, Eglinton and the Wanneroo region. The large deficiency in Homewares in Alkimos + Eglinton provides scope for additional bulk retail floorspace.

Table F.8 Under(-)/Over(+) Supply of Shops (M² NSA) in Sub-region in 2031

District	SPMKT	MEALS	HOMEWARES	OTHER	TOTAL
Alkimos SW	-2513	-568	-3017	-1828	-7930
Alkimos SE	7898	1065	6013	22444	37424
Alkimos NE	-7482	-3232	-7786	-6938	-25442
Alkimos	-2097	-2735	-4790	13676	4051
Eglinton SW	-5089	-2206	-6257	-5693	-19249
Eglinton SE	2382	-1200	-1978	1295	499
Eglinton Nth	-5581	-2343	-6604	-6057	-20589
Eglinton	-8285	-5749	-14839	-10454	-39338
Alkimos+Egltn	-10382	-8484	-19629	3217	-35287
Near East	-1289	-605	-1770	-1915	-5597
Butler-Quinns	-1334	-5689	-11361	-838	-19219
Clarkson	-1779	-3207	466	-1528	-6049
Yançep2Rocks	-4673	-3814	-1537	2018	-8025
Joondalup Nth	-423	-6170	23984	16352	33732
Bal Wanneroo	-7774	-9948	-22781	-19923	-60492
Wanneroo Region	-27623	-37917	-32602	-2649	-100932
Main Catchment	-107565	-81107	-74162	-32708	-295545
North Perth	-217262	-180793	-221655	-206648	-826362

By 2031, assuming the ultimate population and Alkimos Town Centre @ 65,000 M² GLA there is still a deficiency in all categories except the miscellaneous “OTHER” group, which is in approximate balance, based on the assumed floorspace mix used in this analysis.

G. Escape/Captured Spending from Alkimos/Eglinton Sub-Region

Table G.1 following shows estimated escape/captured spending from the Alkimos/Eglinton District in 2011 for total of all retail.

Table G.1 Escape and Captured Spending 2011 Alkimos/Eglinton District (\$m)

Source	Total	Allocated to (% of Total)		
	Spending	District		Other Area
District	131.7	12.5	9.5%	119.1 90.5%
Other Areas	17077.3	4.0		17073.3
Region Total	17209.0	16.5		17192.5

In 2011, it is estimated that only \$12.5m, (or 9.5%) of the total of \$131.7m spending available from the Alkimos/Eglinton District is retained within the Sub-region. The balance of \$4.0m captured from outside this District is less than the \$119m currently escaping from the District to other locations. Net lost escape spending is \$115m, equivalent to 87% of total spending generated from within the District.

Table G.2 Summary of Escaped & Captured Spending –Various Options Alkimos/Eglinton \$m (2006\$)

Year	Total \$m Available	\$m Retained	% Retained	\$m Escape	Captured \$m	Total Sales in Dist \$m	Net escape Captured \$m	Net as % of \$ Available
2011	131.7	12.5	9.5%	119.1	4.0	16.5	115.2	87.5%
2021	436.8	212.3	48.6%	224.5	73.0	285.4	151.4	34.7%
*2031.1	721.9	413.4	57.3%	308.5	116.1	529.5	192.4	26.7%
*2031.2	722.0	427.7	59.2%	294.3	141.2	568.8	153.2	21.2%

*2031.1= Without Additional Town Centre Space 2031.2= Without Additional Town Centre Space

This shows that the escape spending reduces as the provision of shop floorspace is increased over time, but still remains at a high level. Similarly captured trade increases over time, mostly from nearby suburbs.

H. Estimated Sales Levels in Alkimos and Eglinton Proposed Centres

Many factors have an influence on the sales performance of shopping centres. Five critical factors are :-

1. The shape and nature of the catchment, preferably a **360° degree catchment**.
2. **Good vehicular access** to adequate carparks from **all directions**
3. **Features** of the centre which appeal to potential customers, which will vary depending on the type of centre. This features include, *inter alia*:
 - 3.1. Shop mix eg Department stores and DDSs as well as specialty and other shops in a regional or sub-regional centre
 - 3.2. Functional design. A good indicator of this is the ratio of Total M² floorspace divided by time taken to find a carpark and then walk past every shop front in the centre and return to car. A higher score = better functionality
 - 3.3. A quality full line supermarket in neighbourhood centres
 - 3.4. Entertainment components, whether that is good eateries or restaurants in a small centre and/or cinemas in a large centre, or perhaps a water/coastal outlook in a seaside or other centres.
 - 3.5. Location on a major or significant road, without undue impediments to access and exposure.
4. A high level of **security, ambience** and in larger centres proximity to other non-retail services.
5. Suitable **distance/travel time** from major **competition**.

The relative importance of each of these factors varies depending on the type of centre.

H.1 Relative Merits of each Site under consideration

The following table H.1 compares the merits of the 3 types of sites based on these criteria.

Table H.1a Description of Major Alkimos Sites Merits

Criterion		Alkimos Sites		
#	Brief Description	Town Centre	Coastal Villages	Other
1	360° degree catchment	Good main roads on all sides	Limited to 180°	Varies depending on local road and bus network
2	Good access all directions	✓	Ditto	Road and proposed bus routes provide good access
3	Features	Regional Centre + major employment node	Seaside ambience with shop/ restaurant mix to match	none
4	Security, ambience	✓	✓	low
5	Distance major competition	✓	✓	Depends on final locations

Table H.1b Description of Major Eglinton Sites Merits

Criterion		Eglinton Sites		
#	Brief Description	Town Centre	Coastal Village	Other
1	360° degree catchment	Good main roads on all sides	Limited to 180°	Varies depending on local road and bus network
2	Good access all directions	✓	Depends on final locations	Road and proposed bus routes provide good access
3	Features	Substantial centre + employment node	Seaside ambience with shop/ restaurant mix to match	none
4	Security, ambience	✓	?	low
5	Distance major competition	✓	✓	Depends on final locations

H.2 Estimates of Sales Levels and Impacts on Other Shops

Table H.2 shows estimates of sales levels in all shops in each suburb or District at 2006 and then 2009 with additional shops trading as a base case for comparison with similar data in later years.

Table H.2 Estimates of Sales in Shops by Suburb/District 2006 & 2009 (2006\$)

Suburb	\$000 2006	\$000 2009	% +/-	\$/M2NSA 2006	\$/M2NSA 2009	% +/-	\$000 +/-	M2 NSA +/-
Alkimos SW	0	0	0	0	0	0	0	0
Alkimos SE	0	0	0	0	0	0	0	0
Alkimos NE	0	0	0	0	0	0	0	0
Alkimos	0	0	0	0	0	0	0	0
Eglinton	0	0	0	0	0	0	0	0
Eglinton SW	0	0	0	0	0	0	0	0
Eglinton SE	0	0	0	0	0	0	0	0
Eglinton Nth	0	0	0	0	0	0	0	0
Eglinton	0	0	0	0	0	0	0	0
Alkimos+Egltn	0	0	0	0	0	0	0	0
District								
Near East	3784	4278	13	7463	8437	13	494	0
Butler-Quinns	28558	98983	247	5705	6509	14	70425	10200
Clarkson	131033	246687	88	5636	7242	29	115654	10815
Yançep2Rocks	12197	14452	19	6761	8011	19	2255	0
Joondalup Nth	571188	760497	33	5688	6282	10	189309	20649
Bal Wanneroo	67531	95570	42	6206	6391	3	28039	4072
Wanneroo Region	814291	1220467	50	5740	6506	13	406176	45736
Total Main Catch	9155831	10330452	13	6130	6516	6	1174621	91829

There are no shops in Alkimos before 2009.

Table H.3 Estimates of Sales in Shops by Suburb/District 2011 & 2016 (2006\$)

Suburb	\$000	\$000	%	\$/M2NSA	\$/M2NSA	%	\$000	M2 NSA
	2011	2016	+/-	2011	2016	+/-	+/-	+/-
Alkimos SW	1162	12445	971	5330	5146	-4	11283	2200
Alkimos SE	15369	84456	450	3461	6802	97	69087	7975
Alkimos NE	0	12076	0	0	10063	0	12076	1200
Alkimos	16531	108977	559	3548	6797	92	92446	11375
Eglinton SW	0	0	0	0	0	0	0	0
Eglinton SE	0	0	0	0	0	0	0	0
Eglinton Nth	0	0	0	0	0	0	0	0
Eglinton	0	0	0	0	0	0	0	0
Alkimos+Egltn	16531	108977	559	3548	6797	92	92446	11375
Near East	4329	5428	25	8538	10706	25	1099	0
Butler-Quinns	205189	196600	-4	5904	5326	-10	-8589	2161
Clarkson	260202	312842	20	7328	7526	3	52640	6059
Yanchep2Rocks	22354	34569	55	4048	5236	29	12215	1080
Joondalup Nth	821356	974083	19	6586	6510	-1	152727	24913
Bal Wanneroo	106466	160080	50	5345	5408	1	53614	9681
Wanneroo Region	1436427	1792579	25	6368	6383	0	356152	55269
Total Main Catch	11046377	12075121	9	6530	6912	6	1028744	55269

Note that trading rates expressed in total depend on the shop mix. Individual shop categories have wide differences in \$/M² rates, with Supermarkets and Bottle shops for example being high and furniture shops low. Details of sales by type of shop are provided in Appendix A. The additions to shop floorspace between 2009 and 2011 throughout the region result in only a slight overall increase in \$/M² rates (6516 to 6530), but they increase again by 2016 even with the additions including additions to areas outside the defined Main Catchment which are not shown in this table.

Table H.4 Estimates of Sales in Shops by Suburb/District 2021 & 2026 (2006\$)

Suburb	\$000	\$000	%	\$/M2NSA	\$/M2NSA	%	\$000	M2 NSA
	2021	2026	+/-	2021	2026	+/-	+/-	+/-
Alkimos SW	19284	19308	0	7315	7324	0	24	0
Alkimos SE	203671	263690	30	8699	8547	-2	60019	7440
Alkimos NE	10168	9753	-4	8473	8127	-4	-415	0
Alkimos	233123	292751	26	8555	8439	-1	59628	7440
Eglinton SW	25948	27466	6	9350	9897	6	1518	0
Eglinton SE	26309	69786	165	6324	6344	0	43477	6840
Eglinton Nth	0	28302	0	0	10198	0	28302	2775
Eglinton	52257	125554	140	7535	7586	1	73297	9615
Alkimos+Egltn	285380	418305	47	8348	8164	-2	132925	17055
Near East	5627	6160	10	11098	12149	10	533	0
Butler-Quinns	193911	231894	20	5253	5236	0	37983	7377
Clarkson	320319	337747	5	7583	7996	5	17428	0
Yanchep2Rocks	47133	180276	283	7139	4134	-42	133143	37000
Joondalup Nth	1025429	1056516	3	6854	7061	3	31087	0
Bal Wanneroo	182776	190918	5	4934	5154	5	8142	0
Wanneroo Region	2060575	2421816	18	6710	6571	-2	361241	61432
Total Main Catch	13056858	13943477	7	7342	7579	3	886619	61432

Reflecting the continuing undersupply of shops turnover rates continue to increase. Some \$/M2NSA rates in locations such as Joondalup and Clarkson reflect the lowering influence of bulk retail.

Table H.5 Estimates of Sales in Shops by Suburb/District 2031 (2006\$) Impact

Suburb	\$000	\$000	%	\$/M2NSA	\$/M2NSA	%	\$000	M2 NSA
	2031.1	2031.2	+/-	2031.1	2031.2	+/-	+/-	+/-
Alkimos SW	19073	17853	-6	7235	6772	-6	-1220	0
Alkimos SE (a)*	299041	345508	16	7809	7013	-10	46467	10972
Alkimos NE	9386	8535	-9	7821	7112	-9	-851	0
Alkimos	327500	371896	14	7774	7003	-10	44396	10972
Eglinton SW	32242	31388	-3	11618	11310	-3	-854	0
Eglinton SE	137990	134376	-3	9439	9192	-3	-3614	0
Eglinton Nth	31730	31151	-2	11434	11225	-2	-579	0
Eglinton	201962	196915	-3	10013	9763	-3	-5047	0
Alkimos+Egltn	529462	568811	7	8499	7763	-9	39349	10972
Near East	6536	6423	-2	12891	12668	-2	-113	0
Butler-Quinns	266307	257988	-3	5037	4879	-3	-8319	0
Clarkson	344480	340747	-1	8155	8067	-1	-3733	0
Yanchep2Rocks	197021	196267	0	4518	4501	0	-754	0
Joondalup Nth	1091585	1084388	-1	7296	7248	-1	-7197	0
Bal Wanneroo	200510	199813	0	5413	5394	0	-697	0
Wanneroo Region	2635901	2654437	1	6790	6650	-2	18536	10972
Total Main Catch	14651607	14653583	0	7880	7834	-1	1976	10972

(a) Additional 15,000 M2 GLA in Alkimos Town Centre

*2031.1= Without Additional Town centre Space 2031.2= Without Additional Town centre Space

The “point of time impact” effect of enlarging Alkimos Town Centre to 65,000 M² is not significant. All turnover rates are substantially higher than in 2006 and up to 2026. Impacts on other shops are not significant over time because of the general undersupply of shops.

I. Source of Trade in Alkimos Town Centre 2031

As an example of the source of trade in Alkimos Town Centre Table I.1 shows suburb details, which are also illustrated in Map 4.

Table I.1 SOURCE of Trade for Alkimos Town Centre in 2031 (\$2006)

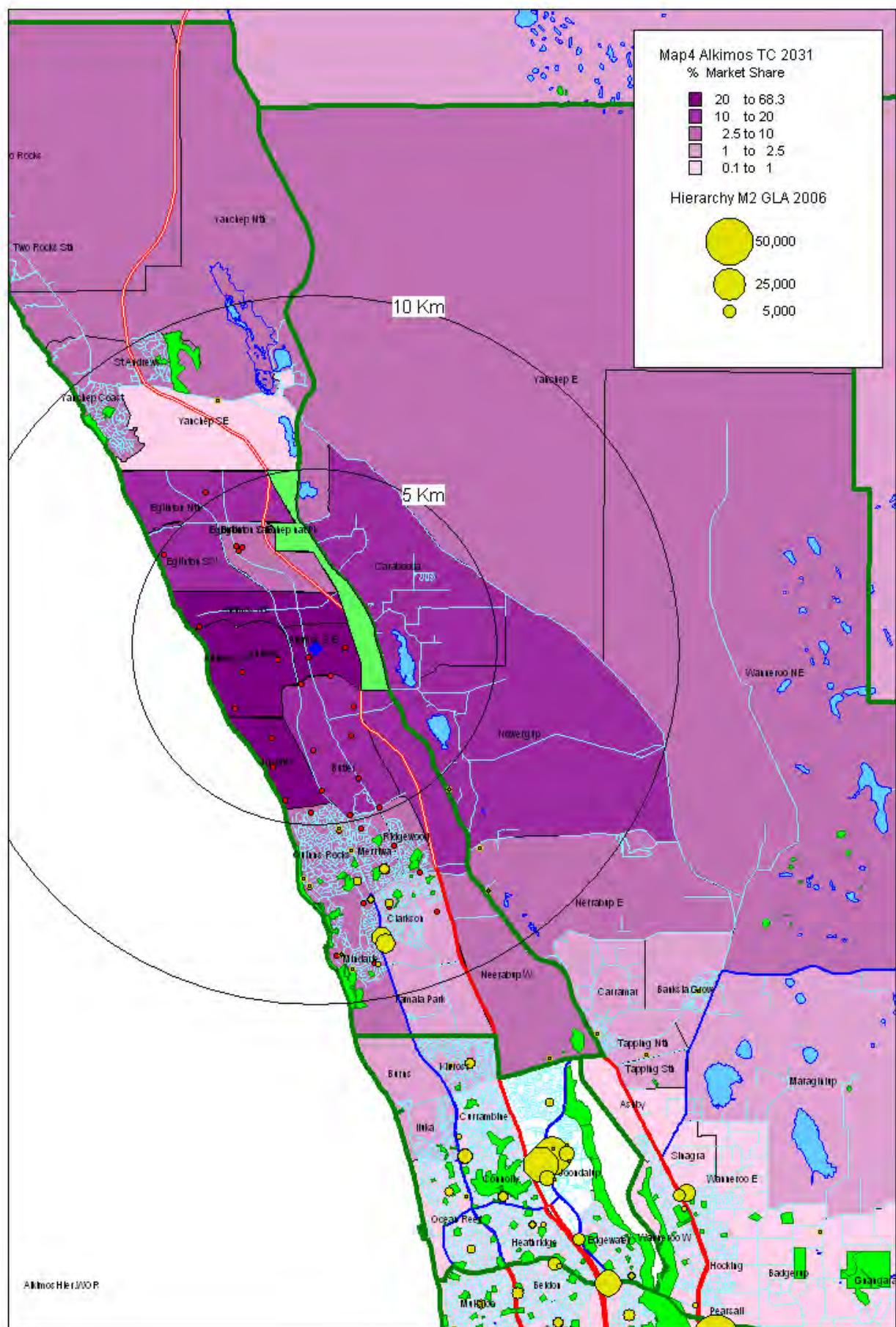
	Total #Pop	\$Available (a)\$000	Town Centre (b)%Share	Town Centre (c)\$000	Town Centre %Source
Alkimos SW	5624	70051	30	21025	8
Alkimos SE	5018	76589	68	52298	20
Alkimos NE	14468	177418	34	59467	23
Alkimos	25110	324058	41	132790	51
Eglinton SW	12755	147721	11	15728	6
Eglinton SE	7223	93091	6	5462	2
Eglinton Nth	13643	157058	7	11173	4
Eglinton	33621	397870	8	32363	12
Alkimos+Egltn	58731	721928	23	165153	63
Carabooda	1657	17999	18	3275	1
Nowergup	312	3123	11	339	0
Yanchep E	1210	12926	6	758	0
Wanneroo NE	404	4814	4	208	0
Near East	3583	38862	12	4580	2
Wanneroo NREST	62314	760790	22	169733	65
Butler	14169	162714	11	17732	7
Jindalee	6070	68630	21	14118	5
Merriwa	6070	55059	7	3557	1
Quinns Rocks	11132	129322	8	9783	4
Ridgewood	4043	47100	7	3495	1
Butler-Quinns	41484	462825	11	48685	19
Wanneroo BTLR	103798	1223615	18	218418	84
Clarkson	11133	124604	1	1747	1
Mindarie	12145	161223	3	4168	2
Tamala Park	2020	21001	2	494	0
Clarkson	25298	306828	2	6409	3
Wnro SE CLRKS	129096	1530443	15	224827	86
Two Rocks	24295	191559	3	5914	2
St Andrews	5059	37005	7	2459	1
Yanchep Cstl	6069	57275	6	3361	1
Yanchep SE	5060	40423	0	0	0
Yanchep Nth	3032	13799	4	591	0
Yanchep2Rocks	43515	340061	4	12325	5
Wanneroo NWST	172611	1870504	13	237152	91
Joondalup Nth	57135	733277	1	4355	2
Wanneroo SW	229746	2603781	9	241507	92
Bal Wanneroo	55106	621973	1	5648	2
Wanneroo Region	284852	3225754	8	247155	95
Other(a)				14787	5
North Perth	1620943	22235532	1	261942	100

(a)= Total retail available from residents etc of area

(b)= Amount spent in Alkimos TC from each area

(c) =Market penetration of Alkimos TC into each area

It is estimated that 51% of the Town centres trade will come from Alkimos, with 95% coming from the Wanneroo region. The market penetrations into the suburbs of Alkimos and to a much lesser extent Eglinton are quite high but are achievable on the assumption that there are no substantial expansions to DDS provision or other non-food retail floorspace in this sub-region other than specified in this report.



Map 4 Source of Trade Alkimos Town Centre in 2031 @ 65,000 M²

J. Conclusions

Several conclusions can be drawn from the *IBECON* analysis:

1. The turnover rates forecast for future years compare favourably with comparable similar shopping centre turnover rates for WA in today's dollars. While initially they are a little below the WA and Australian rates, these are exceeded in subsequent years.
2. Based on typical industry averages, each of the proposed extensions from a sales level point of view would appear to trade viably, (subject to the conditions and caveat listed below)
3. It has also been assumed that the Alkimos/Eglinton additions would be built to high standards so as to provide some enhanced appeal to residents of adjoining suburbs. This particularly applies to the Town Centres and coastal villages.
4. In future years when the railway is extended residential development along this north-western corridor will also escalate. The demographic projections used as the basis of this study should therefore be viewed as conservative. Faster growth rates in population will of course add to pressures for additional retail facilities in this corridor.
5. If for some reason population growth rates are slower than used in this study, the results are still valid for later years, as this is essentially a planning exercise to ensure that adequate provision is made for future retail requirements.
6. Generally the forecasts undertaken in this analysis have been conservative. Areas where more optimistic scenarios could be envisaged are higher population growth, increased jobs growth particularly in Alkimos/Eglinton Town Centre and possibly higher increases in real growth per capita.
7. The average rate of growth in real retail spending per capita used in this study from 2006 to 2031 has been 0.67% pa, compared with 1.9% over the period 1966 to 2006 and over 5% pa since 2001. A more realistic scenario would add real increases of 1% per annum over the next 10-12 years at least. Adding only 0.5% pa compounded for the next 25 yrs would add 13% to retail spending by 2031. This is equivalent to approximately \$94m in 2006\$ in the Alkimos Eglinton sub-region, enough spending to support another 15,000 M² NSA or about 20,000 M² GLA of retail floorspace.
8. There is a deficiency of 35,000 M² NSA by 2031 in the Alkimos Eglinton sub-region, assuming ultimate population (which is expected to be reached in 2032) and the Town Centre @ 65,000M² GLA retail. When combined with the 15,000 M² NSA from more realistic real spending growth assumptions, this would indicate scope for adding up to a further 50,000 M² NSA (=65,000 M² GLA) in this sub-region by 2031/2. This could be provided in a variety of formats ranging from local centres to bulk retail.

9. There is generally an undersupply in all categories of retail except "OTHER " which comprises mostly clothing and miscellaneous shops, in Wanneroo North region . This shop mix assessment is influenced by changes in spending patterns over time, and can be addressed in the future, as there is no immediate need to specify precise compositions at present.
10. The issue of accessibility to shops and means of transportation is relevant. Consideration is being given to bus services along a major arc throughout the subregion, to facilitate access to local, town and regional centres. This is preferable to a plethora of small unviable corner stores or very small local centres, which while appearing to provide easy access to shops by persons without vehicles, such as the elderly, teenagers or lower SEC groups, has a number of serious drawbacks, including some serious adverse social consequences.
11. My general view, supported by observation of numerous failures of the retail component of small isolated local centres throughout Australian cities, is that an appropriately designed public transport system not only provides access for lower SEC groups, with limited transport mobility, to lower priced goods and services in larger more economically feasible and hence cheaper centres, it avoids the high social costs of failed small retailers/centres. Such a transport system should not exclusively use large lumbering buses but a combination of standard commuter bus routes, specially routed mini buses, and where feasible, subsidised out of peak hours taxi services. This also provides younger, older, lonely and other isolated social groups access to larger socialisation populations in the larger centres, as well as better access to other services, including medical and social welfare. Transport systems such as these are working successfully in locations as diverse as high SEC New York & Mosman as well as outer lower SEC suburbs in Sydney and small country towns in NSW. The buses provided by clubs in Sydney to overcome drink driving issues are also an example of a variation of this approach which works.

Summary of Main Results and Conclusions

12. It is projected that Alkimos will reach an ultimate population of 25,125 by about 2025/26, with Eglinton reaching an ultimate population of 33,635 by about 2031/32, a total for the two suburbs of 58,760.
13. This population could then support approximately 108,550 M² Net Selling Area (NSA), equivalent to 144,700 M² retail Gross Leasable Area (GLA), which depending on definitions used, is significantly less than Net Lettable Area (NLA) using WA definitions.
14. The main and other centres simulated in this study at the ultimate population for Option A were as shown in following table:-

Table S.1 M² Floorspace Evaluated Option A

Centre/Location	Suburb (Map 2)	M ² GLA	Code #	Map 2 Locid #
Alkimos Regional Centre	Alkimos SE	65,000	949	3301-3306
Alkimos Coastal Village	Alkimos SW	2,500	6303	3310
Alkimos Nth Coastal Village	Alkimos NE/SW	1,500	6301	3308
Alkimos Nbhd	Alkimos SW	300	5571	3307
Alkimos Nbhd	Alkimos SW	300	6302	3309
Alkimos Nbhd	Alkimos SE	300	6311	3311
Romeo	Alkimos SE	300	5	3321
Romeo E	Alkimos SE	400	6	3322
Romeo W	Alkimos SE	800	4	3326
Total Alkimos (Above only)		71,400		
Eglinton District Centre	Eglinton SE	20,000	na	3401-3403
Eglinton Nbhd	Eglinton SW	4,000	na	3405
Eglinton Nbhd	Eglinton Nth	4,000	na	3406
Total Eglinton (Above only)		28,000		
Total Alkimos + Eglinton(Above only)		99,400		

Code # = City of Wanneroo ID #, Locid #=IBECON Location ID # in Table B1 @ page 9 + Map 2

15. Total proposed retail floorspace assessed in detail in this study for the Alkimos/Eglinton sub-region was 99,400 M² retail GLA.
16. There is a shortfall of retail floorspace in the Alkimos/Eglinton sub-region of over 45,000 M² retail GLA, when ultimate population supportable floorspace is compared with proposals assessed in this study.
17. It is recommended that initially about 20,000 M² be developed as bulk retail adjacent to the Alkimos Town Centre. Once the sub-regions population is fully developed this bulk retail floorspace could be converted to other commercial or community facilities.
18. Based on this analysis, it is recommended that a further 5-10,000 M² be allowed for as local/neighbourhood centres, spread throughout the Alkimos/Eglinton subregion.
19. These additional local centres would be best located on substantial roads in the suburbs shown in Map 1 as Alkimos SW, Alkimos NE, Eglinton Nth and Eglinton SW.

Option B Retail Floorspace Scenario and Results = Recommended Option

20. The main and other centres simulated in this study at the ultimate population for Option B were as shown in following table S.2:-

Table S.2 M² Floorspace Evaluated Option B

Centre/Location	Suburb (Map 2)	M ² GLA	Code #	Map 2 Locid #	<>Option A
Alkimos Regional Centre	Alkimos SE	65,000	949	3301-3306	=
Alkimos Coastal Village	Alkimos SW	3,000	6303	3310	+500M ²
Alkimos Nth Coastal Village	Alkimos NE/SW	1,500	6301	3308	=
Alkimos Nbhd	Alkimos SW	2,000	5571	3307	+1,700M ²
Alkimos Nbhd	Alkimos SW	0	6302	3309	-300M ²
Alkimos Nbhd	Alkimos SE	1,500	6311	3311	+1,200M ²
Romeo Rd	Alkimos SE	1,000	5	3321	+700M ²
Romeo Nbhd	Alkimos SE	3,000	6	3322	
Romeo W	Alkimos SE	0	4	3326	-800M ²
Total Alkimos (Above only)		77,000			
Eglinton District Centre	Eglinton SE	20,000	na	3401-3403	=
Eglinton Nbhd (Marina)	Eglinton SW	4,000	na	3405	=
Eglinton Nbhd	Eglinton Nth	4,000	na	3406	=
Eglinton Nbhd	Eglinton SW	500	na	3407	+500M ²
Eglinton Nbhd	Eglinton Nth	1,500	na	3408	+1,500M ²
Total Eglinton (Above only)		30,000			
Total Alkimos + Eglinton	(Excl Bulk retail)	107,000			
+ Bulk Retail	Eglinton SE	20,000	na		
Total including Bulk Retail	Alkimos+Eglinton	127,000			

Code # = City of Wanneroo ID #, Locid #=IBECON Location ID # in Table B1 @ page 9 + Map 2

21. In addition to standard retail, a further 20,000 M² GLA of bulk retail floorspace was considered as appropriate for a location adjacent to the Town centre.
22. This scenario (option B) resulted in continuing deficiencies of shop floorspace throughout the evaluation period, with a deficiency of 35,000 M² NSA, not including the bulk retail (of 10,000 M² NSA) with ultimate population in 2031, or 25,000 M² NSA if the bulk retail is included. This is equivalent to a deficiency of approximately 30-35,000 M² GLA which is equal to over 20% of the sub regions supportable retail floorspace.
23. All of the proposed Option B retail components would trade viably and are recommended.

K. Selected Population, SEC and other Retail data

Table K.1 Total Population

Suburb/Sub-region	BIRTH	CENSUS		IBECON	POPULATION	PROJECTIONS					
		1996	2001			2005	2006	2009	2011	2016	2021
Alkimos											
Alkimos SW	1.000	0	73	71	70	3403	5629	5629	5629	5629	5629
Alkimos SE	1.000	0	73	71	70	205	296	1684	3109	5021	5023
Alkimos NE	1.000	0	73	71	70	3973	6575	14475	14475	14475	14475
Alkimos		0	219	213	210	7581	12500	21788	23213	25125	25127
Eglinton											
Eglinton SW	1.000	0	73	71	70	70	70	70	9212	9212	12761
Eglinton SE	1.000	0	73	71	70	70	70	3213	4838	4838	6749
Eglinton Nth	1.000	0	73	71	70	70	70	70	70	10913	12715
Eglinton		0	219	213	210	210	210	3353	14120	24963	32225
Alkimos+Egltn		0	438	426	420	7791	12710	25141	37333	50088	57352
Near East											
Carabooda	1.500	74	395	838	952	1042	1103	1259	1403	1533	1662
Nowergup	1.000	59	235	248	252	258	262	279	294	307	319
Yançhep E	1.000	754	21	168	214	361	460	629	802	1024	1215
Wanneroo NE	1.000	74	123	160	170	196	212	263	309	359	409
Near East		961	774	1414	1588	1857	2037	2430	2808	3223	3605
Wanneroo NREST		961	1212	1840	2008	9648	14747	27571	40141	53311	60957
Butler-Quinns											
Butler	1.000	66	105	3617	4979	8054	10105	13521	14042	14333	14177
Jindalee	1.000	66	73	67	70	1036	1684	3120	5015	5631	6076
Merriwa	1.487	3008	4252	5379	5975	6173	6307	6241	6018	6143	6076
Quinns Rocks	0.908	3775	6308	6677	7161	8925	10105	10401	10364	10920	11139
Ridgewood	1.420	66	1020	1717	1992	2817	3368	3380	3510	3839	4050
Butler-Quinns		6981	11758	17457	20177	27005	31569	36663	38949	40866	41518
Wanneroo BTLR		7942	12970	19297	22185	36653	46316	64234	79090	94177	102475
Clarkson											
Clarkson	1.058	4880	6151	7644	8464	10795	12350	11441	11033	11261	11139
Mindarie	1.191	1788	4931	6651	7469	8711	9543	9881	10030	11261	12151
Tamala Park	1.000	10	10	78	100	376	561	2040	2005	2040	2025
Clarkson		6678	11092	14373	16033	19882	22454	23362	23068	24562	25315
Wnro SE CLRKS		14620	24062	33670	38218	56535	68770	87596	102158	118739	127790

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Suburb/Sub-region	BIRTH	1996	2001	2005	2006	2009	2011	2016	2021	2026	2031
Yançep2Rocks											
Two Rocks	1.500	2073	1788	2016	2191	2896	3368	6932	12954	18597	24303
St Andrews	0.502	649	742	697	727	796	842	801	1003	3071	5063
Yançep Coastal	0.462	1850	1396	1789	1992	2481	2807	4681	6018	6143	6076
Yançep SE	1.000	669	105	172	199	415	561	1872	4012	4607	5063
Yançep Nth	1.000	132	52	86	100	175	225	2111	3009	3071	3038
Yançep2Rocks		5373	4083	4760	5209	6763	7803	16397	26996	35489	43543
Wanneroo NWST		19993	28145	38430	43427	63298	76573	103993	129154	154228	171333
Joondalup Nth											0
Burns	1.500	181	220	2344	2845	3724	4313	4462	4597	4753	4909
Connolly	0.843	3594	3885	3748	3711	3846	3938	4117	4283	4278	4273
Currambine	0.950	3457	6315	6813	6923	7082	7188	7173	7138	7130	7121
Edgewater	0.936	5076	5096	4889	4834	4864	4886	4877	4854	4848	4843
Heathridge	0.931	7432	7384	7105	7030	7090	7132	7146	7138	7130	7121
Iluka	0.832	958	2963	3638	3793	3961	4073	4304	4521	4753	4985
Joondalup	1.020	5384	7322	7390	7397	7442	7475	7460	7424	7415	7406
Kinross	1.186	3970	6324	6606	6664	6919	7092	7078	7043	7035	7027
Ocean Reef	0.827	8103	8438	9292	9483	9543	9584	9564	9518	9507	9495
Joondalup Nth		38155	47947	51825	52680	54471	55681	56181	56516	56849	57180
Wanneroo SW		58148	76092	90255	96107	117769	132254	160174	185670	211077	228513
Bal Wanneroo											
Bal Wanneroo		15623	19734	27670	31185	37435	41609	47577	51453	53374	55183
Wanneroo Region		73771	95826	117925	127292	155204	173863	207751	237123	264451	283696
North Perth	0.870	1085730	1188835	1255914	1278023	1337752	1377699	1451576	1518457	1577074	1620536

There is strong growth projected for this sub-region in future years.

Table K.2 Population Growth Rates for the Region (Average Annual Increase #)

Suburb/Sub-region	1996- 2001	2001- 2005	2005- 2006	2006- 2009	2009- 2011	2011- 2016	2016- 2021	2021- 2026	2026- 2031
Alkimos									
Alkimos SW	14	0	-1	1111	1113	0	0	0	0
Alkimos SE	14	0	-1	45	45	277	285	382	0
Alkimos NE	14	0	-1	1301	1301	1580	0	0	0
Alkimos	42	0	-3	2457	2459	1857	285	382	0
Eglinton									
Eglinton SW	14	0	-1	0	0	0	1828	0	709
Eglinton SE	14	0	-1	0	0	628	325	0	382
Eglinton Nth	14	0	-1	0	0	0	0	2168	360
Eglinton	42	0	-3	0	0	628	2153	2168	1451
Alkimos+Egltn	84	0	-6	2457	2459	2485	2438	2550	1451
Near East									
Carabooda	64	110	114	30	30	31	28	26	25
Nowergup	35	3	4	2	2	3	3	2	2
Yançep E	-146	36	46	49	49	33	34	44	38
Wanneroo NE	9	9	10	8	8	10	9	10	10
Near East	-38	158	174	89	89	77	74	82	75
Wanneroo NREST	46	158	168	2546	2548	2562	2512	2632	1526
Butler-Quinns									
Butler	7	878	1362	1025	1025	683	104	58	-31
Jindalee	1	-1	3	322	324	287	379	123	89
Merriwa	248	281	596	66	67	-13	-44	25	-13
Quinns Rocks	506	92	484	588	590	59	-7	111	43
Ridgewood	190	174	275	275	275	2	26	65	42
Butler-Quinns	952	1424	2720	2276	2281	1018	458	382	130
Wanneroo BTLR	998	1582	2888	4822	4829	3580	2970	3014	1656
Clarkson									
Clarkson	254	373	820	777	777	-181	-81	45	-24
Mindarie	628	430	818	414	416	67	29	246	178
Tamala Park	0	17	22	92	92	295	-7	7	-3
Clarkson	882	820	1660	1283	1285	181	-59	298	151
Wnro SE CLRKS	1880	2402	4548	6105	6114	3761	2911	3312	1807

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Suburb/Sub-region	1996-	2001-	2005-	2006-	2009-	2011-	2016-	2021-	2026-
	2001	2005	2006	2009	2011	2016	2021	2026	2031
Yançep2Rocks									
Two Rocks	-57	57	175	235	236	712	1204	1128	1141
St Andrews	18	-11	30	23	23	-8	40	413	398
Yançep Coastal	-90	98	203	163	163	374	267	25	-13
Yançep SE	-112	16	27	72	73	262	428	119	91
Yançep Nth	-16	8	14	25	25	377	179	12	-6
Yançep2Rocks	-257	168	449	518	520	1717	2118	1697	1611
Wanneroo NWST	1623	2570	4997	6623	6634	5478	5029	5009	3418
Joondalup Nth									
Burns	7	531	501	293	294	29	27	31	31
Connolly	58	-34	-37	45	46	35	33	-1	-1
Currambine	571	124	110	53	53	-3	-7	-1	-1
Edgewater	4	-51	-55	10	11	-1	-4	-1	-1
Heathridge	-9	-69	-75	20	21	2	-1	-1	-1
Iluka	401	168	155	56	56	46	43	46	46
Joondalup	387	17	7	15	16	-3	-7	-1	-1
Kinross	470	70	58	85	86	-2	-7	-1	-1
Ocean Reef	67	213	191	20	20	-4	-9	-2	-2
Joondalup Nth	1956	969	855	597	603	99	68	69	69
Wanneroo SW	3579	3539	5852	7220	7237	5577	5097	5078	3487
Bal Wanneroo									
Bal Wanneroo	816	1979	3515	2084	2085	1189	770	379	358
Wanneroo Region	4395	5518	9367	9304	9322	6766	5867	5457	3845
North Perth	20621	16769	22109	19909	19973	14775	13376	11723	8692

Table K.3 Wanneroo Region Socio-Economic and Retail Data 2006 (2006\$)

Suburb/Sub-region	#Pop	Pop%	Age pa	Age %<18	Age %>65	#Job	#Tur	#Hhld	\$/Wk	\$000	NSAM2	NSAM2	NSAM2	#Mvs	Total
Area	Totl					Totl	0	Hhld		Totl	Reqd	Exist	+/-	Hhld	Reswf
Alkimos															
Alkimos SW	64	32.9	43.8	3.1	3.1	10	0	25	1368	587	89	0	-89	1.25	51
Alkimos SE	64	32.9	43.8	3.1	3.1	20	0	25	1368	620	95	0	-95	1.25	51
Alkimos NE	64	32.9	43.8	3.1	3.1	10	0	25	1368	588	90	0	-90	1.25	51
Alkimos	192	32.9	43.8	3.1	3.1	40	0	75	1368	1795	274	0	-274	1.25	153
Eglinton															
Eglinton SW	64	32.9	43.8	3.1	3.1	5	0	25	1368	574	87	0	-87	1.25	51
Eglinton SE	64	32.9	43.8	3.1	3.1	5	0	25	1368	574	87	0	-87	1.25	51
Eglinton Nth	64	32.9	43.8	3.1	3.1	5	0	25	1368	576	87	0	-87	1.25	51
Eglinton	192	32.9	43.8	3.1	3.1	15	0	75	1368	1724	261	0	-261	1.25	153
Alkimos+Egltn	384	32.9	43.8	3.1	3.1	55	0	150	1368	3519	535	0	-535	1.25	306
Near East															
Carabooda	945	19.4	29.6	4.8	90	0	296	1426	9194	1419	90	-1329	2.28	485	
Nowergup	245	1.1	33.1	6.9	0	0	73	1337	2200	345	417	71	2.20	121	
Yançhep E	209	0.0	44.0	2.4	184	0	70	1393	2271	365	0	-365	0.00	104	
Wanneroo NE	165	6.3	44.2	4.9	195	0	38	1422	1785	285	0	-285	2.13	57	
Near East	1564	12.6	33.6	4.8	469	0	477	1407	15450	2414	507	-1908	1.92	767	
Wanneroo NREST	1948	16.6	35.6	4.5	524	0	627	1397	18969	2949	507	-2443	1.76	1073	
Butler-Quinns															
Butler	4974	0.0	17.7	1.9	81	0	1658	1393	47335	7434	0	-7434	0.00	2487	
Jindalee	65	0.0	13.8	4.6	81	0	22	1393	879	142	0	-142	0.00	32	
Merriwa	5968	7.3	18.0	37.4	184	0	2041	1099	44483	6895	3137	-3758	1.53	2038	
Quinns Rocks	7156	2.9	33.7	7.2	368	0	2316	1413	70086	10915	1868	-9047	1.82	3342	
Ridgewood	1986	14.6	38.8	1.8	139	0	565	1552	20005	3160	0	-3160	1.88	919	
Butler-Quinns	20149	4.6	25.5	14.3	853	0	6602	1322	182788	28546	5005	-23541	1.27	8818	
Wanneroo BTLR	22097	5.7	26.4	13.4	1377	0	7229	1329	201757	31495	5512	-25984	1.31	9891	
Clarkson															
Clarkson	8458	6.9	29.3	10.1	1150	0	2589	1288	80792	12619	20739	8119	1.74	3744	
Mindarie	7463	9.0	33.3	4.0	460	6126	2243	1755	84796	13294	2507	-10787	1.97	3774	
Tamala Park	96	0.0	16.6	9.3	19	0	32	1393	1078	174	0	-174	0.00	48	
Clarkson	16017	7.8	31.1	7.3	1629	6126	4864	1504	166666	26087	23246	-2842	1.83	7566	
Wnro SE CLRKS	38114	6.6	28.4	10.8	3006	6126	12093	1399	368423	57582	28758	-28826	1.52	17457	

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Suburb/Sub-region	#Pop	Pop%	Age %<18	Age %>65	#Job	#Tur	#Hhld	\$/Wk	\$000	NSAM2	NSAM2	NSAM2	#Mvs	Total
Area	Totl	pa			Totl	0	Hhld		Totl	Reqd	Exist	+/-	Hhld	Reswf
Yançep2Rocks														
Two Rocks	2185	7.0	28.6	22.4	478	0	884	975	16099	2462	1804	-658	1.67	756
St Andrews	721	2.1	19.8	19.8	47	0	286	1029	4801	739	0	-739	1.59	292
Yançep Cstl	1986	7.6	39.1	5.5	47	0	742	1065	13517	2077	0	-2077	1.64	777
Yançep SE	192	18.7	40.6	2.6	0	0	76	923	1280	192	0	-192	1.67	148
Yançep Nth	96	44.1	39.6	2.1	47	0	37	570	370	56	0	-56	1.25	76
Yançep2Rocks	5180	7.7	32.0	14.4	619	0	2025	1006	36067	5526	1804	-3722	1.64	2049
Wanneroo NWST	43294	6.7	28.8	11.3	3625	6126	14118	1343	404490	63108	30562	-32548	1.54	19506
Joondalup Nth														
Burns	2841	67.2	40.1	10.7	160	0	1268	1213	21562	3356	0	-3356	1.71	1332
Connolly	3706	-0.7	31.6	5.4	400	0	1118	1725	41645	6531	1403	-5128	1.92	1989
Currambine	6917	2.1	33.7	5.9	800	0	2041	1736	78100	12291	4817	-7474	1.88	3489
Edgewater	4830	-0.8	27.6	7.4	998	0	1588	1583	56412	8916	22781	13864	1.89	2611
Heathridge	7024	-0.7	29.0	5.6	599	0	2465	1325	68005	10529	2016	-8513	1.76	3663
Iluka	3787	5.3	33.4	3.4	160	0	1079	1838	41032	6505	0	-6505	1.98	1935
Joondalup	7390	0.5	12.2	20.7	3996	0	2250	1495	94429	15054	64850	49795	1.77	3543
Kinross	6657	1.3	27.4	7.8	320	0	1985	1711	75545	11939	392	-11547	1.86	3394
Ocean Reef	9477	2.6	26.1	15.2	599	0	2849	1669	104331	16437	4145	-12292	2.02	5044
Joondalup Nth	52629	4.8	27.5	10.0	8032	0	16643	1579	581061	91558	100404	8844	1.87	27000
Wanneroo SW	95923	5.7	28.1	10.6	11657	6126	30761	1471	985551	154666	130966	-23704	1.72	46506
Bal Wanneroo														
Bal Wanneroo	31105	8.2	29.6	12.1	2198	61753	10134	1428	290153	45581	10880	-34701	1.68	15736
Wanneroo Region	127028	6.3	28.5	11.0	13855	67879	40895	1460	1275704	200247	141846	-58405	1.71	62242
North Perth	1277012	1.8	20.5	21.9	711141	8172796	466244	1371	14513291	2300258	2283655	-16602	1.68	633920

Table K.4 Wanneroo Region Socio-Economic and Retail Data 2031 (2006\$)

Suburb/Sub-region	#Pop	Pop%	Age pa	Age %<18	#Job	#Tur	#Hhld	\$/Wk	\$000	NSAM2	NSAM2	NSAM2	#Mvs	Total
Area	Totl				Totl	0	Hhld		Totl	Reqd	Exist	+/-	Hhld	Reswf
Alkimos														
Alkimos SW	5624	21.7	35.1	1.9	500	0	2184	1635	70048	10566	2636	-7930	1.25	4499
Alkimos SE	5018	21.3	38.4	1.7	4000	0	1949	1635	76552	11831	38291	26459	1.25	4014
Alkimos NE	14468	25.6	35.0	1.9	1000	0	5619	1635	177409	26640	1200	-25440	1.25	11574
Alkimos	25110	23.9	35.7	1.9	5500	0	9752	1635	324009	49037	42127	-6911	1.25	20087
Eglinton														
Eglinton SW	12755	25.1	39.4	2.6	500	0	4953	1635	147708	22021	2775	-19246	1.25	10204
Eglinton SE	7223	22.7	38.1	2.2	1800	0	2805	1635	93087	14118	14618	499	1.25	5778
Eglinton Nth	13643	25.4	42.0	1.9	500	0	5298	1635	157045	23362	2775	-20587	1.25	10914
Eglinton	33621	24.7	40.2	2.2	2800	0	13056	1635	397840	59501	20168	-39334	1.25	26896
Alkimos+Egltn	58731	24.3	38.3	2.1	8300	0	22808	1635	721849	108538	62295	-46245	1.25	46983
Near East														
Carabooda	1657	4.9	35.5	3.3	122	0	519	1705	17995	2792	90	-2702	2.28	850
Nowergup	312	1.0	35.6	1.0	0	0	93	1599	3123	489	417	-72	2.20	155
Yançep E	1210	0.0	38.3	2.1	251	0	403	1665	12920	2055	0	-2055	0.00	605
Wanneroo NE	404	4.1	35.1	1.3	267	0	93	1700	4813	767	0	-767	2.13	140
Near East	3583	2.8	36.4	2.5	640	0	1108	1681	38851	6103	507	-5596	1.43	1750
Wanneroo NREST	62314	23.1	38.2	2.1	8940	0	23916	1637	760700	114641	62802	-51841	1.26	48733
Butler-Quinns														
Butler	14169	0.0	24.1	4.3	111	0	4723	1665	162711	25362	39555	14192	0.00	7084
Jindalee	6070	0.0	23.4	2.9	111	0	2023	1665	68621	10612	3017	-7595	0.00	3035
Merriwa	6070	1.2	34.3	8.8	251	0	2075	1314	55058	8464	6013	-2451	1.53	2073
Quinns Rocks	11132	2.0	31.8	2.8	505	0	3603	1690	129310	20201	4071	-16130	1.82	5198
Ridgewood	4043	4.7	41.1	1.9	191	0	1150	1857	47090	7440	212	-7228	1.88	1872
Butler-Quinns	41484	1.2	29.2	4.1	1169	0	13574	1634	462790	72079	52868	-19212	0.88	19262
Wanneroo BTLR	103798	14.3	34.6	2.9	10109	0	37490	1636	1223490	186720	115670	-71053	1.12	67995
Clarkson														
Clarkson	11133	2.0	33.8	3.0	1577	0	3408	1541	124601	19449	37577	18127	1.74	4929
Mindarie	12145	3.1	34.5	3.2	630	8436	3651	2099	161216	25548	4661	-20887	1.97	6143
Tamala Park	2020	0.0	35.8	0.6	26	0	673	1665	20993	3287	0	-3287	0.00	1010
Clarkson	25298	2.4	34.3	2.9	2233	8436	7732	1815	306810	48284	42238	-6047	1.70	12082
Wnro SE CLRKS	129096	12.0	34.5	2.9	12342	8436	45222	1666	1530300	235004	157908	-77100	1.22	80077

Continued next page

Suburb/Sub-region	#Pop	Pop%	Age %<18	Age %>65	#Job	#Tur	#Hhld	\$/Wk	\$000	NSAM2	NSAM2	NSAM2	#Mvs	Total
Area	Totl	pa			Totl	0	Hhld		Totl	Reqd	Exist	+/-	Hhld	Reswf
Yançep2Rocks														
Two Rocks	24295	9.6	39.1	7.6	655	0	9835	1166	191547	28999	1804	-27195	1.67	8409
St Andrews	5059	7.1	25.6	22.8	64	0	2008	1231	36997	5725	0	-5725	1.59	2052
Yançep Cstl	6069	5.1	27.0	2.5	64	0	2267	1273	57270	8714	1080	-7634	1.64	2375
Yançep SE	5060	14.8	37.8	2.0	0	0	1990	1104	40423	6093	40718	34624	1.67	3907
Yançep Nth	3032	19.2	35.9	1.8	64	0	1177	681	13796	2091	0	-2091	1.25	2425
Yançep2Rocks	43515	10.0	35.5	7.6	847	0	17277	1147	340033	51622	43602	-8021	1.63	19168
Wanneroo NWST	172611	11.5	34.8	4.1	13189	8436	62499	1523	1870333	286626	201510	-85121	1.33	99245
Joondalup Nth														
Burns	4905	10.9	40.6	2.5	220	0	2189	1451	48078	7418	3642	-3776	1.71	2301
Connolly	4268	0.4	29.0	7.9	547	0	1287	2062	55773	8813	1403	-7410	1.92	2291
Currambine	7116	0.4	32.4	3.4	1097	0	2100	2076	98221	15597	7025	-8572	1.88	3590
Edgewater	4837	-0.1	26.8	10.3	1368	0	1591	1893	65171	10360	22781	12420	1.89	2615
Heathridge	7115	-0.1	24.2	12.5	821	0	2497	1584	78081	12163	2016	-10147	1.76	3710
Iluka	4980	1.8	31.2	3.6	220	0	1419	2198	63600	10163	0	-10163	1.98	2545
Joondalup	7402	0.1	27.1	6.0	5481	0	2253	1788	111699	17807	105994	88186	1.77	3549
Kinross	7021	0.4	34.5	2.8	440	0	2094	2047	90330	14254	2602	-11652	1.86	3580
Ocean Reef	9491	0.4	29.4	6.7	821	0	2853	1996	122271	19290	4145	-15145	2.02	5051
Joondalup Nth	57135	1.3	30.3	6.2	11015	0	18283	1875	733224	115865	149608	33741	1.86	29232
Wanneroo SW	229746	8.9	33.7	4.6	24204	8436	80782	1602	2603557	402491	351118	-51380	1.45	128477
Bal Wanneroo														
Bal Wanneroo	55106	3.6	32.0	5.5	3004	85043	17745	1699	621902	97523	37042	-60483	1.62	27125
Wanneroo Region	284852	7.9	33.3	4.8	27208	93479	98527	1620	3225459	500014	388160	-111863	1.48	155602
North Perth	1620943	1.1	26.9	8.7	1027800	13810187	591111	1638	22234252	3519824	2682687	-837138	1.68	818594

Attachment A Listing of all Additional Retail Floorspace M² NSA

Note that in instances where a trader or centre has been expanded the new size is shown this table, not the amount of the expansion.

Listing by Area in		North Perth		Jul 18, 2006		R4.	63	M2 NSA							
		Jul 18, 2006		R4.	63										
		Y1+Y2=2031(2006\$) Ultimate AlkEgl Popln Y2 =add Alk STG6 2031													
Open	Supermark	Meat+Fish	Fruit+Veg	MealsOut		Alchl+Tob	Cloth+Sho	Furn+Cove	Hardw+Ktc	MiscChem			TOTAL	Locid	
Alexander Hts 1006 0															
1 1 z Alexa Alexander Hts STG2	2008	1922	193	414	68	101	142	68	68	169			3145	6411	
TOTAL		1922	193	414	68	101	142	68	68	169			3145		
Alkimos SW 10161 0															
1 1 z ALKIM ALKIMOS NBHD(5571)	2011	40	9	14	29	3	46	11	17	49			218	3307	
1 1 z ALKIM ALKIMOS NBHD	2021	40	9	14	29	3	46	11	17	49			218	3309	
1 1 z ALKIM ALKIMOS NBHD	2015	250	50	50	650	100	300	0	50	750			2200	3310	
TOTAL		330	68	78	708	106	392	22	84	848			2636		
Alkimos SE 10162 0															
1 1 z ALKI1 Alkimos TC	2010	2963	60	90	188	20	458	75	113	473			4440	3301	
1 1 z ALKI2 Alkimos TC	2015	461	90	135	281	30	2712	495	1294	1159			6657	3302	
1 1 z ALKI3 Alkimos TC	2019	2801	350	525	469	50	3733	413	889	1766			10996	3303	
1 1 z ALKI4 Alkimos TC	2023	323	60	90	278	20	3728	645	1001	1295			7440	3304	
1 1 z ALKI5 Alkimos TC	2029	323	60	90	278	20	3728	645	1001	1295			7440	3305	
2 0 z ALKI6 Alkimos TC	2032	1226	270	405	844	90	4199	563	1114	2261			10972	3306	
1 1 z ALKIM ALKIMOS NBHD(6311)	2016	90	5	7	23	8	0	0	0	88			221	3311	
1 1 z ROMEO ROMEO (5)	2016	90	5	7	23	8	0	0	0	88			221	3321	
1 1 z ROMEO ROMEO E (6)	2016	120	6	9	30	10	0	0	0	117			292	3322	
1 1 z ROMEO ROMEO W (4)	2016	240	12	18	60	20	0	0	0	234			584	3326	
TOTAL		8637	918	1376	2474	276	18558	2836	5412	8776			49263		
Alkimos NE 10163 0															
1 1 z ALKIM ALKIMOS NBHD(6301)	2016	150	20	20	260	50	150	0	50	500			1200	3308	
TOTAL		150	20	20	260	50	150	0	50	500			1200		
Ashby 1041 0															
1 1 z ASHBY ASHBY	2011	289	66	99	206	22	339	83	124	355			1583	6525	
TOTAL		289	66	99	206	22	339	83	124	355			1583		
Balcatta 1061 0															
1 1 z BALCA BALCATTA HOMEMAKER	2007	0	0	0	0	0	0	7088	4725	3938			15751	2118	
TOTAL		0	0	0	0	0	0	7088	4725	3938			15751		
Banksia Grove 1081 0															
1 1 z Banks Banksia Grove	2011	38	15	23	26	8	0	0	0	30			140	3103	
1 1 z BANKS BANKSIA GROVE DC	2017	2381	40	45	150	30	2190	469	1088	1050			7443	3106	
1 1 z Banks Banksia Grove	2011	0	0	0	0	0	0	0	0	0			0	3109	
TOTAL		2419	55	68	176	38	2190	469	1088	1080			7583		
Burns 1201 0															
1 1 z Burns Burns BR1	2010	2250	200	300	150	67	150	0	150	375			3642	2820	
TOTAL		2250	200	300	150	67	150	0	150	375			3642		
Butler 1211 0															
1 1 z BRIGH BRIGHTON/Butler R(1)	2009	1735	195	266	263	53	552	263	263	750			4340	3601	
1 1 z BUTLE BUTLER LOCAL 1	2008	0	0	0	0	0	0	0	0	0			0	3602	
1 1 z MARMI MARMION STH (3)	2007	2156	163	244	188	63	0	0	0	825			3639	3603	
1 1 z BUTLE BUTLER R STG2+3 (1)	2011	1446	315	473	985	105	3867	776	1716	2369			12052	3606	
1 1 z BUTLE BUTLER REGIONAL STG4	2026	570	120	180	375	40	3429	375	833	1455			7377	3608	
1 1 z BUTLE BUTLER REGIONAL STG5	2027	272	45	68	254	15	4506	769	1195	1457			8581	3610	
1 1 z BUTLE BUTLER STH(13)	2011	94	38	56	66	19	0	0	0	75			348	3616	
1 1 z BUTLE BUTLER (2)	2011	450	23	34	113	38	0	0	0	439			1097	3620	

1 1 z BRIGH	BRIGHTON E (8)	2011	300	15	23	75	25	0	0	0	293	731	3621	
1 1 z BUTLE	BUTLER C (11)	2011	285	15	22	71	24	0	0	0	278	695	3622	
1 1 z LUKIN	LUKIN (12)	2011	285	15	22	71	24	0	0	0	278	695	3623	
	TOTAL		7593	944	1388	2461	406	12354	2183	4007	8219	39555		
Carramar	1256 0													
1 1 z CARRA	CARRAMAR EAST	2015	2265	270	279	98	33	0	0	0	505	3450	3105	
1 1 ws WOW/S	Carramar West	2008	1575	225	225	0	0	0	0	0	113	2138	3107	
1 1 z Carra	Carramar West	2008	150	32	36	120	24	252	120	120	300	1154	3107	
	TOTAL		3990	527	540	218	57	252	120	120	918	6742		
Claremont	1281 0													
1 1 z CLARE	CLAREMONT SC	2008	510	109	122	408	82	856	408	408	1019	3922	1004	
	TOTAL		510	109	122	408	82	856	408	408	1019	3922		
Clarkson	1286 0													
1 1 cs COL/S	OCEAN KEYS CENTRE	2009	2013	259	358	0	0	74	0	0	149	2853	3009	
1 1 ws WOW/S	OCEAN KEYS CENTRE	2009	1593	296	223	0	0	0	0	0	105	2217	3020	
1 1 ck COL/K	OCEAN KEYS CENTRE	2009	91	0	0	0	0	2262	362	1018	792	4525	3020	
1 1 z OCEAN	OCEAN KEYS CENTRE	2009	495	158	92	501	61	1453	305	355	1915	5335	3020	
1 1 z CLARK	CLARKSON 11	2009	900	40	45	150	30	315	150	150	413	2193	3017	
1 1 z Ainsb	Ainsbury (125)	2020	675	0	0	0	0	0	0	0	0	675	3011	
1 1 z OCEAN	OCEAN KEYS STG3(672)	2015	788	168	189	630	126	1323	630	630	1575	6059	3021	
	TOTAL		6555	921	907	1281	217	5427	1447	2153	4949	23857		
Currambine	1351 0													
1 1 z CURRA	CURRAMBINE	CU2	2009	900	100	150	150	67	225	83	83	450	2208	2813
	TOTAL		900	100	150	150	67	225	83	83	450	2208		
East Perth	1411 0													
1 1 z EAST	EAST PERTH	2011	1838	436	653	761	218	0	0	0	871	4777	423	
	TOTAL		1838	436	653	761	218	0	0	0	871	4777		
Eglinton SW	14361 0													
1 1 z EGLIN	EGLINTON NBHD	2021	750	300	450	525	150	0	0	0	600	2775	3405	
	TOTAL		750	300	450	525	150	0	0	0	600	2775		
Eglinton SE	14362 0													
1 1 z EGLIN	EGLINTON DIST STG1	2021	2330	253	379	164	18	420	66	98	432	4160	3401	
1 1 z EGLIN	EGLINTON DIST STG2	2026	517	98	146	305	33	2751	482	1196	1312	6840	3402	
1 1 z EGLIN	EGLINTON DIST STG3	2031	2035	220	330	141	15	362	56	85	374	3618	3403	
	TOTAL		4882	571	855	610	66	3533	604	1379	2118	14618		
Eglinton Nth	14363 0													
1 1 z EGLIN	EGLINTON NBHD	2026	750	300	450	525	150	0	0	0	600	2775	3406	
	TOTAL		750	300	450	525	150	0	0	0	600	2775		
Ellenbrook	1441 0													
1 1 **		2006	0	0	0	134	0	0	0	77	54	265	0	
1 1 ws WOW/S	Ellenbrook Mktplc	2006	2820	604	403	0	0	0	0	0	201	4028	6905	
1 1 z Ellen	Ellenbrook Mktplc	2006	25	60	0	300	0	1191	0	73	771	2420	6905	
1 1 z ELLEN	ELLENBROOK D.C.	2010	2651	295	398	563	90	8033	1388	2168	3281	18867	6903	
1 1 wb WOW/B	ELLENBROOK TC STG2	2011	158	0	0	0	0	2625	368	1050	1050	5251	6906	
1 1 z ELLEN	ELLENBROOK TC STG2	2011	2560	305	458	329	35	689	131	197	715	5419	6906	
1 1 z ELLEN	ELLENBROOK TC STG3	2018	55	2	90	5	60	3057	249	664	889	5071	6907	
	TOTAL		8269	1266	1349	1331	185	15595	2136	4229	6961	41321		
Helena Valley	1571 0													
1 1 z HELEN	HELENA VALLEY	2007	793	23	23	78	39	0	0	0	305	1261	5644	
	TOTAL		793	23	23	78	39	0	0	0	305	1261		
Hocking	1621 0													
1 1 z HOCKI	HOCKING	2007	0	0	0	225	0	0	0	0	300	525	2612	
	TOTAL		0	0	0	225	0	0	0	0	300	525		
Innaloo	1651 0													
1 1 nm NEWMA	INNALOO SC	2011	1850	200	200	0	0	0	0	0	50	2300	1811	
1 1 ws WOW/S	INNALOO SC	2011	2100	300	300	0	0	0	0	0	150	2850	1811	
1 1 tg TGT	INNALOO SC	2011	30	0	0	0	0	1950	150	375	495	3000	1811	

1 1 z	INNAL	INNALOO SC	2011	608	139	209	434	47	713	174	260	746	3330	1811
	TOTAL			4588	639	709	434	47	2663	324	635	1441	11480	
Jindalee	1666	0												
1 1 z	JINDA	JINDALEE N(7)	2008	150	8	11	38	13	0	0	0	146	366	3605
1 1 cs	COL/S	JINDALEE (9)	2013	1406	125	188	0	0	0	0	0	94	1813	3611
1 1 z	JINDA	JINDALEE (9)	2013	94	38	56	66	19	0	0	0	75	348	3611
1 1 z	JINDA	JINDALEE (10)	2011	66	27	40	46	13	0	0	0	53	245	3612
1 1 z	JINDA	JINDALEE (7)	2011	66	27	40	46	13	0	0	0	53	245	3615
	TOTAL			1782	225	335	196	58	0	0	0	421	3017	
Joondalup	1676	0												
1 1 wb	WOW/B	LAKESIDE JOONDALUP	2009	169	0	0	0	0	2813	394	1125	1125	5626	2716
1 1 z	LAKES	LAKESIDE JOONDALUP	2009	2237	593	818	2891	375	4365	633	1204	5823	18939	2716
1 1 z	LAKES	LAKESIDE JOONDALUP	2015	1313	300	450	2063	100	8290	4425	1913	6059	24913	2717
	TOTAL			3719	893	1268	4954	475	15468	5452	4242	13007	49478	
Kinross	1746	0												
1 1 z	SPMKT	SELKIRK/KINROSS	2008	1631	63	94	0	0	0	0	0	56	1844	2815
1 1 z	SELKI	SELKIRK/KINROSS	2008	150	8	11	38	13	0	0	0	146	366	2815
	TOTAL			1781	71	105	38	13	0	0	0	202	2210	
Landsdale	1771	0												
1 1 z	DARCH	DARCH SC	2011	263	56	63	210	42	441	210	210	525	2020	6520
	TOTAL			263	56	63	210	42	441	210	210	525	2020	
Madeley	1821	0												
1 1 z	MADEL	MADELEY SC	2011	281	60	68	225	45	473	225	225	563	2165	6521
	TOTAL			281	60	68	225	45	473	225	225	563	2165	
Marmion	1861	0												
1 1 sv	SUV	MARMION VILLAGE	2011	996	0	0	0	0	0	0	0	0	996	2001
1 1 sv	SUV	MARMION VILLAGE	2010	0	20	41	0	0	0	0	0	119	180	2001
1 1 z	MARMI	MARMION VILLAGE	2010	0	0	0	0	0	0	0	0	0	0	2001
	TOTAL			996	20	41	0	0	0	0	0	119	1176	
Merriwa	1896	0												
1 1 z	MERRI	MERRIWA STH(121)	2011	525	120	180	375	40	616	150	225	645	2876	3618
	TOTAL			525	120	180	375	40	616	150	225	645	2876	
Midland	1906	0												
1 1 wb	WOW/B	MIDLAND GATE	2008	180	0	0	0	0	3000	420	1200	1200	6000	5607
1 1 cs	COL/S	MIDLAND GATE	2008	2247	220	323	0	0	19	0	0	154	2963	5607
1 1 z	MIDL	MIDLAND GATE	2008	976	255	279	3279	97	3405	456	678	3780	13205	5607
	TOTAL			3403	475	602	3279	97	6424	876	1878	5134	22168	
Mindarie	1916	0												
1 1 z	Minda	Mindarie keys(675)	2007	94	38	56	66	19	0	0	0	75	348	3038
1 1 z	ANCHO	ANCHORAGE N(124)	2007	47	10	11	38	8	79	38	38	94	363	3050
1 1 z	Ancho	Anchorage (128)	2011	188	40	45	150	30	315	150	150	375	1443	3052
	TOTAL			329	88	112	254	57	394	188	188	544	2154	
Morley	1926	0												
1 1 wb	WOW/B	CENTRO GALLERIA	2010	182	0	0	0	0	3038	425	1215	1215	6075	6208
1 1 z	CENTR	CENTRO GALLERIA	2010	2982	374	491	698	140	1465	698	698	1885	9431	6208
	TOTAL			3164	374	491	698	140	4503	1123	1913	3100	15506	
Osborne Park	2066	0												
1 1 z	GATEW	GATEWAY CENTRAL	2007	0	0	0	0	0	0	1350	900	750	3000	1710
	TOTAL			0	0	0	0	0	0	1350	900	750	3000	
Pearsall	2101	0												
1 1 z	PEARS	PEARSALL	2011	197	42	47	158	32	331	158	158	394	1517	6522
	TOTAL			197	42	47	158	32	331	158	158	394	1517	
Perth	2111	0												
1 1 z	NORTH	NORTHBIDGE	2008	217	130	130	152	65	0	0	0	174	868	64
1 1 z	Raine	Raine Sq	2011	1313	125	281	0	63	0	0	0	0	1782	117
1 1 z	City	City Square	2008	1489	197	295	1214	42	0	0	0	251	3488	126
1 1 z	Westr	Westralia Sq	2008	1313	125	281	0	63	0	0	0	0	1782	127

	TOTAL											
Quinns Rocks	2136 0		4332	577	987	1366	233	0	0	0	425	7920
1 1 z Tappi	Tapping Way(667)	2008	612	31	46	153	51	0	0	0	596	1489 3053
1 1 z Quinn	Quinns N(9211)	2007	150	8	11	38	13	0	0	0	146	366 3054
1 1 z DUNCO	DUNCOMBE(119)	2011	94	38	56	66	19	0	0	0	75	348 3617
	TOTAL		856	77	113	257	83	0	0	0	817	2203
Ridgewood	2151 0											
1 1 z BP RI	BP RIDGEWOOD(122)	2011	106	0	0	106	0	0	0	0	0	212 3619
	TOTAL		106	0	0	106	0	0	0	0	0	212
Sinagra	2231 0											
1 1 z SINAG	SINAGRA	2011	315	72	108	225	24	370	90	135	387	1726 6524
	TOTAL		315	72	108	225	24	370	90	135	387	1726
Tapping Sth	23262 0											
1 1 z Tappi	Tapping	2009	180	0	0	0	0	0	0	75	0	255 3108
	TOTAL		180	0	0	0	0	0	0	75	0	255
Woodvale	2521 0											
1 1 ws WOW/S	WOODVALE BOULEVARDE	2007	1780	420	310	0	0	0	0	0	90	2600 2608
	TOTAL		1780	420	310	0	0	0	0	0	90	2600
Yanchep Cstl	25313 0											
1 1 z Yanch	Yanchep YA1	2012	375	75	113	150	67	0	0	0	300	1080 3506
	TOTAL		375	75	113	150	67	0	0	0	300	1080
Yanchep SE	25314 0											
1 1 z YANCH	YANCHEP REGIONAL	2025	4500	500	750	1500	500	11250	6000	6000	6000	37000 3505
1 1 z YANCH	YANCHEP 96	2015	188	75	113	131	38	0	0	0	150	695 3507
1 1 z YANCH	YANCHEP SPMKT	2010	1903	150	225	125	42	0	0	0	578	3023 3508
	TOTAL		6591	725	1088	1756	580	11250	6000	6000	6728	40718
Wanneroo E	24012 0											
1 1 z WANNE	WANNEROO CENTRAL	2015	2186	250	375	131	38	1950	150	375	776	6231 6501
	TOTAL		2186	250	375	131	38	1950	150	375	776	6231
Gosnells	3780 0											
1 1 **		2006	4090	1259	749	8642	1569	7179	10243	12454	20014	66199 0
1 1 **		2012	3421	610	897	886	267	3470	626	926	4499	15602 0
1 1 ac ACTIO	FOREST LAKE SC 2	2009	2180	190	285	0	0	0	0	0	100	2755 10805
1 1 ac ACTIO	MADDINGTON SC	2012	1779	155	233	0	0	0	0	0	82	2249 10900
1 1 z MADDI	MADDINGTON SC	2012	0	0	0	0	0	150	150	150	150	600 10900
1 1 ac ACTIO	Ranford Rd SC	2009	1836	160	240	0	0	0	0	0	84	2320 15515
1 1 ws WOW/S	Warton Rd woolies	2009	1575	225	225	0	0	0	0	0	113	2138 15523
	TOTAL		14881	2599	2629	9528	1836	10799	11019	13530	25042	91863
Kalamunda	4200 0											
1 1 **		2010	3863	240	360	394	63	94	0	0	649	5663 0
1 1 ac ACTIO	KALAMUNDA Glades	2008	861	75	113	0	0	0	0	0	40	1089 7618
1 1 z KALAM	KALAMUNDA Glades	2008	188	75	113	131	38	0	0	0	150	695 7618
	TOTAL		4912	390	586	525	101	94	0	0	839	7447
GRAND TOTAL			110369	15265	19572	37480	6305	115939	44862	54769	105600	510161