cranbourne east
precinct structure plan

Commercial/Retail Market Analysis

September 2007

CEUGP/SR13B

This Report has been prepared for:

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Population

In any demand analysis a population must be identified in order to plan for provision of services. This has been undertaken for Cranbourne East, based on an analysis of the Urban Development Program (UDP), and supplemented by SGS estimates of development. The population and development density assumptions are described in Table 1 below.

Table 1: Selected Population Scenarios

Scenario 1	Development Timing				
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	812	10,038	2,117	2,129	**15,097**
Sum of Lots	280	3,589	730	734	**5,333**
Scenario 2c					
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	1,226	12,567	2,117	1,448	**17,358**
Sum of Lots	423	4,461	730	499	**6,113**
Scenario 2d					
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	1,226	12,567	2,117	881	**16,792**
Sum of Lots	423	4,461	730	304	**5,918**

Source: SGS Estimate

Retail Demand

Policy Context

Council has adopted the Activity Centres Strategy to guide the planning of activity centres in Casey. The Strategy documents the future directions for the City regarding sustainability, urban form and character, population, housing, public amenity, employment, transport, physical infrastructure and provisions of development infrastructure, services and facilities.

The Strategy is a response to the State Government's Melbourne 2030 policy and incorporates a number of significant policy elements contained in local strategies including Casey C21 Strategy, Casey Business Development Strategy, Casey Municipal Strategic Statement and policy objectives for individual activity centres.

In terms of activity centres, the Strategy provides a general hierarchy of centres to guide planning including:

- **Principal Activity Centres** – represent municipal wide and regional level catchment in terms of population, employment, service provisions and also contain regional level entertainment, retailing, commercial, and community opportunities to the residents. These centres are

expected to cater for a population of over 100,000 persons. Fountain Gate, a nominated principal activity centre will have an additional 105,200 sqm of retail floorspace and 31,300 sqm of commercial floorspace by 2021.[1]

- **Major Activity Centres** – Likely to serve a population of 50,000 to 75,000 persons. The purpose of these centres is to provide a major employment and mixed activity precinct. It specifies that retail development in the form of discount department store and supermarket will be promoted, and the centres are also to serve as a day-to-day destination for shopping, commercial and community goods and services. Casey Central as a Major Activity Centre is projected to accommodate up to 50,000 sqm of retail floorspace and a significant amount of office development.
- **Neighbourhood Centres** – Designed with the aim of forging a community identity and to service the day-to-day retail needs of households. It is proposed they have a catchment population of 10,000 to 25,000 persons. Supermarkets will be the key anchor for the convenience-shopping component of the centre and, in addition, up to 12-20 retail and other tenancies are expected to be developed.
- **Convenience Centres** – In residential-based locations, these centres would form the basic unit of the activity centre network by serving a population of up to 4,000. Retail development in the form of a convenience store will have a community focus and up to five shops are expected to be on-site.
- **Peripheral Sales Precincts** – Specifically designed to house large bulky good tenancies in an integrated and defined precinct. Retail floorspace in the order of over 1,000 sqm per tenant is envisaged with complementary office floorspace.

Opportunities

Table 2 below presents the floorspace demand estimates based on various population scenarios. All the scenarios presented do not change the floorspace demand to a great extent. It is proposed, within all the scenarios, to provide 2 supermarkets (7,369-9,309sqm approx), clothing stores (472-596sqm) plus a variety of food, clothing and other retail of about 10,000sqm of floorspace. No department stores/discount department stores would be necessary.

[1] City of Casey (1999) Development Contribution Plan for Fountain Gate – Narre Warren District Centre

Table 2: Net Floorspace Demand/Retained Demand, 2006-31, Sqm

	Net Floorspace Demand/Retained Demand, 2006-31, Sqm										
Income Profile	**Lynbrook**			**Cranbourne East**			**Casey-Cranbourne**				
Population Scenario	**1**	**2c**	**2d**	**1**	**2c**	**2d**	**1**	**2c**	**2d**	**MIN**	**MAX**
Supermarkets	8,097	9,309	9,006	7,685	8,836	8,547	7,369	8,473	8,197	7,369	9,309
Department Stores	0	0	0	0	0	0	0	0	0	0	0
Other Food	2,084	2,397	2,318	1,978	2,275	2,200	1,897	2,181	2,110	1,897	2,397
Clothing	519	596	577	492	566	548	472	543	525	472	596
HH Goods	970	1,115	1,079	921	1,059	1,024	883	1,015	982	883	1,115
Other Retail	2,457	2,825	2,733	2,332	2,681	2,594	2,236	2,571	2,487	2,236	2,825
Hospitality and Services	2,681	3,082	2,982	2,544	2,926	2,830	2,440	2,806	2,714	2,440	3,082
Total	**16,808**	**19,325**	**18,695**	**15,953**	**18,342**	**17,743**	**15,298**	**17,589**	**17,015**	**15,298**	**19,325**

Source: SGS Estimates

Employment Demand

Policy context

In September 2002 Council adopted a municipal strategy entitled *Casey C21 A vision for our future (Casey C21).* The opportunities for Casey are identified below:

Monash University, together with Chisholm Institute and the new hospital will provide a foundation upon which to build diverse, dense, knowledge intensive business and industry. This precinct is to be known as the Casey Technology Park. The opportunity exists to create at least 10,000 jobs in this precinct in the long term.

Another opportunity, that will be able to build on the success of the Casey Technology Park is the proposed Fountain Gate Business Park, this is part of the Fountain Gate/Narre Warren CBD. This large business precinct has the potential to provide more than 20,000 jobs in the longer term.

If the development of these two precincts can be achieved, an array of benefits will flow to the whole Casey community. Equally, in the longer term, development may spill over into other precincts as opportunities are realised. There are opportunities for redevelopment along the Princes Highway or 'C21 corridor'. Achieving the development of these precincts will require a sustained local commitment and leadership.

Opportunities

The Cranbourne East study area is designated as a residential extension to Cranbourne. There would be some scope for jobs in the area but this is likely to be very limited. With the proposed Cranbourne West and Cranbourne North industrial precincts in close proximity, Cranbourne East will provide residential opportunities for this expanding local workforce.

In developing Cranbourne East, it is important to plan for the job demand generated by the new residential population. There is little provision in the study area for employment floorspace, apart from the opportunities provided within the activity centres. Therefore we have estimated the number of people who will require jobs and the types of jobs split by import, export and construction. Table 3 below summarises the demand for jobs based on the population scenarios.

Table 3: Job type Split Scenarios (2031)

Job Type	Casey-Cranbourne SLA	Cranbourne East 2031 (1)	Cranbourne East 2031 (2c)	Cranbourne East 2031 (2d)
Exports	18%	1,637	1,883	1,821
Local	64%	5,779	6,644	6,427
Construction	9%	784	902	872
50:50 (export:local)	10%	876	1,007	974
Total	**100%**	**9,077**	**10,436**	**10,095**

Source: SGS Estimate

It is expected that approximately 784 to 902 construction jobs will be required to service the future population of Cranbourne East. Similarly between 5,770 and 6,644 local jobs will need to be provided, as well as between 1,637 and 1,883 export based jobs, with the remainder split between export and local jobs.

1 Introduction

1.1 The Brief

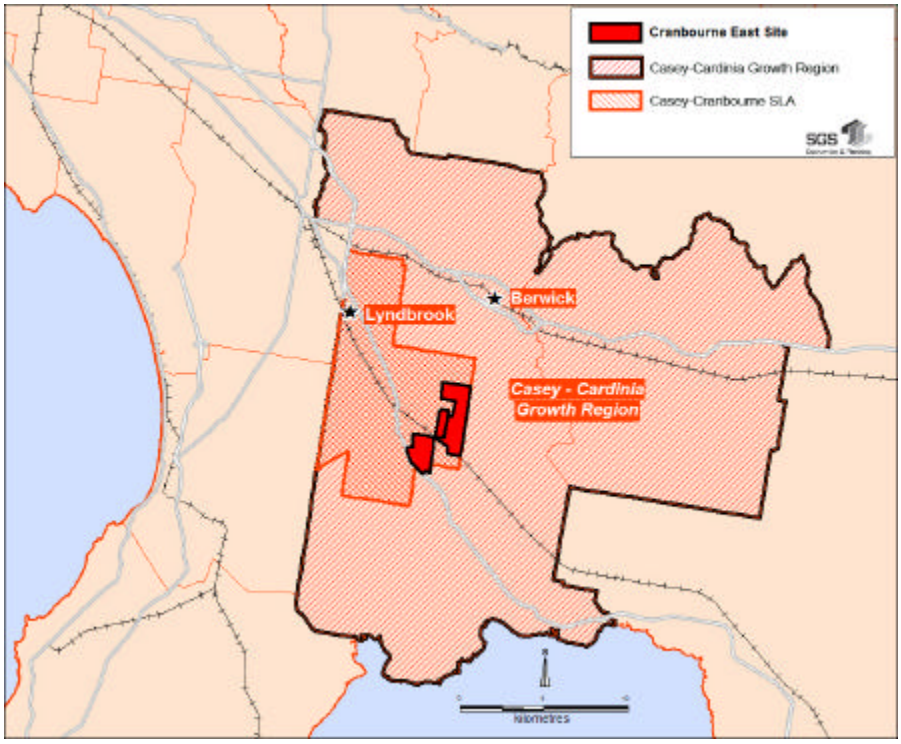
SGS Economics and Planning (SGS) has been commissioned as part of the Consultant Team for the strategic planning for the Cranbourne East B study area, an 870 hectare site located in Cranbourne East. The brief specifies that modelling and analysis of potential economic land use categories will be undertaken to identify constraints and opportunities for the precinct.

This report aims to determine the retail/commercial demand for the study area Cranbourne East B. It firstly determines the future residential population of the site. The modelling suggests an average residential lot size of 600 sq m in standard residential neighbourhoods, with some provision for larger lots of 1,000 sq m and also some medium density lots of 400 sq m. Further work relying on the population projections results in identifying the retail floorspace demand, as well the as job required to service the future population. The report is divided into 4 sections:

- Introduction and Context
- Retail Analysis
- Employment Analysis
- Appendix

1.2 Location Context

Figure 1: Cranbourne East Study Area



SGS Economics & Planning

Cranbourne East Study Area is within the Casey-Cranbourne SLA which is within the Casey Cardinia Growth Region (CCGR) as identified by SGS. The Cranbourne East site has a northern precinct which is bounded by Thompsons Road to the north, Berwick – Cranbourne Road to the east, Mayfield Road to the west and the former South Gippsland railway to the South. This also includes the Collison Road Estate, a 1950s large lot semi-rural subdivision, in the south-western corner of the precinct. The southern precinct is bounded by the Berwick – Cranbourne Road to the north, the South Gippsland Highway to west and south, and Casey Fields regional sports complex to the east.

The site is deemed to be mostly residential, and is in close proximity to Cranbourne West growth area, which will have a significant industrial component in the land use, and the Dandenong South regional industrial hub.

2 Retail Analysis

2.1 National Trends in Retailing

The ABS catalogue 8501.0 details trends in Retail Trade for Australia. The latest July 2007 summary is presented below with trend graphs presented in the appendix:

TOTAL RETAIL

There has been moderate trend growth for 21 months. Food retailing has had four months of moderate trend growth following five months of strong growth. Department stores (three months) and Clothing and soft good retailing (five months) have had strong trend growth. Hospitality and services has had two months of weak trend growth following five months of moderate growth.

FOOD RETAILING

There has been moderate trend growth for four months following five months of strong growth. New South Wales has had 12 months of moderate trend growth. Western Australia and the Australian Capital Territory had moderate growth in July 2007 following strong growth for nine and six months respectively. Queensland (18 months), Tasmania (eight months) and the Northern Territory (three months) have had strong growth.

DEPARTMENT STORES

The trend growth has been strong for three months. New South Wales and Western Australia have followed the same pattern, while Queensland has had four months of strong trend growth. Victoria has had three months of weak growth.

CLOTHING AND SOFT GOOD RETAILING

There has been five months of strong trend growth. New South Wales (four months), Victoria (13 months), Queensland (five months) and South Australia (two months) have had strong trend growth.

The Australian Capital Territory had moderate growth in July 2007 following eight months of strong growth. Western Australia has had weak trend growth for the last two months.

HOUSEHOLD GOOD RETAILING

Trend growth has been slowing since January 2007, with weak growth in July 2007. New South Wales and Queensland have also had a slowing trend and were flat in July. Victoria had weak trend growth in July following ten months of moderate growth. The Northern Territory has had eight months of strong growth.

RECREATIONAL GOOD RETAILING

The trend growth was weak in July 2007 after being in decline for five months. New South Wales (six months), Victoria (five months), and the Australian Capital Territory (three months) have been in decline. Queensland, Western Australia and Tasmania had strong trend growth in July 2007, while the remaining two states were flat.

OTHER RETAILING

Trend growth has been growing since November 2006 with moderate growth recorded in July 2007. New South Wales (three months) and Queensland (five months) have had strong trend growth. Victoria (13 months), South Australia (six months) and the Australian Capital Territory (five months) have been in decline.

TOTAL RETAIL (EXCLUDING HOSPITALITY AND SERVICES)

Over the last seven months, the trend growth for Total retail (excluding Hospitality and services) has mostly been stronger than Total industries (including Hospitality and services).

HOSPITALITY AND SERVICES

There has been weak trend growth for two months following five months of moderate growth. Queensland (six months), South Australia (six months), Tasmania (five months) and the Australian Capital Territory (two months) have had strong growth, while the remaining states have been in decline for at least three months.

The results of a survey of retailer sentiment carried out in November 2006 in Australia[2], indicated that the current retail confidence is improving despite interest rate rises in May and August last year with:

- 44% of respondents indicating they are **more optimistic** about future trading prospects in October 2006, compared to 33% in March of that year;
- **Modest expansion** on the agenda for the majority of national retailers, with 84% of respondents planning to increase store numbers and expansion into interstate markets being considered by 72% of respondents over the next 12 months.

[2] Survey of Retailer Sentiment Australia, November 2006, Jones Lang La Salle

- **Concern over** interest rates and fuel price movements, which could impact negatively on trading prospects and confidence.
- A **solid economy**, with low unemployment, positive employment growth and tax cuts offsetting the negatives
- **Discretionary spending under pressure**, as a direct result of interest rate movements and other rises in the cost of living. However, as budgets become stretched, consumers are responding well to sales campaigns.
- **Credit purchases** up, as well as credit card debt - a sign that consumer spending is at unsustainable levels.

2.2 Regional Trends in Retailing

According to a recent report by CBRE[3], the growth of **Neighbourhood, Sub Regional and Regional Centres** in Metropolitan Melbourne continued into 2006 and is predicted to continue in the medium term, with over 320,000 sqm of additional floorspace due for completion by 2010. Melbourne's suburban shopping centre stock continues to grow as demand for the category remains high. Some other key points from the report are:

- Shopping centre floorspace grew by 96,800 sqm over 2006. **Neighbourhood Centres** showed the greatest growth over the year increasing by 91,400 sqm and accounting for over 94% of new shopping centre floorspace. Regional shopping centres added a nominal 3,800 sqm of space in 2006 with just over 1,500 of additional regional stock recorded.
- In terms of **future prospects**, 2007 is expected to feature an increase in construction activity with 132,100 sqm of suburban shopping centre space forecast for completion. It is expected that this will be equally divided between Neighbourhood, Sub Regional and Regional Centres.
- In terms of rents, for Super Regional and Regional Shopping Centres these range between $800 sqm to $2,000 sqm with an indicative net face rent of $1,200 sqm. Sub Regional Centres range up to $850 sqm with an average net face rent of $590 sqm. **Neighbourhood Centres** now range between $275 sqm to $700 sqm and have an indicative net face rent of $448 sqm.
- *Suburban Shopping Centres, in particular those located in Melbourne's strong growth corridors will remain sought after assets*. Privately owned neighbourhood centres with potential development options will continue to entice institutional buyers. Large scale opportunities still exist, albeit rare; however, 100% stakes are becoming a thing of the past as vendors are now opting for 50% stakes and joint ownership arrangements, so they can share in the value uplift brought about by improved management.

2.3 Local Trends and Prospects

Recent analysis completed by Ratio Consultants Pty Ltd included an assessment of existing and future retail floorspace requirements for the City of Casey. The study indicated that as a result of significant dwelling and population growth, there will be an *increased provision for retail goods and services leading to an overall reduction in levels of* ***escape expenditure*** *from the city*. The current low levels of escape expenditure for **food based retail** categories within Casey indicated a further marginal decrease over the forecast period. **Non-food** categories indicate significant potential decreases in

[3] Market View, Melbourne Metropolitan Retail, CBRE, Fourth Quarter 2006

escape expenditure from the city, however there may be some marginal reductions of escape to areas North West of the city's limit.

According to Ratio, the level of ***inbound expenditure*** *to the city is expected to increase*, influenced by a number of factors including:

- A shift into higher order and a further diversified retail offering within the City;
- Population growth in the city of Cardinia
- The regional catchment for the city is expected to extend over the local government areas of Cardinia, Bass Coast and South Gippsland, which will contain a population of 515,000 persons by 2031 (DSE:2004); and
- Over the forecast period (2001-2031), the City will experience a shift to a mature population, with declining household sizes and associated increases in wealth and retail expenditure within the catchment affecting the retail offering.

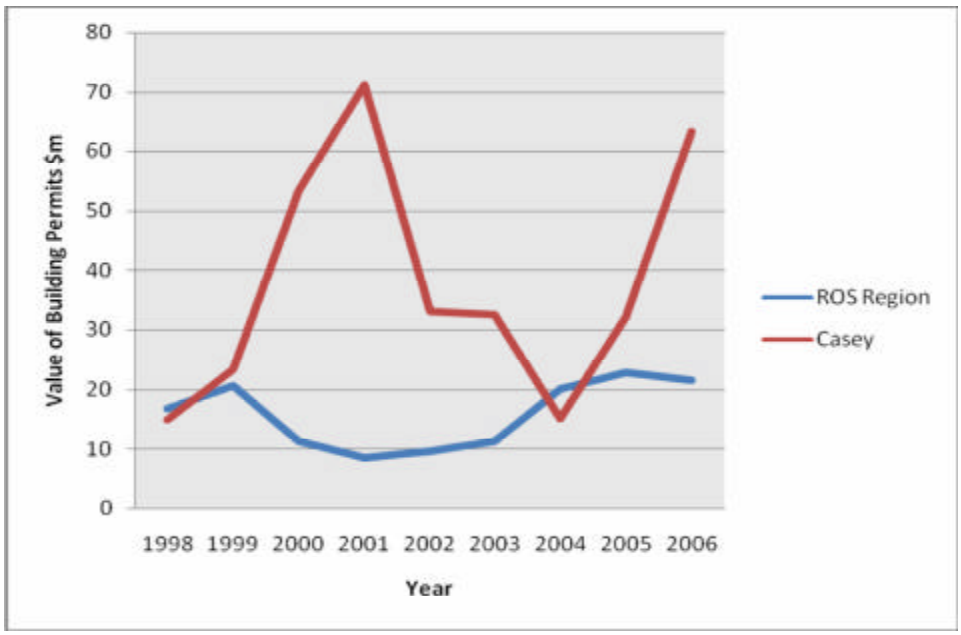
On the basis that the City of Casey will experience:

- significant internal and external influences from population and household growth over the next three decades;
- significant increases in inbound expenditures from neighbouring local government areas to the City's east; and
- reductions in escape expenditures from the City, a sustainable provision for additional floorspace is required to reconcile the provision for additional retail demand.

2.3.1 Value of Construction

Between 1998 and 2006, the value of retail construction in Casey has fluctuated markedly. Levels peaked in 2001 at $71.2 million and then fell to only $15 million in 2004 before rising rapidly to current levels of $63 million in 2006. Retail construction investment in Casey has stayed well above those for the rest of the south region for the majority of the period.

Figure 2 Value of Retail Building Permits ($m)



Source: PULSE Database, Victoria Building Commission

2.4 Policy Context

Council has adopted a number of strategy documents for activity centre planning in Casey. The Activity Centre Strategy and Cranbourne East Development Plan are relevant to this economic analysis.

Council has adopted the Activity Centres Strategy to guide the planning of activity centres in Casey. The Strategy documents the future directions for the City regarding sustainability, urban form and character, population, housing, public amenity, employment, transport, physical infrastructure and provisions of development infrastructure, services and facilities.

The Strategy is a response to the State Government's Melbourne 2030 policy and incorporates a number of significant policy elements contained in local strategies including Casey C21 Strategy, Casey Business Development Strategy, Casey Municipal Strategic Statement and policy objectives for individual activity centres.

In terms of activity centres, the Strategy provides a general hierarchy of centres to guide planning including:

- **Principal Activity Centres** – represent municipal wide and regional level catchment in terms of population, employment, service provisions and also contain regional level entertainment, retailing, commercial, and community opportunities to the residents. These centres are expected to cater for a population of over 100,000 persons. Fountain Gate, a nominated principal activity centre will have an additional of 105,200 sqm of retail floorspace and 31,300 sqm of commercial floorspace by 2021.[4]
- **Major Activity Centres** – Likely to serve a population of 50,000 to 75,000 persons. The purpose of these centre are to provide a major employment and mixed activity precinct consisting. It is specified that retail development in the form of discount department store and supermarket will be promoted and the centres are also to serve as a day-to-day destination for shopping, commercial and community goods and services. Casey Central as a Major Activity Centre is projected to accommodate up to 50,000 sqm of retail floorspace and a significant amount of office development.
- **Neighbourhood Centres** – Designed with the aim of forging a community identity and to function by serving the day-to-day retail needs of households. It is proposed they have a catchment population of 10,000 to 25,000 persons. Supermarkets will be the key anchor for the convenience-shopping component of the centre and, in addition, up to 12-20 retail and other tenancies are expected to be developed.
- **Convenience Centres** – In residential-based locations, these centres would form the basic unit of the activity centre network by serving a population of up to 4,000. Retail development in the form of a convenience store will have a community focus and up to five shops are expected to be on-site.
- **Peripheral Sales Precincts** – Specifically designed to house large bulky good tenancies in an integrated and defined precinct. Retail floorspace in the order of over 1,000 sqm per tenant is envisaged with complementary office floorspace.

Within this context, the Activity Centres Strategy for Casey sets out the need to plan for a Neighbourhood Activity Centre at Cranbourne East. The Cranbourne East Development Plan which was

[4] City of Casey (1999) Development Contribution Plan for Fountain Gate – Narre Warren District Centre

adopted in November 2006 assists this aim by providing for the structure planning of the Cranbourne East area. This states that the wider Cranbourne East planning area should accommodate:

- Suburban areas for existing and new housing estates with average lot size of 600 sqm per lot
- A large ***neighbourhood activity centre*** to service the area, with significant retail, community service and commercial space; and
- A proposed Parks Victoria regional parkland
- Significant urban and environmental design features.

The Cranbourne East Development Plan proposes the development of a new neighbourhood activity centre at the intersection of Narre-Warren Cranbourne Road and Linsell Boulevard. The Development Plan also states that the centre is expected to meet the following conditions:

- Provide attractive locations to meet the day-to-day needs, and most weekly shopping functions of households at locations which are convenient and provide easy access to the community.
- Provide a range of convenience shopping and selected weekly goods and services as well as neighbourhood orientated community facilities be provided.
- Function as a social focus be encouraged by providing places for people to meet.
- Be defined by a supermarket, specialty shops and related goods and services.
- Provide neighbourhood and convenience functions and the following retail goods and services:
    - Supermarket.
    - At least 15 to 20 retail and other tenancies.
    - Medical services.
    - Child care facilities.
    - Wide range of other possible retail/commercial uses to co-locate.
- Provide the following range of community facilities:
    - Town Square.
    - Multi-functional community building.

2.5 Existing Retail Hierarchy

The existing activity centre hierarchy is dominated by the two **principal activity centres**, Fountain Gate – Narre Warren CBD and the Cranbourne Town Centre (refer to

Figure 3 for location context relative to study area). These meet a wide range of Casey's weekly and discretionary shopping needs and have significant catchment areas that extend beyond the municipality.

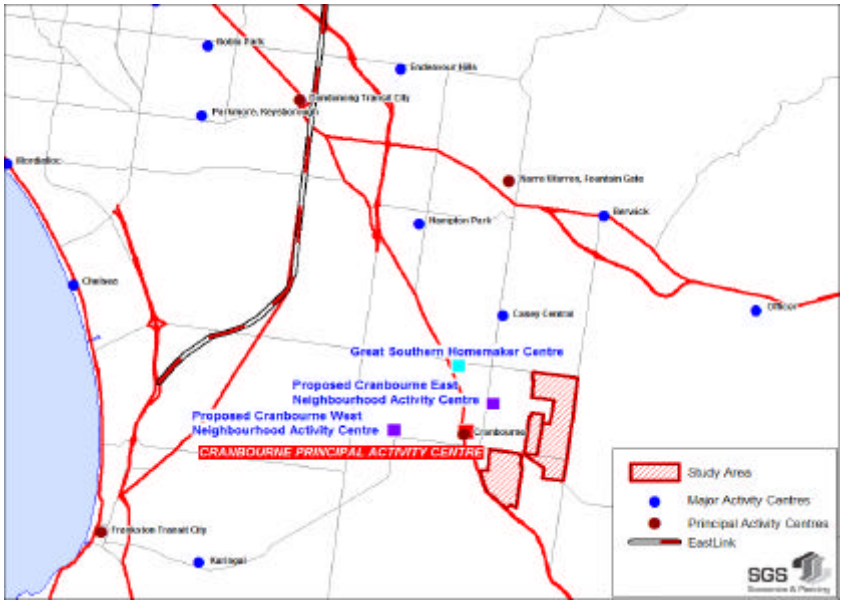
There are three **major activity centres** which provide varying degrees of sub-regional facilities and services. These are the Berwick Village, Endeavour Hills Town Centre and Hampton Park Town Centre. Council has also designated that Casey Central (an existing supermarket based centre) become a major activity centre.

At the next level there are several supermarket based **neighbourhood centres**. These include Autumn Place (Doveton), Narre Warren Neighbourhood Centre (located in the Fountain Gate- Narre Warren CBD), Parkhill Plaza (Berwick), Pearcedale, Spring Square (Hallam), Thompsons Parkway (Cranbourne North) and Tooradin.

Recently a number of sites that had been envisaged for convenience centres have been developed as small supermarket based centres and these include Amberley Park (Narre Warren South) and Kirkwood Crescent (Hampton Park). A permit was also issued for an additional small supermarket based centre in Duff Street, Cranbourne West.

The lowest level of the activity centre hierarchy is comprised of a number of **convenience centres** and facilities that provide for selected day to day goods and services and there are eleven such centres in Casey. Figure 3 below provides as visual context of the existing retail hierarchy surrounding the Cranbourne East Study Area.

Figure 3: Activity Centres in South East Region



Source: SGS Economics and Planning

Total floorspace by type of use against the Activity Centre Hierarchy (as at November 2003) is illustrated in

Table 4 below. This indicates that in Neighbourhood Centres, the majority of space is occupied by community services space (32.1%), followed by Retail Food space (28.7%) and Office space (11.3%). Other uses such as Retail Services (7.7%), Retail Non-Food (5.7%) and Restricted Retail (2.0%) account for proportionately less space.

Table 4: Floorspace in Casey

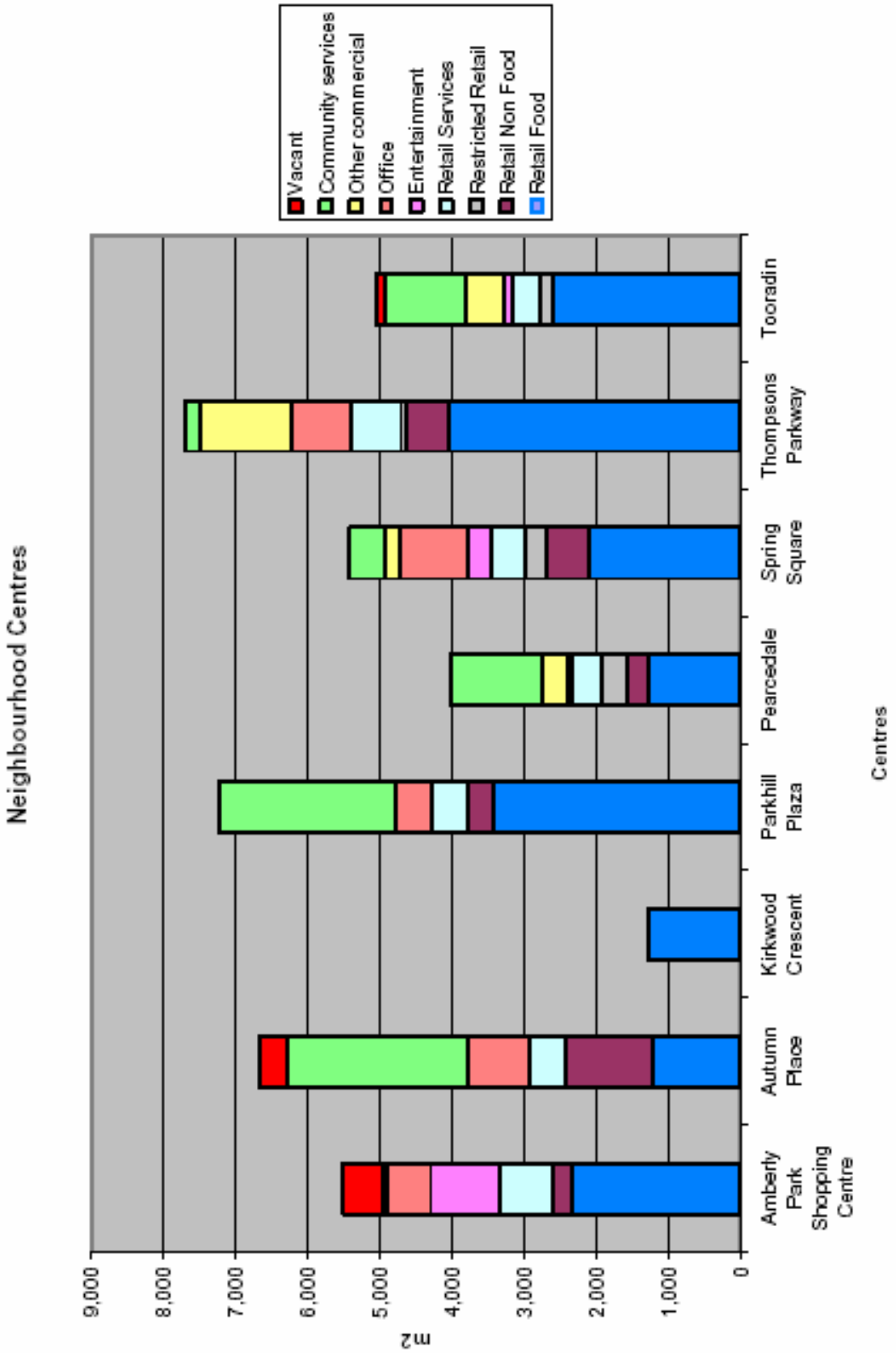
Activity	Principal Activity Centre	Major Activity Centre	Neighbourhood Centre	Convenience Centre	Other
Retail Food	44,155	44,224	20,742	5,226	14,058
Retail Non-Food	67,775	22,280	4,144	1,277	200
Restricted Retail	82,224	5,604	1,479	1,424	36,714
Retail Services	15,508	12,478	5,591	1,535	2,475
Entertainment	51,332	5,281	3,688	0	9,967
Office	16,155	12,438	8,157	2,747	3,650
Other Commercial	40,466	17,665	3,932	357	29,760
Community Services	53,676	41,813	23,237	1,532	11,589
Vacant	10,538	10,140	1,398	689	4,569
Total	381,828	171,923	72,366	14,786	112,982

Source: City of Casey Activity Centres Strategy, October 2006, Ratio Consultants

Figure 4 below illustrates the split of floorspace across the eight neighbourhood centres in Casey. This does show a similar trend with retail food space accounting for a high proportion of space across all centres but the amount of space occupied by Community Services and Office uses varying across the neighbourhood centres.

To determine the level of retail floorspace and the type of centre required for Cranbourne East, it is important to determine the expected future population. This will inform the potential expenditure for retail and therefore determine the amount of retail floorspace required by the new population.

Figure 4: Retail Floorspace for Neighbourhood Centres



Source: City of Casey Activity Centres Strategy, October 2006, Ratio Consultants

2.6 Population forecasts

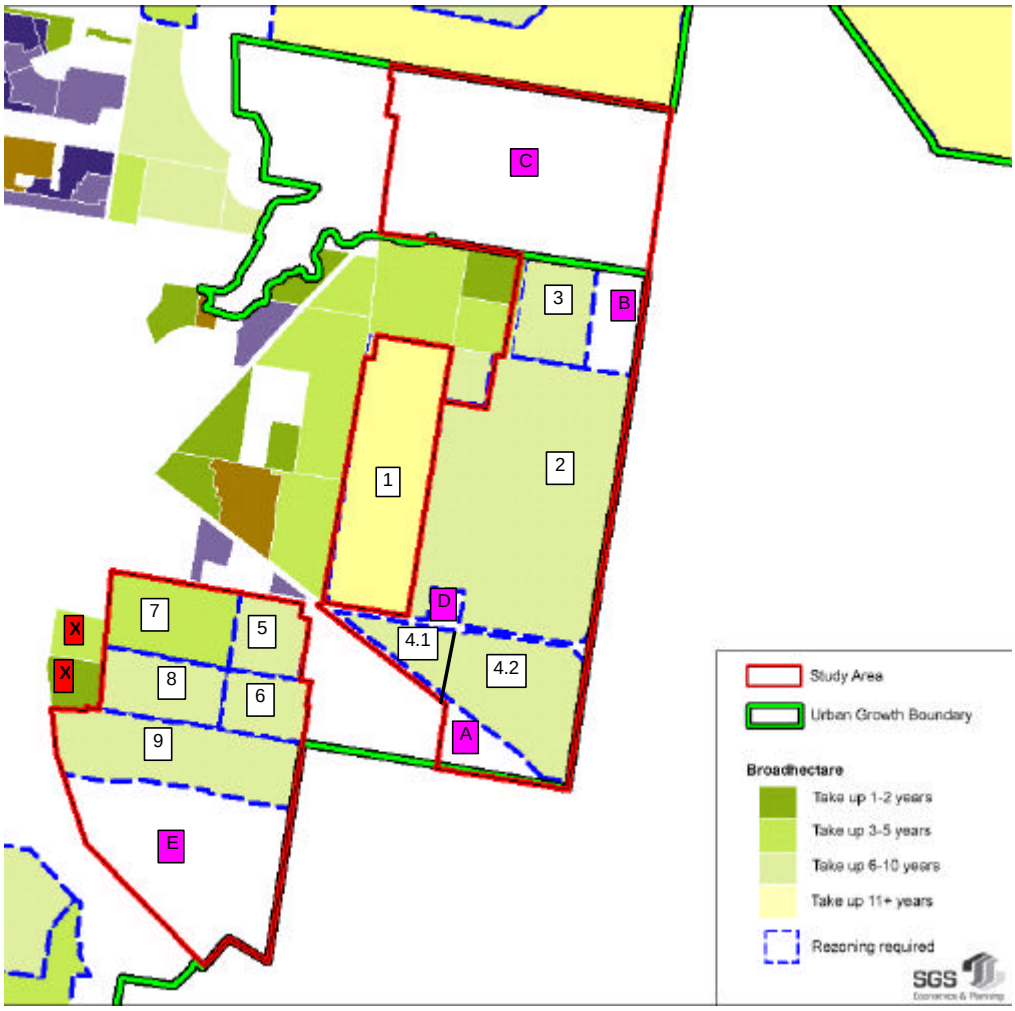
To ascertain a potential future population in Cranbourne East, DSE's Urban Development Program (UDP) was used as a guide for the land use pattern and development timing. The UDP was supplemented by SGS estimates of additional land not identified in the UDP, but included in the designated study area as provided by City of Casey.

2.6.1 Urban Development Program 2006

Figure 5 below shows the study area overlaying the broadhectare residential UDP map. The following key describes the numbered areas.

XX	Not in Study area
9	From UDP
D	Areas estimated by SGS

Figure 5: UDP Land Areas with Study Area Overlay



Source: DSE 'Urban Development Program' (UDP), SGS

The Urban Development Program identifies a total of 514.31 ha of broadhectare residential land. It provides the size in hectares by small areas (numbered 1-9 in Figure 5 above) as well as the number of lots in each of the small areas and the expected timing of each development site. Based on this information, the number of lots per hectare as well as the density of development and average lot sizes can be calculated (refer to Table 5).

Table 5: UDP Schedule - Cranbourne East

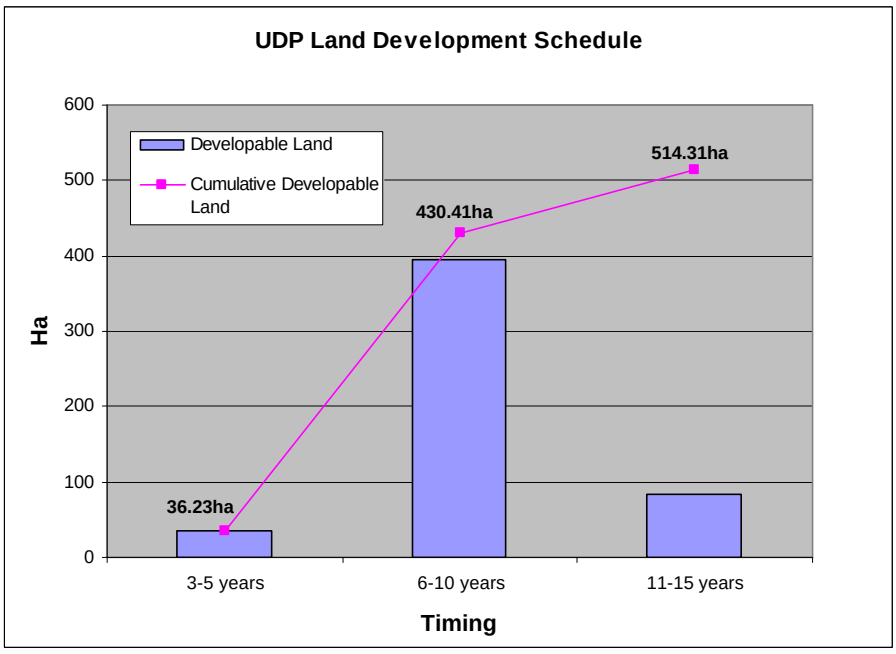
Area	Ha	Lots	Lots/Ha	Lots Size	Development timing
1	83.9	1049	12.503	800sqm	11-15 years
2	173.45	2517	14.511	689sqm	6-10 years
3	28.02	348	12.420	805sqm	6-10 years
4.1	15.29	168	10.997	909sqm	6-10 years
4.2	50.64	557	10.997	909sqm	6-10 years
5	20.13	221	10.979	911sqm	6-10 years
6	19.2	211	10.990	910sqm	6-10 years
7	36.23	400	11.041	906sqm	3-5 years
8	28.07	306	10.901	917sqm	6-10 years
9	59.38	590	9.936	1,006sqm	6-10 years
Total UDP	**514.31**	**6367**	**12.380**	**808sqm**	

Source: DSE, UDP 2006 Annual Report and SGS analysis

The UDP specifies:

- 6,367 lots
- An average density of 12.38 lots per hectare
- Average lot size 808sqm
- Majority of development in 6-10 years

Figure 6: Cranbourne East Developable Land Identified by UDP



Source: DSE, UDP 2006 Annual Report

From Figure 6 above, we can see that in 3-5 years (from 2006) 36.23ha of the 514.31ha will be developed. In 6-10 years, it is expected that 430.41ha will be developed, and all 514.31 ha will be developed in 11-15 years time. This land development schedule can help identify the expected population. Table 6 below summarises the information provided by DSE regarding the residential land supply in Cranbourne East.

Table 6: UDP land areas to population estimates.

Cranbourne East (Estimates based on UDP only)

	Development timing			
	2011	**2016**	**2021**	
	3-5 years	6-10 years	11-15 years	Grand Total
Sum of Ha	36.23	394.18	83.9	514.31
Sum of Lots	400	4918	1049	6367
70% to be developed for residential[5]	280	3443	734	4457
Lots per Hectare	11	12	13	12
HH Yield	2.63	2.54	2.48	
Population	738	8,735	1,822	11,295

Source: DSE; Victoria in the Future, UDP 2006 Annual Report

By multiplying the reduced number (70% of sum of lots) of lots by the household (HH) yield, we can estimate the population in each of the development time ranges. Table 6 above shows that under tge UDP scenario of land development, in years 3-5 it can be expected that an additional 738 people will be living in Cranbourne East, with another 8,735 people to move in between years 6-10 and a further 1,822 people in years 11-15, resulting in a total of 11,295 people (approximately) in Cranbourne East.

This figure, however does not represent the study area in whole as identified by Council (Refer to Figure 5), therefore SGS has supplemented this information with estimates outlined in the next section, to ascertain the potential future population based on development extending outside of the UDP estimates for Cranbourne East.

2.6.2 Study Area

Through the revision of the Urban Development Program (2006), Cranbourne East Development Plan (2006), Collisons Estate Background Report (2007) and Blue Hills Rise Management Plan (2006), a number of key areas on the subject site were identified.

- Areas 1-9 are identified in the UDP as residential broadhectare land.
- Area 4 is split into 4.1 and 4.2 where the former represents the proposed Blue Hills Rise Retirement Village.
- Area 1 is the Collisons Estate for which there are a number of potential redevelopment options which are explored further in the next section.

In addition, SGS has identified areas A-E, which can be described as land in the study area which is not identified by the UDP. Table 7 below shows their respectful sizes and potential future uses.

[5] Assumption of 30% for infrastructure and open space.

Table 7: Land use – UDP plus extended by study area boundary

Area	Ha	Lots	Lots/Ha	Lots Size	Development timing
1	83.9	1049	12.503	800sqm	11-15 years
2	173.45	2517	14.511	689sqm	6-10 years
3	28.02	348	12.420	805sqm	6-10 years
4.1	15.29	168	10.997	909sqm	6-10 years
4.2	50.64	557	10.997	909sqm	6-10 years
5	20.13	221	10.979	911sqm	6-10 years
6	19.2	211	10.990	910sqm	6-10 years
7	36.23	400	11.041	906sqm	3-5 years
8	28.07	306	10.901	917sqm	6-10 years
9	59.38	590	9.936	1,006sqm	6-10 years
Total UDP	**514.31**	**6367**	**12.380**	**808sqm**	
Land in study area not identified by UDP	**307.62**				
A	13.84	Not developable due to proposed road cutting through section			
B	20.62	Retarding Basin			
C	164.7	Outside UGB			
D	4.16	School[6]			
E	104.3			500-1000sqm	16+ years
Total Developable Land	618.61				
Allowance for infrastructure and open space	185.58				
Total Land area	**821.93**				
Total Residential Land	433.03				

Thus, a total land area of 821.93 ha has been calculated by SGS, of which 433.03ha net is assumed to be developed for residential use. This figure takes into account a 30% allocation of land for *roads and infrastructure and open space* (this is more than the usual allowance for infrastrucure of 20% because includes open space) and also subtracts the areas with known uses other than residential. By varying certain assumptions, we can use the above land areas identified for calculating population scenarios.

2.6.3 Population Scenarios

By breaking down the study area into the small area blocks, we can test different scenarios based on varying lot sizes in each area. Scenario 1 uses the lot sizes as calculated by the UDP, but discounts the land area by 30%, to allow for infrastructure and open space. The additional area 'E' is added and assumed to be developed at a 10 lots per hectare density, resulting in 1,000sqm lot sizes on average.

For all subsequent population scenarios it is assumed that on average, the HH yield is 2.9 for residential generally, and 1.5 for area 4.1 which is the proposed Blue Hills Retirement Village.

[6] Catholic Primary School already in PUZ

Table 8: Population Scenario 1 - Using UDP Lot sizes, allowing 30% for infrastructure, open space etc.

Area	Ha	Lot sizes	Lots	Number of Persons	Lots per Hectare (Dwelling Density)	Development Timing
1	58.73	*800sqm*	734	2,129	13	16+ years
2	121.415	*689sqm*	1762	5,110	15	6-10 years
3	19.614	*805sqm*	244	706	12	6-10 years
4.1	10.703	*405sqm*	264	396	25	6-10 years
4.2	35.448	*909sqm*	390	1,130	11	6-10 years
5	14.091	*911sqm*	155	449	11	6-10 years
6	13.44	*910sqm*	148	428	11	6-10 years
7	25.361	*906sqm*	280	812	11	3-5 years
8	19.649	*917sqm*	214	621	11	6-10 years
9	41.566	*1,006sqm*	413	1,198	10	6-10 years
E	73.01	*1,000sqm*	730	2,117	10	11-15 years
Total	**433.03**	**842sqm**	**5333**	**15,097**	**12**	

The population resulting from Scenario 1, is estimated as 15,097 people. This figure results from the number of lots multiplied by the assumed HH yield (2.9 persons per household/lot). The average dwelling density in this scenario is 12 lots per hectare.

Area 1 (Collisons Estate), offers potential for future redevelopment. The 83ha site (57.73ha after taking into account 30% of area for infrastructure and open space), currently only accommodates 92 lots. It is expected, that in line with the development of Cranbourne East, there are several options regarding the redevelopment of Collisons. The summary of these scenarios is outlined in the Table 7 below.

Scenarios 2a-2d, in line with Melbourne 2030 principles, assumes a higher density development on areas 2-9 and E. Table 9 below outlines the new lot size assumptions (apart from 4.1 which is Blue Hills Rise and pre-determined by the Management Plan 2006) compared to what the UDP outlines. The scenarios also assume that any redevelopment of Collisons Estate would occur in 16+ years, as opposed to 11-15years as identified by the UDP.

Table 9: Density Assumptions Areas 2-9 and E

Area	Lot Size
2	600sqm
3	600sqm
4.1	405sqm
4.2	550sqm
5	600sqm
6	600sqm
7	600sqm
8	600sqm
9	1,000sqm
E	1,000sqm

Source: SGS estimate

Table 10: Collisons Estate Redevelopment Options (Area 1)

Scenario 2a assumptions		
Redevelopment/Sub-division	100%	58.73ha
Redevelopment dwelling density	13	734lots
Not redeveloped	0%	0lots
Scenario 2b assumptions		
Redevelopment/Sub-division	0%	0.00ha
Redevelopment dwelling density	0	0lots
Not redeveloped	100%	92lots
Scenario 2c assumptions		
Redevelopment/Sub-division	50%	29.37ha
Redevelopment dwelling density	16	470lots
Not redeveloped	50%	29lots
Scenario 2d assumptions		
Redevelopment/Sub-division	25%	14.68ha
Redevelopment dwelling density	16	235lots
Not redeveloped	75%	69lots

AREA 1 - Collisons Estate	Scenario 2a	Scenario 2b	Scenario 2c	Scenario 2d
Area (ha)	58.73ha	58.73ha	58.73ha	58.73ha
Nunber of Lots	734lots	92lots	499lots	304lots
Average Lots Per Hectare	13	1.6	9	5
Lot Size (Average)	800	6,384	1,176	1,932

Each Scenario has different dwelling density implications for Collisons, and of course different population estimations.

Table 11: Population Scenario 2a - Higher density assumptions and 100% redevelopment of Collisons

Area	Ha	Lot sizes	Lots	Number of Persons	Lots per Hectare (Dwelling Density)	Development Timing
1	58.73	*800sqm*	734	2,129	13	16+ years
2	121.415	*600sqm*	2,024	5,868	17	6-10 years
3	19.614	*600sqm*	327	948	17	6-10 years
4.1	10.703	*405sqm*	264	396	25	6-10 years
4.2	35.448	*550sqm*	645	1,869	18	6-10 years
5	14.091	*600sqm*	235	681	17	6-10 years
6	13.44	*600sqm*	224	650	17	6-10 years
7	25.361	*600sqm*	423	1,226	17	3-5 years
8	19.649	*600sqm*	327	950	17	6-10 years
9	41.566	*1,000sqm*	416	1,205	10	6-10 years
E	73.01	*1,000sqm*	730	2,117	10	11-15 years
Total	433.03	669sqm	6,348	18,039	15	

The average dwelling density for the above scenario is 15 lots per hectare, a total of 6,348 lots expected to be developed on the study site, with approximately 18,039 residents by the year 2031.

Table 12: Population Scenario 2b - Higher density assumptions and no redevelopment of Collisons

Area	Ha	Lot sizes	Lots	Number of Persons	Lots per Hectare (Dwelling Density)	Development Timing
1	58.73	*6,384sqm*	92	267	1.6	16+ years
2	121.415	*600sqm*	2,024	5,868	17	6-10 years
3	19.614	*600sqm*	327	948	17	6-10 years
4.1	10.703	*405sqm*	264	396	25	6-10 years
4.2	35.448	*550sqm*	645	1,869	18	6-10 years
5	14.091	*600sqm*	235	681	17	6-10 years
6	13.44	*600sqm*	224	650	17	6-10 years
7	25.361	*600sqm*	423	1,226	17	3-5 years
8	19.649	*600sqm*	327	950	17	6-10 years
9	41.566	*1,000sqm*	416	1,205	10	6-10 years
E	73.01	*1,000sqm*	730	2,117	10	11-15 years
Total	433.03	1,176sqm	5,706	16,177	13	

The average dwelling density for the above scenario is 13 lots per hectare, a total of 5,706 lots expected to be developed on the study site, with approximately 16,177 residents by the year 2031.

Table 13: Population Scenario 2c - Higher density assumptions and 50% redevelopment of Collisons

Area	Ha	Lot sizes	Lots	Number of Persons	Lots per Hectare (Dwelling Density)	Development Timing
1	58.73	*1,176sqm*	499	1,448	9	16+ years
2	121.415	*600sqm*	2,024	5,868	17	6-10 years
3	19.614	*600sqm*	327	948	17	6-10 years
4.1	10.703	*405sqm*	264	396	25	6-10 years
4.2	35.448	*550sqm*	645	1,869	18	6-10 years
5	14.091	*600sqm*	235	681	17	6-10 years
6	13.44	*600sqm*	224	650	17	6-10 years
7	25.361	*600sqm*	423	1,226	17	3-5 years
8	19.649	*600sqm*	327	950	17	6-10 years
9	41.566	*1,000sqm*	416	1,205	10	6-10 years
E	73.01	*1,000sqm*	730	2,117	10	11-15 years
Total	433.03	703sqm	6,113	17,358	14	

The average dwelling density for the above scenario is 14 lots per hectare, a total of 6,113 lots expected to be developed on the study site, with approximately 17,358 residents by the year 2031.

Table 14: Population Scenario 2d - Higher density assumptions and 25% redevelopment of Collisons

Area	Ha	Lot sizes	Lots	Number of Persons	Lots per Hectare (Dwelling Density)	Development Timing
1	58.73	*1,932sqm*	304	881	5	16+ years
2	121.415	*600sqm*	2024	5,868	17	6-10 years
3	19.614	*600sqm*	327	948	17	6-10 years
4.1	10.703	*405sqm*	264	396	25	6-10 years
4.2	35.448	*550sqm*	645	1,869	18	6-10 years
5	14.091	*600sqm*	235	681	17	6-10 years
6	13.44	*600sqm*	224	650	17	6-10 years
7	25.361	*600sqm*	423	1,226	17	3-5 years
8	19.649	*600sqm*	327	950	17	6-10 years
9	41.566	*1,000sqm*	416	1,205	10	6-10 years
E	73.01	*1,000sqm*	730	2,117	10	11-15 years
Total	433.03	772sqm	5,918	16,792	14	

The average dwelling density for the above scenario is 14 lots per hectare, a total of 5,918 lots expected to be developed on the study site, with approximately 16,792 residents by the year 2031.

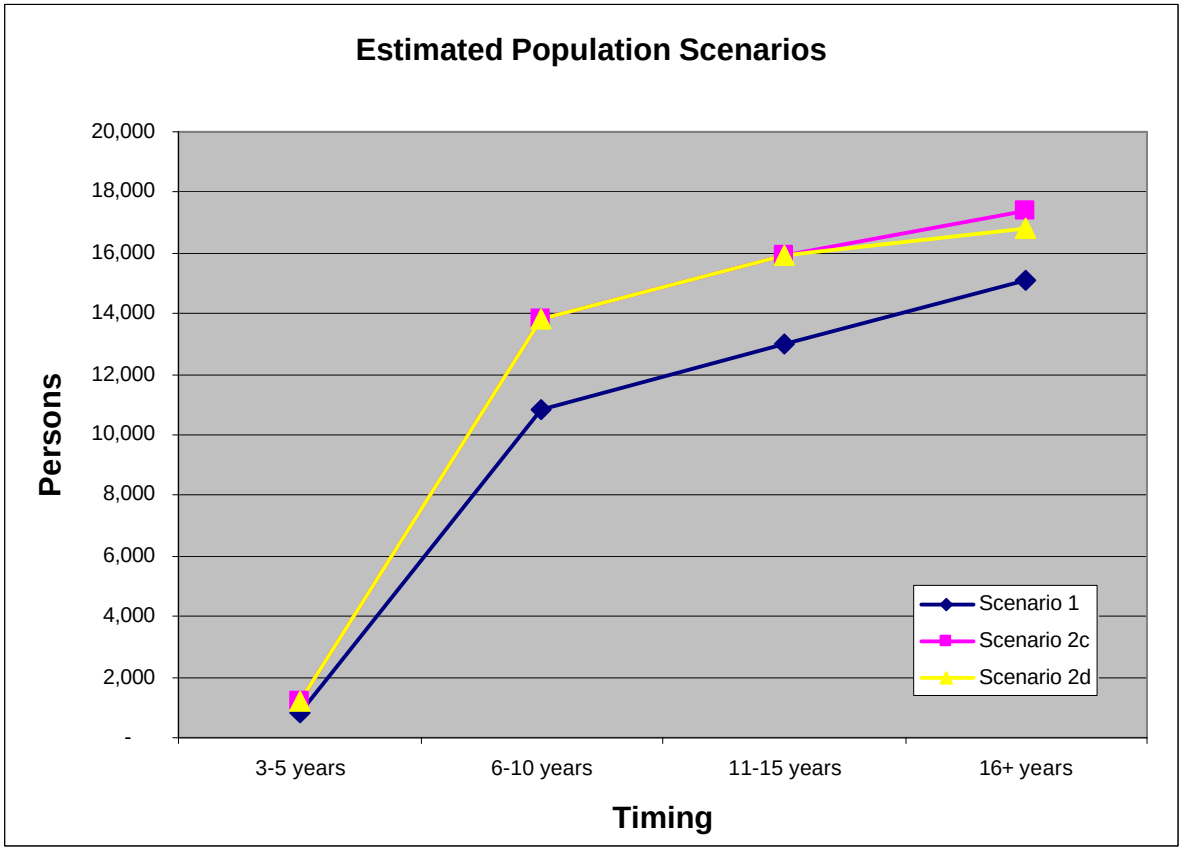
The most likely population scenarios selected for the retail forecasting are:

Table 15: Selected Population Scenarios

Scenario 1	Development Timing				
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	812	10,038	2,117	2,129	**15,097**
Sum of Lots	280	3,589	730	734	**5,333**
Scenario 2c					
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	1,226	12,567	2,117	1,448	**17,358**
Sum of Lots	423	4,461	730	499	**6,113**
Scenario 2d					
Data	**3-5 years**	**6-10 years**	**11-15 years**	**16+ years**	**Total**
Sum of Number of Persons	1,226	12,567	2,117	881	**16,792**
Sum of Lots	423	4,461	730	304	**5,918**

Source: SGS estimate

Figure 7: Cumulative Population



Source: SGS estimate

Scenario 1 assumes a lower density development, therefore resulting in a smaller population. Scenarios 2c and 2d assume higher density developments in all areas and differ only with regards to the redevelopment of Collisons Estate. Under the selected population scenarios, it is possible to test the amount of retail floorspace required to service the expected new population. The following section outlines the method for forecasting.

2.6.4 Sensitivity of population projections

It has been noted that higher density should be achieved in Cranbourne East, therefore it is important to test how this will affect the population projections. Table 13 below, presents the lot size assumptions used in estimating population.

Table 16: Density Assumptions

Area	Lot Size
2	600sqm
3	600sqm
4.1	405sqm
4.2	550sqm
5	600sqm
6	600sqm
7	600sqm
8	600sqm
9	**600sqm**
E	**600sqm**

Source: SGS estimate

By changing the assumption of the density in areas 9 and E we can see that the population projections do not change too much. With a higher density residential development in those areas, the expected population in 16+ years can only be around 2,000 more people in each scenario. Resulting in the following estimates:

- Scenario 1: 17,320
- Scenario 2c: 17,398
- Scenario 2d: 19,007

It is not expected that these higher estimates would exceed the threshold of retail and commercial floorspace demand. Therefore the scenarios identified above (section 2.4.3) are used for the modelling in further sections.

2.7 Retail Floorspace Projections

In projecting the demand for retail floor space from Cranbourne East, SGS:

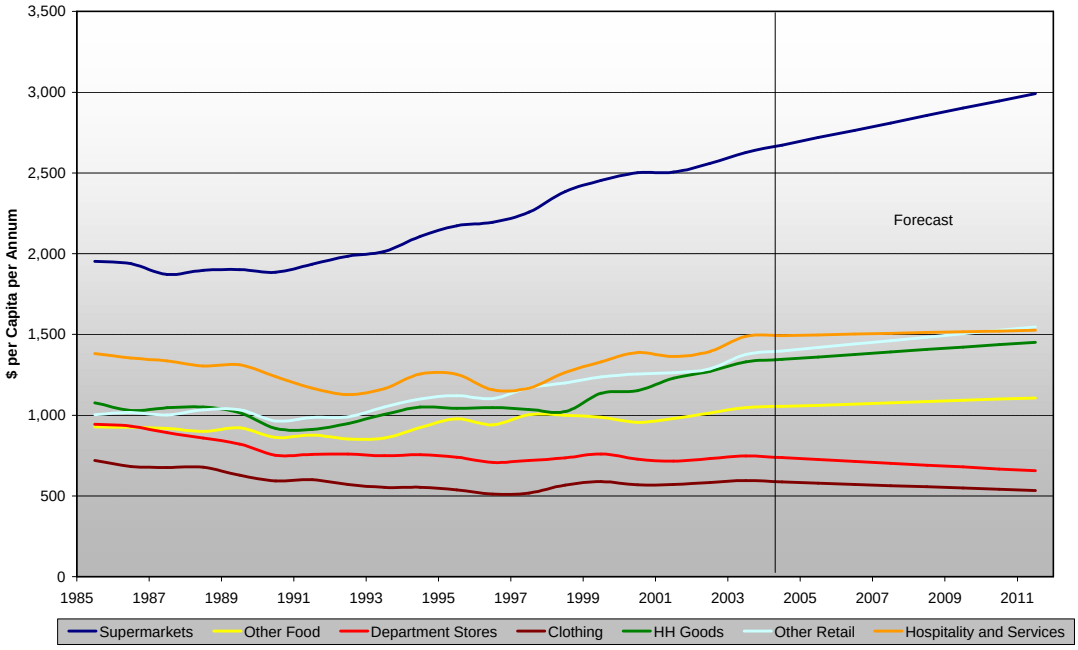
- Used existing and projected population plus income and retail expenditure per capita by key commodity groups to calculate the amount of potential retail expenditure by commodity groups.
- Applied benchmark values per sqm of expenditure (Retail Turnover Density values - RTD values) to actual and potential retail expenditure by key commodity groups to calculate floor space demand.

2.7.1 Trends in Retail Expenditure

Data on retail trade expenditure published by the ABS (Retail Trade, Cat No. 8501.0) suggests that people's expenditure habits have been changing over time. Hence, a trend analysis of retail expenditure for the period 1983 to 2003 was conducted. This enabled an estimate of how the real growth in the national retail expenditure per capita is likely to change in the future. Results of the analysis are shown in

Figure 8 below.

Figure 8: National Retail Spending per Capita (constant 2001 $)



Source: ABS Retail Trade (8501.0) and SGS projection.

There has been growth in all commodities over the period 1985 to 2005 except in Department Store and Clothing spending. This reflects recent industry trends, which have shown a shift of spending away from higher order Department Stores (such as Myer and David Jones) into regional centres. In addition, the decline in Clothing spending does not necessarily mean that people are buying fewer clothes, but instead reflects the declining trend in the price of clothes. Table 17 below summarises the expected effect this pattern will have on annual retail expenditure per capita over the next 25 years to 2031.

Table 17: National Retail Expenditure per Capita per Annum (2001$)

	2001	2006	2011	2016	2021	2026	2031
Supermarkets	$2,504	$2,764	$2,992	$3,220	$3,449	$3,677	$3,905
Department Stores	$715	$713	$656	$598	$541	$483	$426
Other Food	$978	$1,069	$1,107	$1,144	$1,182	$1,219	$1,257
Clothing	$571	$571	$532	$493	$454	$414	$375
Household Goods	$1,229	$1,376	$1,452	$1,527	$1,603	$1,679	$1,755
Other Retail	$1,264	$1,440	$1,547	$1,654	$1,761	$1,868	$1,975
Hospitality & Services	$1,363	$1,502	$1,525	$1,548	$1,571	$1,593	$1,616
Total	**8,623**	**9,436**	**9,810**	**10,185**	**10,559**	**10,934**	**11,308**

Source: ABS Retail Trade (8501.0) and SGS projections.

2.7.2 Retail Expenditure Potential - Cranbourne East

The National retail expenditure by commodity group per capita was modified for application to residents in Cranbourne East. This modification was achieved through use of the 1998-1999 ABS Household Expenditure Survey (publication 6535.0), which contains statistics on how local demographics affect retail expenditure. This data is published on a household basis rather than a per capita basis and thus the household value and its variation from the national average has been used as a surrogate value for modifying the per capita expenditure figures.

The Lynbrook income profile was selected as one proxy for Cranbourne East, to profile the future potential income profile. Lynbrook average income is higher than the national average by 10 percentage points. The 2006 income profile of the current residents in Cranbourne East was also used to test scenarios (4 percentage points above national average), as well as the profile of Casey – Cranbourne SLA which is on par with the national average with regards to the income profile. The basis of this modification is shown in Figure 9.

The income quintiles in Figure 9 represent the following income ranges:

Lower	Second	Third	Fourth	Upper
Negative/Nil income - $349	$350-$649	$650-$1199	$1,200-$1,699	$1,700-$1,999

16.3% of the nation is in the Lower income quintile, 25.1% are in the Upper. The next box titled Variation in income from national average represents how each comparative area's income spreads between the quintile compared to the national average. For example, in Casey-Cranbourne, 94% of the national average is represented by people in the second income quintile.

Figure 9: Comparative Household Retail Expenditure Variation by Income

Income Quintiles	Lower	Second	Third	Fourth	Upper
National Average	16.3%	17.2%	27.0%	14.5%	25.1%
Cranbourne East	10.6%	15.9%	31.5%	21.6%	20.3%
Casey - Cranbourne	12.1%	16.2%	36.5%	18.6%	16.7%
Lynbrook	4.6%	8.2%	33.0%	24.6%	29.7%

Variation in Income from National Average	Lower	Second	Third	Fourth	Upper
Cranbourne East	65%	93%	117%	149%	81%
Casey - Cranbourne	74%	94%	135%	128%	66%
Lynbrook	28%	48%	123%	169%	118%

Australian Expenditure Profile	Lower	Second	Third	Fourth	Upper	National Average Expenditure
HES Expenditure profile	**274.11**	**420.63**	**518.87**	**599.58**	**764.49**	515.536

Income profile to expenditure profile and calculation of variation from national average	Lower	Second	Third	Fourth	Upper	Average Expenditure	Variation From National Average
Cranbourne East	178.70	390.32	606.24	892.35	620.52	537.63	1.04
Casey - Cranbourne	204.15	395.85	701.63	768.28	507.92	515.56	1.00
Lynbrook	76.85	199.84	635.71	1014.18	905.67	566.45	1.10

Source: ABS Household Expenditure Survey 1998-1999 6535.0, ABS Census 2006.

By using population projections defined in the previous section plus income variation by percentile group and real growth in retail expenditure, the amount of retail expenditure available in Cranbourne East was estimated.

For detailed calculations, refer to the appendix. A summary of the potential expenditure under each population scenario with the varying income profile is summarised in the table below:

Table 18: Available Retail Expenditure in Cranbourne East

		Income Profiles		
		Lynbrook	**Cranbourne East**	**Casey - Cranbourne**
Population Scenarios	**Scenario 1**	$187,582,684	$178,037,806	$170,731,962
	Scenario 2c	$215,676,535	$204,702,141	$196,302,118
	Scenario 2d	$208,639,828	$198,023,487	$189,897,524

Source: SGS estimates

2.7.3 Retail Floor Space Demand

Based on estimated potential retail spending generated by the residents of study area and by applying the industry benchmark retail turnover densities (RTDs), it is possible to estimate the demand for various types of retail floor space that this level of population will generate. It should be noted that conservative[7] RTDs were applied in this analysis, which are similar to modern enclosed shopping developments and the likely form of retail development in Cranbourne East.

Table 19: Retail Turnover Densities (RTD)

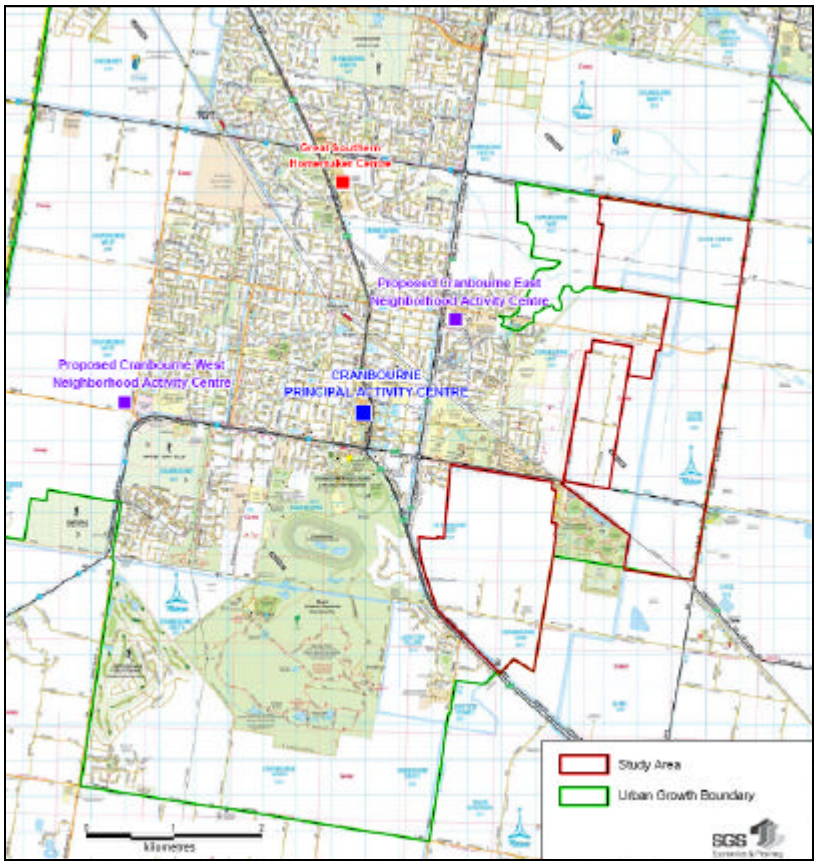
Commodity Groups	Retail Turnover Density ($/Sqm)
Supermarkets	$8,000
Department Stores	$2,500
Other Food	$6,000
Clothing	$3,000
HH Goods	$3,000
Other Retail	$4,000
Hospitality and Services	$3,000

Source: SGS estimate

But it is also important to note that, not all of the projected growth in retail floors space will be provided within Cranbourne East. In fact, there will be significant escape expenditure, whereby the residents of the new suburb undertake some of their retail/shopping activities elsewhere (e.g. Melbourne CAD, Fountain Gate, Cranbourne, etc). Figure 10 below shows the principal and neighbourhood activity centres surrounding the study area.

[7] A conservative RTD value is a high value as the higher the RTD value the lower the amount of floor space needed to absorb the available expenditure.

Figure 10: Activity Centres Surrounding Cranbourne East Study Area



Thus when we take into account that certain sectors of retail will retain more of the expenditure generated locally than others, we apply the ratios of retained expenditure shown in Table 20 to the total retail expenditure potential from Cranbourne East to calculate the likely requirement for local floor space.

Table 20: Ratios of Retail Expenditure Likely to be Retained in Cranbourne East

Supermarkets	Department Stores	Other Food	Clothing	Household Goods	Other Retail	Hospitality & Services	Total
100%	0%	60%	25%	10%	30%	30%	53%

When these retention ratios are applied to all the scenarios described above, the potential demand for retail floorspace in Cranbourne East is summarised in Table 21 below.

Table 21: Floorspace Forecast Summary

		Income Profiles		
		Lynbrook	**Cranbourne East**	**Casey - Cranbourne**
Population Scenarios	Scenario 1	16,808 sqm	15,953 sqm	15,298 sqm
	Scenario 2c	19,325 sqm	18,342 sqm	17,589 sqm
	Scenario 2d	18,695 sqm	17,743 sqm	17,015 sqm

Source: SGS estimates

The floorspace estimates range from 15,298 sqm to 19,325 sqm. These floorspace estimtes give rise to recommendations with regards to potential retail uses in Cranbourne East:

Table 22: Net Floorspace Demand/Retained Demand, 2006-31, Sqm

	Net Floorspace Demand/Retained Demand, 2006-31, Sqm										
Income Profile	**Lynbrook**			**Cranbourne East**			**Casey-Cranbourne**				
Population Scenario	**1**	**2c**	**2d**	**1**	**2c**	**2d**	**1**	**2c**	**2d**	**MIN**	**MAX**
Supermarkets	8,097	9,309	9,006	7,685	8,836	8,547	7,369	8,473	8,197	7,369	9,309
Department Stores	0	0	0	0	0	0	0	0	0	0	0
Other Food	2,084	2,397	2,318	1,978	2,275	2,200	1,897	2,181	2,110	1,897	2,397
Clothing	519	596	577	492	566	548	472	543	525	472	596
HH Goods	970	1,115	1,079	921	1,059	1,024	883	1,015	982	883	1,115
Other Retail	2,457	2,825	2,733	2,332	2,681	2,594	2,236	2,571	2,487	2,236	2,825
Hospitality and Services	2,681	3,082	2,982	2,544	2,926	2,830	2,440	2,806	2,714	2,440	3,082
Total	**16,808**	**19,325**	**18,695**	**15,953**	**18,342**	**17,743**	**15,298**	**17,589**	**17,015**	**15,298**	**19,325**

Source: SGS estimates

2.7.4 Summary/recommendation

All the scenarios presented do not change the floorspace demand to a great exrent. It is proposed, no matter what the population and income profile will be, to provide 2 supermarkets (7,369-9309sqm approx), clothing stores (472-596sqm) plus a variety of food, clothing and other retail of about 10,000sqm of floorspace. No department stores/discount department stores would be necessary.

3 Employment

3.1 Policy Context - C21 Jobs

In September 2002 Council adopted a municipal wide city strategy entitled *Casey C21 A vision for our future (Casey C21). The opportunities for Casey are identified below:*

The Monash University, together with Chisholm Institute and the new hospital will provide a foundation upon which to build diverse, dense, knowledge intensive business and industry. This precinct is to be known as the Casey Technology Park. The opportunity exists to create at least 10,000 jobs in this precinct in the long term.

Another opportunity, that will be able to build on the success of the Casey Technology Park is the proposed Fountain Gate Business Park, this is part of the Fountain Gate/Narre Warren CBD. This large business precinct has the potential to provide more than 20,000 jobs in the longer term.

If the development of these two precincts can be achieved, an array of benefits will flow to the whole Casey community. Equally, in the longer term, development may spill over into other precincts as opportunities are realised. There are opportunities for redevelopment along the Princes Highway or 'C21 corridor'. Achieving the development of these precincts will require a sustained local commitment and leadership. While opportunities can be identified, nothing is guaranteed. These opportunities can disappear if not pursued.

The Cranbourne East study area is designated as a residential extension to Cranbourne. There would be some scope for jobs in the area but this is likely to be very limited. With the proposed Cranbourne West and Cranbourne North industrial precincts in close proximity, Cranbourne East will provide residential opportunities for this expanding local workforce.

3.2 Job Stock

Using data from the ABS census Journey to Work, the estimated number of jobs in each area are summarised in Table 23 below:

Table 23: Job Stock

	Total Jobs
Casey (C) – Cranbourne	**7,408**
Casey (C) – Berwick	12,170
Casey (C) – Hallam	10,307
Casey (C) – South	2,950
Casey (C)	32,835
Cardinia (S) – Pakenham	6,023
CCGR	**38,858**

Source: ABS, JTW 2001

To identify the future employment potential in Casey-Cranbourne and the Casey-Cardinia Growth Area, a population projection needs to be determined. DSE has estimated the Victoria in the Future population projections outlined in Table 24 below.

Table 24: VIF Population Projections 2001-2031

Population Projections	2001	2006	2011	2016	2021	2026	2031
Casey (C) - Cranbourne	51,548	68,934	84,227	97,134	109,445	120,847	130,131
CCGR	199,552	248,637	285,205	319,265	352,248	382,397	408,654

Source: DSE, VIF 2004

3.3 Methodology

This section outlines the steps taken by SGS in forecasting employment numbers by various employment locations.

Step 1 Employment Trends, Intermediate Demand & Specialisation Patterns

To forecast employment for the region, SGS:

1. Regresses each of the 17 industrial subcomponents of Gross State Product (GSP) over a 20 year time series to establish a relationship between specific industrial sector output and GSP.
2. Uses location quotients (c.f. state economy) to identify the propensity for each industrial subcomponent of the regional economy to export to inter-regional and international destinations.
3. Uses state and regional employment data (ABS Journey to Work, 2001) to progressively scale down the inter-industry flow table within the national input-output tables (ABS Cat No. 5209.0).

These three steps establish the propensity for each of the industrial subcomponents of the regional economy to service 'export' vs. 'local' markets, as well as their regional inter-industry linkages.

Step 2 Population Based Employment Growth

Given the propensity of each industrial subcomponent of the regional economy to service 'local' markets, it is possible to model the direct and flow on employment effects attributable to population growth. The basic steps are as follows:

1. Population growth for the region is adopted from official forecasts (over 20–30 years);
2. Household income is assumed to grow at the same rate as the regional population.
3. This growth in income is assumed to transfer into household spending, which in turn requires increased output from consumption linked industries.
4. Consumption induced employment effects estimated previously, i.e. in the construction of the regional inter-industry flow (input-output) table, are used to quantify and distribute the increased employment levels in upstream industries.

Step 3 Export Based Employment Growth

Given the propensity of each industrial subcomponent of the regional economy to service 'export' markets, it is possible to model the direct and flow on employment effects attributable to overall export growth. The basic steps are as follows:

1. Export growth is assumed to grow in line with GSP.
2. Industrial income for each of the regional subcomponents of the economy is also assumed to continue to grow at their observed rate over the time series.
3. The income flows associated with this subcomponent specific growth are introduced to the industrial support industries previously established, i.e. in the construction of the regional inter-industry flow (input-output) table, and are used to quantify and distribute the increased employment levels in upstream industries.

3.4 Regional Employment Demand

Table 25 below forecasts the employment based on 2001 employment in Casey-Cranbourne SLA and the Casey Cardinia Growth Region (CCGR).

Table 25: Employment Forecasts for Casey-Cranbourne and Casey Cardinia Growth Region (CCGR)

	Casey-Cranbourne						CCGR					
Industry	2006	2011	2016	2021	2026	2031	2006	2011	2016	2021	2026	2031
Agriculture; hunting and trapping	4	7	8	8	8	7	29	51	52	49	40	31
Forestry and fishing	0	1	1	2	2	2	2	3	5	6	7	8
Mining	-1	-2	-4	-5	-6	-7	-3	-6	-10	-13	-17	-20
Meat and dairy products	10	20	28	35	41	46	32	64	89	112	133	151
Other food products	3	7	9	12	14	16	104	207	288	362	426	482
Beverages, tobacco products	0	0	0	0	0	0	1	2	3	4	5	6
Textiles	1	2	3	4	4	5	12	25	34	43	50	57
Clothing and footwear	4	9	12	15	18	20	23	45	63	79	93	106
Wood and wood products	2	5	8	10	11	13	24	49	67	83	96	107
Paper, printing and publishing	5	12	17	21	25	28	25	53	75	94	111	126
Petroleum and coal products	0	0	0	0	0	0	2	5	7	9	10	12
Chemicals	1	2	3	4	4	5	14	27	36	45	52	58
Rubber and plastic products	0	1	1	1	1	2	26	50	67	82	94	104
Non-metallic mineral products	3	7	10	12	14	16	13	26	35	43	49	54
Basic metals and products	2	4	5	6	7	8	18	36	48	59	67	74
Fabricated metal products	3	6	8	10	12	13	41	84	114	140	162	180
Transport equipment	7	15	21	26	30	34	63	123	168	208	242	271
Other machinery and equipment	4	9	13	16	19	21	42	83	113	139	161	180
Miscellaneous manufacturing	4	9	13	17	20	23	37	74	103	129	153	173
Electricity, gas and water	2	4	5	7	8	9	16	33	48	62	74	86
Construction	4	14	19	22	24	26	9	23	10	-5	-24	-42
Wholesale trade	48	110	157	199	237	270	260	540	756	956	1,133	1,287
Retail trade	306	683	974	1,242	1,490	1,699	1,205	2,453	3,483	4,467	5,360	6,145
Repairs	39	90	129	165	198	226	148	313	447	574	689	790
Accommodation, cafes and restaurants	58	131	189	243	292	334	220	459	659	850	1,025	1,179
Transport and storage	42	96	137	173	205	233	152	322	454	576	682	776
Communication services	15	35	51	65	78	89	60	127	182	232	278	318
Finance and insurance	31	71	102	131	158	180	114	242	348	448	538	618
Ownership of dwellings	0	0	0	0	0	0	0	0	0	0	0	0
Property and business services	67	171	251	322	388	444	262	605	877	1,126	1,348	1,544
Government administration	5	13	19	25	30	35	22	50	73	95	115	132
Education	118	263	372	473	565	642	409	834	1,180	1,510	1,807	2,067
Health and community services	149	338	486	625	754	863	528	1,095	1,584	2,056	2,493	2,877
Cultural and recreational services	44	95	134	169	201	228	148	302	429	548	656	750
Personal and other services	71	158	227	291	350	401	241	501	725	940	1,139	1,314
Total Jobs	**1,051**	**2,387**	**3,409**	**4,345**	**5,205**	**5,931**	**4,298**	**8,901**	**12,613**	**16,109**	**19,247**	**22,003**

Source: SGS Estimate

The SGS model predicts an additional 5,931 jobs by 2031 in Casey-Cranbourne, with majority of jobs in the retail sector, to provide for the growth in population expected in the region. Over 6,000 retail jobs are expected in CCGR by 2031 out of 22,000 which is almost 30% of projected job growth.

3.5 Local Job Demand

The method used to identify the demand for jobs in Cranbourne East is presented in Tables 22-24 below.

Using VIF population projections by age, it is possible to estimate the working population (15-65 year olds) as a percentage of the total projected population. This is calculated at the SLA level for Casey-Cranbourne. The calculated ratio of the working population can be assumed to be consistent in Cranbourne East, therefore applying the ratio of the working population in Casey-Cranbourne, and using the projected population scenarios identified above it is possible to estimate Cranbourne East's working population. Applying an assumed unemployment rate of 4%, then reduces the working population figure to a total jobs demanded.

Table 26: Demand for Jobs – Scenario 1

Scenario 1	2006	2011	2016	2021	2026	2031
Casey-Cranbourne VIF Population Forecasts	68,934	84,227	97,134	109,445	120,847	130,131
Casey-Cranbourne Working age Population (15-65 y.o)	46,701	58,162	66,363	72,758	77,586	81,496
% of total population	68%	69%	68%	66%	64%	63%
Cranbourne East Population Forecast	-	812	10,850	12,968	15,097	15,097
Cranbourne East Working Population	-	561	7,413	8,621	9,693	9,455
Unemployment Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Total Jobs	-	538	7,116	8,276	9,305	9,077

Source: VIF, JTW, SGS

Under the population scenario 1 it can be expected that 9,077 residents will require jobs by 2031.

Table 27: Demand for Jobs – Scenario 2c

Scenario 2c	2006	2011	2016	2021	2026	2031
Casey-Cranbourne VIF Population Forecasts	68,934	84,227	97,134	109,445	120,847	130,131
Casey-Cranbourne Working age Population (15-65 y.o)	46,701	58,162	66,363	72,758	77,586	81,496
% of total population	68%	69%	68%	66%	64%	63%
Cranbourne East Population Forecast	-	1,226	13,793	15,910	17,358	17,358
Cranbourne East Working Population	-	846	9,424	10,577	11,144	10,871
Unemployment Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Total Jobs	-	813	9,047	10,154	10,698	10,436

Source: VIF, JTW, SGS

Under the population scenario 2c it can be expected that 10,436 residents will require jobs by 2031.

Table 28: Demand for Jobs – Scenario 2d

Scenario 2d	2006	2011	2016	2021	2026	2031
Casey-Cranbourne VIF Population Forecasts	68,934	84,227	97,134	109,445	120,847	130,131
Casey-Cranbourne Working age Population (15-65 y.o)	46,701	58,162	66,363	72,758	77,586	81,496
% of total population	68%	69%	68%	66%	64%	63%
Cranbourne East Population Forecast	-	1,226	13,793	15,910	16,792	16,792
Cranbourne East Working Population	-	846	9,424	10,577	10,781	10,516
Unemployment Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Total Jobs	-	813	9,047	10,154	10,349	10,095

Source: VIF, JTW, SGS

Under the population scenario 2d it can be expected that 10,095 residents will require jobs in by 2031.

It is also interesting to know the type of jobs which are likely to be required to service the resident population. The categories include export jobs, local jobs, construction jobs and some which fit 50:50 into both the export and local categories. The percentage of each job type is calculated using the Journey to Work (JTW) 2001 data, at the 3-digit ANZSIC classification level. Each industry is classified under each job type. Using Casey-Cranbourne SLA JTW data and fitting it into the classifications, the job type split is identified for Casey-Cranbourne. Table 25 below details the percentage split. Cranbourne East is assumed to follow the same split pattern.

Table 29: Job type Split Scenarios (2031)

Job Type	Casey-Cranbourne SLA	Cranbourne East 2031 (1)	Cranbourne East 2031 (2c)	Cranbourne East 2031 (2d)
Exports	18%	1,637	1,883	1,821
Local	64%	5,779	6,644	6,427
Construction	9%	784	902	872
50:50 (export:local)	10%	876	1,007	974
Total	**100%**	**9,077**	**10,436**	**10,095**

Source: SGS Estimate

Using the total jobs demanded identified above, and applying the percentage splits by job type it is possible to calculate the numbers of jobs in Cranbourne East. It can be expected that approximately 784 to 902 construction jobs will be required to service the future population. Similarly between 5,770 and 6,644 local jobs will need to be provided, as well as between 1,637 and 1,883 export based jobs, with the remainder split between export and local jobs.

APPENDIX

Retail Floorspace Forecasts: Lynbrook Income Profile Scenarios

Table 30: Scenario 1

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$2,669,660	$585,022	$987,308	$474,837	$1,295,123	$1,380,256	$1,360,577	**$8,752,783**
2016	$38,392,817	$7,132,321	$13,639,837	$5,876,983	$18,209,005	$19,719,014	$18,452,278	**$121,422,254**
2021	$49,135,374	$7,705,500	$16,835,821	$6,464,533	$22,841,640	$25,091,407	$22,377,834	**$150,452,109**
2026	$60,988,649	$8,017,830	$20,222,609	$6,874,997	$27,849,214	$30,986,619	$26,430,783	**$181,370,700**
2031	$64,773,120	$7,064,794	$20,844,690	$6,223,884	$29,105,831	$32,761,426	$26,808,939	**$187,582,684**
Growth in Retail Expenditure								
2006-11	$2,669,660	$585,022	$987,308	$474,837	$1,295,123	$1,380,256	$1,360,577	**$8,752,783**
2011-16	$35,723,157	$6,547,298	$12,652,529	$5,402,145	$16,913,882	$18,338,758	$17,091,701	**$112,669,471**
2016-21	$10,742,557	$573,179	$3,195,984	$587,550	$4,632,635	$5,372,393	$3,925,555	**$29,029,854**
2021-26	$11,853,275	$312,329	$3,386,788	$410,465	$5,007,574	$5,895,211	$4,052,949	**$30,918,592**
2026-31	$3,784,472	-$953,035	$622,081	-$651,114	$1,256,617	$1,774,807	$378,156	**$6,211,983**
Total, 2006-31	**$64,773,120**	**$7,064,794**	**$20,844,690**	**$6,223,884**	**$29,105,831**	**$32,761,426**	**$26,808,939**	**$187,582,684**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$64,773,120	$0	$12,506,814	$1,555,971	$2,910,583	$9,828,428	$8,042,682	$99,617,598
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	8,097	2,826	3,474	2,075	9,702	8,190	8,936	43,300

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$64,773,120	$64,773,120	$8,000	8,097	8,097
Department Stores	$7,064,794	$0	$2,500	2,826	0
Other Food	$20,844,690	$12,506,814	$6,000	3,474	2,084
Clothing	$6,223,884	$1,555,971	$3,000	2,075	519
HH Goods	$29,105,831	$2,910,583	$3,000	9,702	970
Other Retail	$32,761,426	$9,828,428	$4,000	8,190	2,457
Hospitality and Services	$26,808,939	$8,042,682	$3,000	8,936	2,681
Total	**$187,582,684**	**$99,617,598**		**43,300**	**16,808**

Table 31: Scenario 2c

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$4,030,074	$883,140	$1,490,424	$716,806	$1,955,095	$2,083,612	$2,053,904	**$13,213,056**
2016	$48,805,789	$9,066,762	$17,339,259	$7,470,949	$23,147,685	$25,067,242	$23,456,940	**$154,354,627**
2021	$60,286,044	$9,454,169	$20,656,504	$7,931,579	$28,025,269	$30,785,594	$27,456,208	**$184,595,368**
2026	$70,122,786	$9,218,642	$23,251,306	$7,904,651	$32,020,130	$35,627,417	$30,389,264	**$208,534,196**
2031	$74,474,050	$8,122,873	$23,966,554	$7,156,021	$33,464,948	$37,668,033	$30,824,055	**$215,676,535**
Growth in Retail Expenditure								
2006-11	$4,030,074	$883,140	$1,490,424	$716,806	$1,955,095	$2,083,612	$2,053,904	**$13,213,056**
2011-16	$44,775,715	$8,183,622	$15,848,836	$6,754,142	$21,192,590	$22,983,631	$21,403,035	**$141,141,571**
2016-21	$11,480,255	$387,407	$3,317,245	$460,630	$4,877,584	$5,718,352	$3,999,268	**$30,240,741**
2021-26	$9,836,742	-$235,526	$2,594,801	-$26,928	$3,994,861	$4,841,823	$2,933,055	**$23,938,828**
2026-31	$4,351,264	-$1,095,769	$715,249	-$748,629	$1,444,818	$2,040,616	$434,792	**$7,142,339**
Total, 2006-31	**$74,474,050**	**$8,122,873**	**$23,966,554**	**$7,156,021**	**$33,464,948**	**$37,668,033**	**$30,824,055**	**$215,676,535**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$74,474,050	$0	$14,379,933	$1,789,005	$3,346,495	$11,300,410	$9,247,217	$114,537,109
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	9,309	3,249	3,994	2,385	11,155	9,417	10,275	49,785

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$74,474,050	$74,474,050	$8,000	9,309	9,309
Department Stores	$8,122,873	$0	$2,500	3,249	0
Other Food	$23,966,554	$14,379,933	$6,000	3,994	2,397
Clothing	$7,156,021	$1,789,005	$3,000	2,385	596
HH Goods	$33,464,948	$3,346,495	$3,000	11,155	1,115
Other Retail	$37,668,033	$11,300,410	$4,000	9,417	2,825
Hospitality and Services	$30,824,055	$9,247,217	$3,000	10,275	3,082
Total	**$215,676,535**	**$114,537,109**		**49,785**	**19,325**

Table 32: Scenario 2d

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$4,030,074	$883,140	$1,490,424	$716,806	$1,955,095	$2,083,612	$2,053,904	**$13,213,056**
2016	$48,805,789	$9,066,762	$17,339,259	$7,470,949	$23,147,685	$25,067,242	$23,456,940	**$154,354,627**
2021	$60,286,044	$9,454,169	$20,656,504	$7,931,579	$28,025,269	$30,785,594	$27,456,208	**$184,595,368**
2026	$67,834,946	$8,917,873	$22,492,704	$7,646,752	$30,975,435	$34,465,030	$29,397,777	**$201,730,516**
2031	$72,044,244	$7,857,855	$23,184,616	$6,922,547	$32,373,114	$36,439,068	$29,818,383	**$208,639,828**
Growth in Retail Expenditure								
2006-11	$4,030,074	$883,140	$1,490,424	$716,806	$1,955,095	$2,083,612	$2,053,904	**$13,213,056**
2011-16	$44,775,715	$8,183,622	$15,848,836	$6,754,142	$21,192,590	$22,983,631	$21,403,035	**$141,141,571**
2016-21	$11,480,255	$387,407	$3,317,245	$460,630	$4,877,584	$5,718,352	$3,999,268	**$30,240,741**
2021-26	$7,548,902	-$536,296	$1,836,200	-$284,827	$2,950,165	$3,679,436	$1,941,569	**$17,135,149**
2026-31	$4,209,299	-$1,060,018	$691,913	-$724,205	$1,397,679	$1,974,038	$420,606	**$6,909,311**
Total, 2006-31	**$72,044,244**	**$7,857,855**	**$23,184,616**	**$6,922,547**	**$32,373,114**	**$36,439,068**	**$29,818,383**	**$208,639,828**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$72,044,244	$0	$13,910,770	$1,730,637	$3,237,311	$10,931,720	$8,945,515	$110,800,198
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	9,006	3,143	3,864	2,308	10,791	9,110	9,939	48,161

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$72,044,244	$72,044,244	$8,000	9,006	9,006
Department Stores	$7,857,855	$0	$2,500	3,143	0
Other Food	$23,184,616	$13,910,770	$6,000	3,864	2,318
Clothing	$6,922,547	$1,730,637	$3,000	2,308	577
HH Goods	$32,373,114	$3,237,311	$3,000	10,791	1,079
Other Retail	$36,439,068	$10,931,720	$4,000	9,110	2,733
Hospitality and Services	$29,818,383	$8,945,515	$3,000	9,939	2,982
Total	**$208,639,828**	**$110,800,198**		**48,161**	**18,695**

Retail Floorspace Forecasts: Cranbourne East Income Profile Scenarios

Table 33: Scenario 1

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$2,533,818	$555,254	$937,070	$450,676	$1,229,222	$1,310,024	$1,291,346	**$8,307,410**
2016	$36,439,253	$6,769,403	$12,945,793	$5,577,941	$17,282,465	$18,715,640	$17,513,360	**$115,243,856**
2021	$46,635,190	$7,313,417	$15,979,154	$6,135,594	$21,679,375	$23,814,667	$21,239,169	**$142,796,567**
2026	$57,885,328	$7,609,854	$19,193,611	$6,525,173	$26,432,146	$29,409,909	$25,085,890	**$172,141,911**
2031	$61,477,232	$6,705,312	$19,784,038	$5,907,190	$27,624,822	$31,094,407	$25,444,804	**$178,037,806**
Growth in Retail Expenditure								
2006-11	$2,533,818	$555,254	$937,070	$450,676	$1,229,222	$1,310,024	$1,291,346	**$8,307,410**
2011-16	$33,905,435	$6,214,148	$12,008,723	$5,127,265	$16,053,243	$17,405,616	$16,222,014	**$106,936,446**
2016-21	$10,195,937	$544,014	$3,033,361	$557,653	$4,396,910	$5,099,027	$3,725,809	**$27,552,711**
2021-26	$11,250,138	$296,437	$3,214,456	$389,579	$4,752,771	$5,595,242	$3,846,720	**$29,345,343**
2026-31	$3,591,904	-$904,541	$590,427	-$617,983	$1,192,676	$1,684,498	$358,914	**$5,895,896**
Total, 2006-31	**$61,477,232**	**$6,705,312**	**$19,784,038**	**$5,907,190**	**$27,624,822**	**$31,094,407**	**$25,444,804**	**$178,037,806**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$61,477,232	$0	$11,870,423	$1,476,798	$2,762,482	$9,328,322	$7,633,441	$94,548,698
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	7,685	2,682	3,297	1,969	9,208	7,774	8,482	41,097

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$61,477,232	$61,477,232	$8,000	7,685	7,685
Department Stores	$6,705,312	$0	$2,500	2,682	0
Other Food	$19,784,038	$11,870,423	$6,000	3,297	1,978
Clothing	$5,907,190	$1,476,798	$3,000	1,969	492
HH Goods	$27,624,822	$2,762,482	$3,000	9,208	921
Other Retail	$31,094,407	$9,328,322	$4,000	7,774	2,332
Hospitality and Services	$25,444,804	$7,633,441	$3,000	8,482	2,544
Total	**$178,037,806**	**$94,548,698**		**41,097**	**15,953**

Table 34: Scenario 2c

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$3,825,010	$838,203	$1,414,585	$680,333	$1,855,613	$1,977,590	$1,949,394	**$12,540,728**
2016	$46,322,376	$8,605,413	$16,456,976	$7,090,800	$21,969,848	$23,791,731	$22,263,367	**$146,500,512**
2021	$57,218,474	$8,973,107	$19,605,427	$7,527,992	$26,599,244	$29,219,113	$26,059,138	**$175,202,495**
2026	$66,554,688	$8,749,565	$22,068,196	$7,502,434	$30,390,832	$33,814,567	$28,842,949	**$197,923,230**
2031	$70,684,544	$7,709,553	$22,747,050	$6,791,897	$31,762,132	$35,751,349	$29,255,617	**$204,702,141**
Growth in Retail Expenditure								
2006-11	$3,825,010	$838,203	$1,414,585	$680,333	$1,855,613	$1,977,590	$1,949,394	**$12,540,728**
2011-16	$42,497,367	$7,767,210	$15,042,390	$6,410,468	$20,114,235	$21,814,141	$20,313,972	**$133,959,783**
2016-21	$10,896,098	$367,694	$3,148,452	$437,191	$4,629,395	$5,427,382	$3,795,771	**$28,701,984**
2021-26	$9,336,214	-$223,542	$2,462,769	-$25,558	$3,791,588	$4,595,454	$2,783,811	**$22,720,735**
2026-31	$4,129,856	-$1,040,012	$678,854	-$710,537	$1,371,300	$1,936,782	$412,668	**$6,778,911**
Total, 2006-31	**$70,684,544**	**$7,709,553**	**$22,747,050**	**$6,791,897**	**$31,762,132**	**$35,751,349**	**$29,255,617**	**$204,702,141**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$70,684,544	$0	$13,648,230	$1,697,974	$3,176,213	$10,725,405	$8,776,685	$108,709,051
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	8,836	3,084	3,791	2,264	10,587	8,938	9,752	47,252

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$70,684,544	$70,684,544	$8,000	8,836	8,836
Department Stores	$7,709,553	$0	$2,500	3,084	0
Other Food	$22,747,050	$13,648,230	$6,000	3,791	2,275
Clothing	$6,791,897	$1,697,974	$3,000	2,264	566
HH Goods	$31,762,132	$3,176,213	$3,000	10,587	1,059
Other Retail	$35,751,349	$10,725,405	$4,000	8,938	2,681
Hospitality and Services	$29,255,617	$8,776,685	$3,000	9,752	2,926
Total	**$204,702,141**	**$108,709,051**		**47,252**	**18,342**

Table 35: Scenario 2d

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$3,825,010	$838,203	$1,414,585	$680,333	$1,855,613	$1,977,590	$1,949,394	**$12,540,728**
2016	$46,322,376	$8,605,413	$16,456,976	$7,090,800	$21,969,848	$23,791,731	$22,263,367	**$146,500,512**
2021	$57,218,474	$8,973,107	$19,605,427	$7,527,992	$26,599,244	$29,219,113	$26,059,138	**$175,202,495**
2026	$64,383,261	$8,464,100	$21,348,195	$7,257,658	$29,399,294	$32,711,326	$27,901,913	**$191,465,746**
2031	$68,378,375	$7,458,019	$22,004,900	$6,570,303	$30,725,854	$34,584,918	$28,301,117	**$198,023,487**
Growth in Retail Expenditure								
2006-11	$3,825,010	$838,203	$1,414,585	$680,333	$1,855,613	$1,977,590	$1,949,394	**$12,540,728**
2011-16	$42,497,367	$7,767,210	$15,042,390	$6,410,468	$20,114,235	$21,814,141	$20,313,972	**$133,959,783**
2016-21	$10,896,098	$367,694	$3,148,452	$437,191	$4,629,395	$5,427,382	$3,795,771	**$28,701,984**
2021-26	$7,164,787	-$509,007	$1,742,767	-$270,334	$2,800,050	$3,492,213	$1,842,775	**$16,263,251**
2026-31	$3,995,114	-$1,006,081	$656,706	-$687,354	$1,326,560	$1,873,592	$399,204	**$6,557,741**
Total, 2006-31	**$68,378,375**	**$7,458,019**	**$22,004,900**	**$6,570,303**	**$30,725,854**	**$34,584,918**	**$28,301,117**	**$198,023,487**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$68,378,375	$0	$13,202,940	$1,642,576	$3,072,585	$10,375,475	$8,490,335	$105,162,287
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	8,547	2,983	3,667	2,190	10,242	8,646	9,434	45,710

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$68,378,375	$68,378,375	$8,000	8,547	8,547
Department Stores	$7,458,019	$0	$2,500	2,983	0
Other Food	$22,004,900	$13,202,940	$6,000	3,667	2,200
Clothing	$6,570,303	$1,642,576	$3,000	2,190	548
HH Goods	$30,725,854	$3,072,585	$3,000	10,242	1,024
Other Retail	$34,584,918	$10,375,475	$4,000	8,646	2,594
Hospitality and Services	$28,301,117	$8,490,335	$3,000	9,434	2,830
Total	**$198,023,487**	**$105,162,287**		**45,710**	**17,743**

Retail Floorspace Forecasts: Casey-Cranbourne (SLA) Income Profile Scenarios

Table 36: Scenario 1

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$2,429,842	$532,469	$898,617	$432,182	$1,178,781	$1,256,267	$1,238,355	**$7,966,513**
2016	$34,943,956	$6,491,618	$12,414,558	$5,349,048	$16,573,273	$17,947,637	$16,794,693	**$110,514,784**
2021	$44,721,499	$7,013,308	$15,323,444	$5,883,818	$20,789,755	$22,837,424	$20,367,613	**$136,936,860**
2026	$55,509,983	$7,297,581	$18,405,994	$6,257,410	$25,347,494	$28,203,063	$24,056,482	**$165,078,007**
2031	$58,954,493	$6,430,158	$18,972,193	$5,664,787	$26,491,228	$29,818,437	$24,400,668	**$170,731,962**
Growth in Retail Expenditure								
2006-11	$2,429,842	$532,469	$898,617	$432,182	$1,178,781	$1,256,267	$1,238,355	**$7,966,513**
2011-16	$32,514,114	$5,959,149	$11,515,941	$4,916,866	$15,394,493	$16,691,371	$15,556,338	**$102,548,271**
2016-21	$9,777,543	$521,690	$2,908,886	$534,770	$4,216,481	$4,889,786	$3,572,919	**$26,422,076**
2021-26	$10,788,484	$284,273	$3,082,550	$373,592	$4,557,739	$5,365,639	$3,688,869	**$28,141,147**
2026-31	$3,444,509	-$867,423	$566,199	-$592,623	$1,143,734	$1,615,374	$344,186	**$5,653,955**
Total, 2006-31	**$58,954,493**	**$6,430,158**	**$18,972,193**	**$5,664,787**	**$26,491,228**	**$29,818,437**	**$24,400,668**	**$170,731,962**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$58,954,493	$0	$11,383,316	$1,416,197	$2,649,123	$8,945,531	$7,320,200	$90,668,859
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	7,369	2,572	3,162	1,888	8,830	7,455	8,134	39,410

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$58,954,493	$58,954,493	$8,000	7,369	7,369
Department Stores	$6,430,158	$0	$2,500	2,572	0
Other Food	$18,972,193	$11,383,316	$6,000	3,162	1,897
Clothing	$5,664,787	$1,416,197	$3,000	1,888	472
HH Goods	$26,491,228	$2,649,123	$3,000	8,830	883
Other Retail	$29,818,437	$8,945,531	$4,000	7,455	2,236
Hospitality and Services	$24,400,668	$7,320,200	$3,000	8,134	2,440
Total	**$170,731,962**	**$90,668,859**		**39,410**	**15,298**

Table 37: Scenario 2c

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$3,668,049	$803,807	$1,356,537	$652,415	$1,779,467	$1,896,439	$1,869,400	**$12,026,115**
2016	$44,421,521	$8,252,287	$15,781,658	$6,799,827	$21,068,308	$22,815,429	$21,349,782	**$140,488,812**
2021	$54,870,494	$8,604,892	$18,800,912	$7,219,078	$25,507,734	$28,020,097	$24,989,792	**$168,013,000**
2026	$63,823,593	$8,390,524	$21,162,620	$7,194,569	$29,143,733	$32,426,974	$27,659,369	**$189,801,382**
2031	$67,783,979	$7,393,188	$21,813,617	$6,513,189	$30,458,762	$34,284,280	$28,055,103	**$196,302,118**
Growth in Retail Expenditure								
2006-11	$3,668,049	$803,807	$1,356,537	$652,415	$1,779,467	$1,896,439	$1,869,400	**$12,026,115**
2011-16	$40,753,472	$7,448,480	$14,425,121	$6,147,412	$19,288,840	$20,918,990	$19,480,382	**$128,462,697**
2016-21	$10,448,973	$352,605	$3,019,254	$419,251	$4,439,427	$5,204,667	$3,640,011	**$27,524,188**
2021-26	$8,953,099	-$214,369	$2,361,708	-$24,509	$3,635,999	$4,406,878	$2,669,576	**$21,788,382**
2026-31	$3,960,386	-$997,335	$650,997	-$681,379	$1,315,028	$1,857,305	$395,734	**$6,500,736**
Total, 2006-31	**$67,783,979**	**$7,393,188**	**$21,813,617**	**$6,513,189**	**$30,458,762**	**$34,284,280**	**$28,055,103**	**$196,302,118**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$67,783,979	$0	$13,088,170	$1,628,297	$3,045,876	$10,285,284	$8,416,531	$104,248,137
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	8,473	2,957	3,636	2,171	10,153	8,571	9,352	45,313

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$67,783,979	$67,783,979	$8,000	8,473	8,473
Department Stores	$7,393,188	$0	$2,500	2,957	0
Other Food	$21,813,617	$13,088,170	$6,000	3,636	2,181
Clothing	$6,513,189	$1,628,297	$3,000	2,171	543
HH Goods	$30,458,762	$3,045,876	$3,000	10,153	1,015
Other Retail	$34,284,280	$10,285,284	$4,000	8,571	2,571
Hospitality and Services	$28,055,103	$8,416,531	$3,000	9,352	2,806
Total	**$196,302,118**	**$104,248,137**		**45,313**	**17,589**

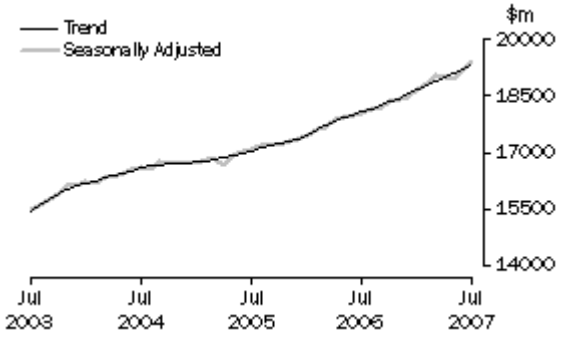
Table 38: Scenario 2d

	Supermarkets	Department Stores	Other Food	Clothing	HH Goods	Other Retail	Hospitality and Services	Total
Estimated Retail Expenditure								
2006 Estimated	$0	$0	$0	$0	$0	$0	$0	**$0**
2011	$3,668,049	$803,807	$1,356,537	$652,415	$1,779,467	$1,896,439	$1,869,400	**$12,026,115**
2016	$44,421,521	$8,252,287	$15,781,658	$6,799,827	$21,068,308	$22,815,429	$21,349,782	**$140,488,812**
2021	$54,870,494	$8,604,892	$18,800,912	$7,219,078	$25,507,734	$28,020,097	$24,989,792	**$168,013,000**
2026	$61,741,271	$8,116,773	$20,472,164	$6,959,837	$28,192,884	$31,369,005	$26,756,948	**$183,608,882**
2031	$65,572,445	$7,151,977	$21,101,922	$6,300,689	$29,465,008	$33,165,714	$27,139,771	**$189,897,524**
Growth in Retail Expenditure								
2006-11	$3,668,049	$803,807	$1,356,537	$652,415	$1,779,467	$1,896,439	$1,869,400	**$12,026,115**
2011-16	$40,753,472	$7,448,480	$14,425,121	$6,147,412	$19,288,840	$20,918,990	$19,480,382	**$128,462,697**
2016-21	$10,448,973	$352,605	$3,019,254	$419,251	$4,439,427	$5,204,667	$3,640,011	**$27,524,188**
2021-26	$6,870,777	-$488,120	$1,671,252	-$259,241	$2,685,149	$3,348,909	$1,767,156	**$15,595,883**
2026-31	$3,831,173	-$964,796	$629,758	-$659,149	$1,272,124	$1,796,709	$382,823	**$6,288,642**
Total, 2006-31	**$65,572,445**	**$7,151,977**	**$21,101,922**	**$6,300,689**	**$29,465,008**	**$33,165,714**	**$27,139,771**	**$189,897,524**
Percentage retained within Cranboune East	100%	0%	60%	25%	10%	30%	30%	53%
Ependiture Retained	$65,572,445	$0	$12,661,153	$1,575,172	$2,946,501	$9,949,714	$8,141,931	$100,846,916
Retail Turnover Density ($/Sqm)	$8,000	$2,500	$6,000	$3,000	$3,000	$4,000	$3,000	
Net Floorspace Demand, 2006-31, Sqm	8,197	2,861	3,517	2,100	9,822	8,291	9,047	43,834

Commodity Groups	Growth in Retail Expenditure, 2006-31	Growth in Retail Expenditure Retained in Cranbourne East, 2006-31	Retail Turnover Density ($/Sqm)	Net Floorspace Base Demand, 2006-31, Sqm	Net Floorspace Demand Retained Demand, 2006-31, Sqm
Supermarkets	$65,572,445	$65,572,445	$8,000	8,197	8,197
Department Stores	$7,151,977	$0	$2,500	2,861	0
Other Food	$21,101,922	$12,661,153	$6,000	3,517	2,110
Clothing	$6,300,689	$1,575,172	$3,000	2,100	525
HH Goods	$29,465,008	$2,946,501	$3,000	9,822	982
Other Retail	$33,165,714	$9,949,714	$4,000	8,291	2,487
Hospitality and Services	$27,139,771	$8,141,931	$3,000	9,047	2,714
Total	**$189,897,524**	**$100,846,916**		**43,834**	**17,015**

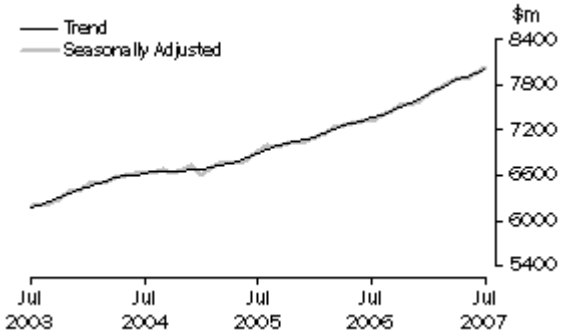
ABS Retail Turnover Trends

Figure 11: Retail Turnover



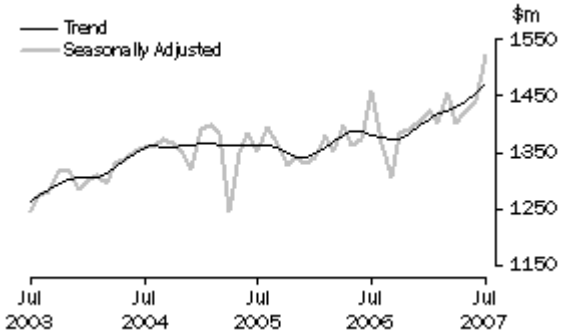
Source: ABS catalogue 8501.0

Figure 12: Food Retailing Turnover



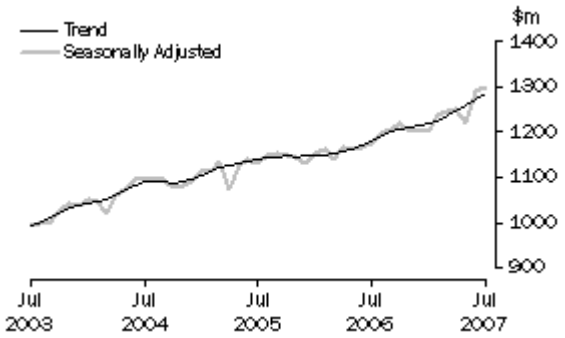
Source: ABS catalogue 8501.0

Figure 13: Department Stores Turnover



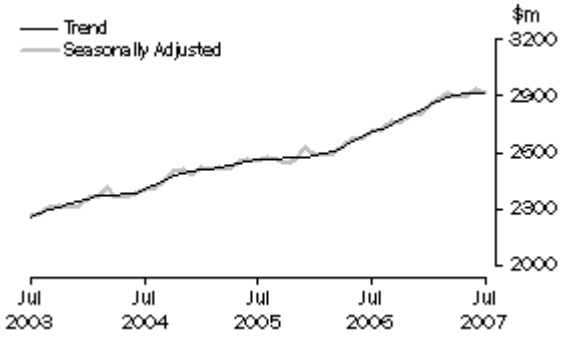
Source: ABS catalogue 8501.0

Figure 14: Clothing and Soft Goods Turnover



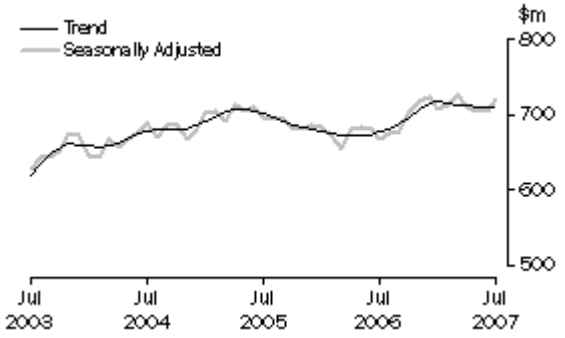
Source: ABS catalogue 8501.0

Figure 15: Household Good Turnover



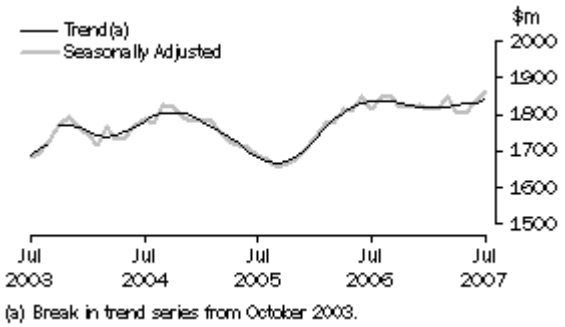
Source: ABS catalogue 8501.0

Figure 16: Recreational Goods Expenditure



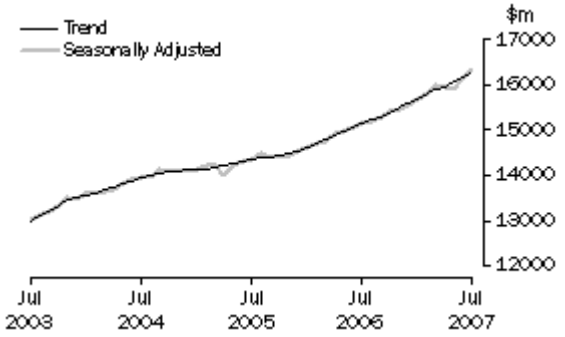
Source: ABS catalogue 8501.0

Figure 17: Other retailing expenditure



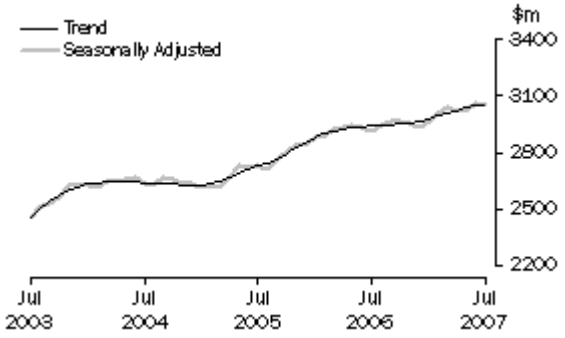
Source: ABS catalogue 8501.0

Figure 18: Total Retail Expenditure



Source: ABS catalogue 8501.0

Figure 19: Hospitality and Services Expenditure



Source: ABS catalogue 8501.0