# St Andrews District Structure Plan

## Retail Hierarchy Assessment

Prepared for : Yanchep Sun City Pty Ltd

September 2007

urbis JHD

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# Executive Summary

## Introduction

1. This report has been prepared on the instructions of Yanchep Sun City Pty Ltd. It considers the role of the St Andrews District Structure Plan (DSP) in presenting a viable retail hierarchy able to meet the needs of future residents of the region.
2. The physical form of the district structure plan follows a linear pattern that facilitates the regular spacing of activity centres at intervals that maximise accessibility for residents. The DSP provides for all residents to be within 5 kms of a major activity centre and 2 kms of a minor activity centre.
3. A viable retail hierarchy is one which meets the needs of consumers, the community, retailers and is flexible in accommodating the changes that have and will continue to occur in the retail industry. However, it is not possible or desirable, to provide a prescriptive and rigid structure that will determine the exact size and composition of activity centres that, in some cases, may not emerge for three decades or more.
4. The retail modelling undertaken by UrbisJHD quantifies the total spending market generated by future residents, considers the likely distribution of the spending to the different centres based on their position within the hierarchy as set out in the DSP, and assesses whether the scheme satisfies the stated objectives.
5. The ultimate staging of retail development will be determined by the rate and location of population growth. The objective of this exercise is to establish whether the planned provision of the centres scheme is appropriate at full development of the region, determined for the purpose of this exercise to be the year 2050.

## Retail Trends

6. In determining the future needs of residents of the St Andrews region and the future structure of the retail environment capable of accommodating them, it is useful to understand the changes that have influenced shopping behaviours and that have given rise to the current retail environment.
7. Australia and Western Australia have experienced strong income growth which has been a key driver behind growth in spending levels. Annual growth in per capita spending across Australia has averaged 0.8% in real terms over the past 30 years, 1.1% over the last 20 years and 2.0% over the last decade. This represents real growth; that is, each year people spend more on retail than the previous year even after inflation is taken into account. Continuing income and wealth growth in Australia is expected to drive continued increases in real spending levels.
8. Social and demographic trends including declining fertility, decreasing household size, an ageing population, better education and changing work patterns have changed attitudes and influenced the pattern of retailing over time. Changed working patterns and social attitudes are reflected in longer trading hours of retailers. Emerging trends that include shopping as a leisure activity, more sophisticated shopping habits and increased internet usage are expected to influence future retail patterns.
9. In response to these demand side changes as well as technological and operational developments, the supply side response has resulted in :
    - New retail formats
    - Larger store sizes
    - Larger shopping centres
    - The suburbanisation of retailing
    - Increased internet usage

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10. Retail is a dynamic industry; consumer behaviour and spending have changed considerably and the retail environment has adapted to accommodate these changes. Whilst future changes will always be difficult to foresee, it is clear that retail will remain a dynamic industry and that any retail hierarchy at St Andrews should be flexible in accommodating emerging retail forms and responsive to consumer behaviour.

## Retail Modelling

11. UrbisJHD has developed a spending distribution model whereby the future spending levels generated by residents are directed to the range of retail facilities within the region. Importantly, the process is transparent and the assumptions used in this modelling are made explicit to facilitate future evolution.

12. The starting point for the retail analysis is the future population levels in St Andrews. Roberts Day have identified 35 residential precincts and 18 activity centres within the DSP and provided us with the ultimate population capacity for each. In total, the population of the St Andrews region, is expected to be close to 155,000.

13. The first step requires a number of assumptions to be made regarding the size of the future spending market available to retail facilities within St Andrews. Specifically the analysis contained within this report has resulted in the following inputs:

    - Real Per Capita Spending Growth: 1.2% overall with variation across the spending categories
    - Non-shopfront: 8% of spending generated by residents of the region is expected to be diverted to non-shopfront (i.e. mail order, internet markets etc)
    - Escape: residents of the region are expected to direct 10% of their spending to facilities beyond the trade area (e.g. Perth Central Business District (CBD)).
    - Capture: Inflow of expenditure would be derived from :
        - workers coming from outside the region;
        - tourists visiting the region; and
        - destination shoppers.
    - Non-household spending. 7% of retail turnover is expected to be generated from non-retail or business purchases.

14. The retail spending market generated by residents of St Andrews at 2050 is forecast at $2.6 billion expressed in $2006 and exclusive of GST.

15. The likely flows of spending from each precinct to each centre will be influenced by :

    - The relative proximity of the centres.
    - The size of centres and their composition, including administrative, retail and commercial function.
    - Accessibility to the centres by a range of transport modes.
    - The presence or absence of physical barriers including road, rail or natural boundary.

16. The modelling results have been tested against established industry benchmarks to ensure an outcome that reflects a realistic, viable and implementable retail hierarchy.

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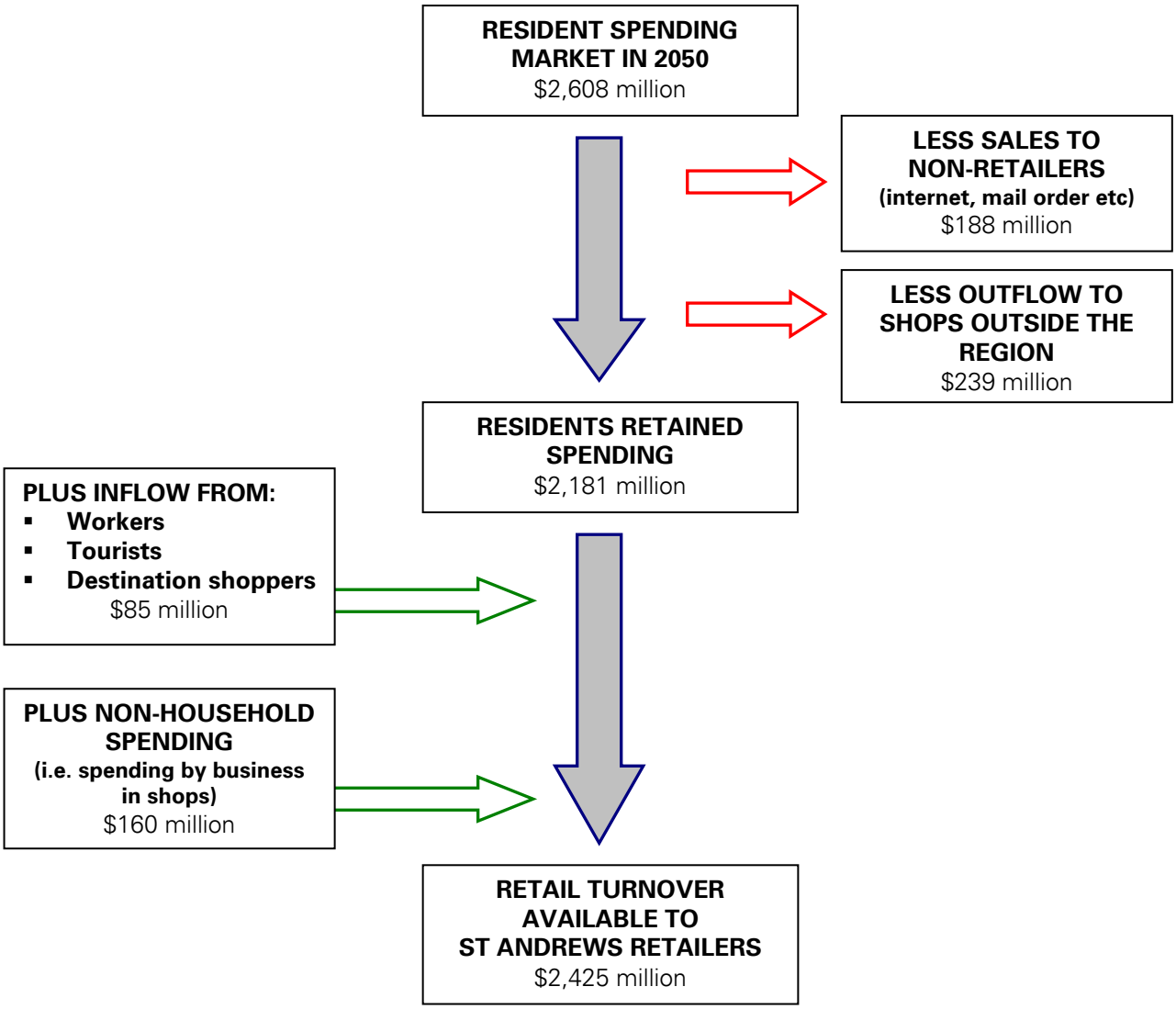

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17. The following points are evident from the results of the retail spending distribution :

- Over half of residents' spending is expected to be directed to the City Centre (A) and the Town Centre (B). Importantly, no part of the St Andrews area is more than 5 kms from either of these centres.
- Bulky goods spending is expected to be directed to these two activity centres, reflecting the need for co-location of bulky goods within or adjacent to the major centres.
- The majority of spending directed to the smaller centres (L-R) is convenience based, reinforcing their role serving the day to day needs of residents from their local areas.

18. Supportable floorspace is based on available spending to each centre and required productivity or trading levels. Historically, retail productivity levels have increased over time as retailers have used floorspace more efficiently. We have allowed for continuing moderate growth in productivity in the future.

- Centre A is the southern major City Centre and represents the most appropriate location for the broadest retail offer as well as the broad range of commercial and civic functions, including a significant proportion of bulky goods floorspace. We note that at this scale (i.e. 71,800 sq.m PLUC 5), the City Centre will be broadly comparable with the retail floorspace of Cannington (81,000 sq.m) or Fremantle (84,000 sq.m) and Joondalup (currently 55,000 sq.m, growing to 80,000 sq.m).
- The northern Centre B, at 70,000 sq.m retail (UrbisJHD), is also identified as a major activity centre that will provide a full range of retail and other facilities (although not to the same level as centre A).
- Centres C, E F and K are smaller than the major activity centres and, with a strong convenience offer in addition to performing a more limited comparison shopping role.
- Centres D and G, with floorspaces between 7,000 sq.m-9,000 sq.m, can be expected to accommodate a full-line supermarket and a mainly convenience based offer.
- Smaller centres (H, I, J and M) are still expected to have a strong convenience offer, but may not provide the full convenience offer, with residents therefore more likely to use these centres in combination with others. In time, the role of centre H may expand if the population expands beyond the study area boundary.
- Centre M is identified as accommodating 4,500 sq.m of retail floorspace. The anticipated pattern of population growth and the status of the Capricorn Village Structure Plan, suggest that this will be the first centre to be established within the region.
- Centres L, N, O, Q, P and R at below 3,000 sq.m can be expected to serve only a limited convenience role. Furthermore, centres L, N and R are likely to serve a limited tourist retail function, however the provision of a major tourist attraction at any of these centres could be expected to increase the floorspace allocation of that centre further.
- The Capricorn Village Structure Plan identifies Centre L as providing a key tourist destination for the region. In this event, it would be reasonable to expect the supportable floorspace to increase from the 1,500 sq.m identified as supportable by residents and local visitors in the modelling.
- Local corner shops are excluded from this analysis since their viability and appropriateness will be determined by more detailed planning considerations.

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19. The model results were tested against per capita floorspace benchmarks and the typical size of centres across the retail hierarchy. We believe that the planned floorspace provision for St Andrews is consistent with floorspace provisions of the City of Wanneroo Centres Strategy and with industry expectations.

20. It is important to recognise that these floorspace allocations should not be considered prescriptive and that the following factors should be noted :

- There is a role for well located corner stores within the retail hierarchy and these would be determined at the local level.
- Future retailer formats may cause a divergence from the actual floorspace allocation; of greater importance is the relativity and role of centres identified in this exercise.
- In the event that activity generators of regional significance (i.e. a substantial international employer or major tourist destination) are located in St Andrews, the assumptions regarding the inflow of retail spending levels should be re-examined.

21. The St Andrews District Structure Plan is therefore considered to result in a viable retail hierarchy that can be expected to meet the needs of both consumers and the wider community.

**St Andrews** **Table 3.6**

**Supportable Floorspace by Activity Centre, 2050 (sq.m)**

| Activity Centre | Food Catering | Conv. | Comp. | Bulky | Total Floorspace[1] PLUC 5 | Total Floorspace[1] UrbisJHD |
|---|---|---|---|---|---|---|
| A | 8,616 | 20,044 | 43,092 | 49,075 | 71,800 | 120,800 |
| B | 8,000 | 18,898 | 16,843 | 25,578 | 43,700 | 69,300 |
| C | 2,407 | 5,047 | 4,215 | 1,547 | 11,700 | 13,200 |
| D | 1,723 | 3,613 | 1,846 | 526 | 7,200 | 7,700 |
| E | 2,455 | 5,148 | 1,813 | 460 | 9,400 | 9,900 |
| F | 2,707 | 5,677 | 1,534 | 0 | 9,900 | 9,900 |
| G | 2,023 | 4,242 | 1,200 | 471 | 7,500 | 7,900 |
| H | 752 | 1,576 | 1,341 | 0 | 3,700 | 3,700 |
| I | 1,430 | 2,999 | 1,178 | 134 | 5,600 | 5,700 |
| J | 1,538 | 3,226 | 1,114 | 173 | 5,900 | 6,100 |
| K | 3,640 | 5,890 | 1,400 | 428 | 10,900 | 11,400 |
| L | 763 | 736 | 53 | 0 | 1,600 | 1,600 |
| M | 1,375 | 3,126 | 188 | 0 | 4,700 | 4,700 |
| N | 525 | 923 | 154 | 0 | 1,600 | 1,600 |
| O | 701 | 1,135 | 64 | 0 | 1,900 | 1,900 |
| P | 357 | 578 | 64 | 0 | 1,000 | 1,000 |
| Q | 528 | 855 | 705 | 0 | 2,100 | 2,100 |
| R | 781 | 1,263 | 64 | 0 | 2,100 | 2,100 |
| **Total** | **40,319** | **84,975** | **76,868** | **78,393** | **202,300** | **280,600** |

*1. 'Retail Floorspace'; UrbisJHD Definition includes Bulky goods. Refer Appendix 1.3*
*Source : UrbisJHD*

# 1 Introduction

This report has been prepared on the instructions of Yanchep Sun City Pty Ltd. UrbisJHD has been asked to assess the St Andrews District Structure Plan and establish whether it represents a viable retail hierarchy able to meet the needs of future residents of this region of northwestern Perth.

This exercise is concerned with the viability of the activity centres identified in the District Structure Plan, their supportable size and broad composition which informs consideration of their roles. Comments are also provided on the design and layout considerations that impact centre viability relevant in considering more detailed planning of the area.

Whist recognising 'Activity Centres' as the appropriate and emerging nomenclature for analysis of this nature, we consider that retail will remain a major driver of an activity centre. This exercise is therefore focused on the appropriate scale of retail at each centre, upon which the broader role and composition can be assessed. At the broad level, this approach reflects the process adopted in the Wanneroo Centres Strategy (January 2005).

## 1.1 The Plan

The St Andrews District Structure Plan (attached as Appendix 1.1) has evolved over a number of years with input from various consultants. The District Structure Plan identifies 35 residential precincts which form the basis of this analysis. From a retail perspective, these precincts and their relative proximity to the identified activity centres are used as the basis for the retail modelling in this report.

The trade area of any retail or activity centre is determined with regard to a range of factors, including :

- The physical distribution of centres – the distance between them.
- The accessibility of centres by different modes of transport.
- The presence or absence of physical barriers including road/rail/open space.
- The size and role of centres.

In the absence of a trade area being defined for each centre, the above factors influence assumptions regarding the flow of retail spending from each precinct to the range of available centres.

In general, the urban form presented in the District Structure Plan follows a linear pattern influenced by the topography of the region and the major infrastructure routes. This linear pattern, relatively unconstrained by existing development, allows for regular spacing of retail centres at intervals which maximise accessibility for the residents to a range of retail facilities.

It is apparent from the District Structure Plan that all residents of the region are within 5 kms of a major activity centre (most within 2 kms) and, with the exception of the northeastern precincts, within 2 kms of a minor activity centre.

## 1.2 Issues of Forecasting Into the Future

Retail represents an important sector of the Australian and indeed most modern economies. It provides benefits, amongst others, in terms of employment as well as access to goods and services. From an economic perspective, an appropriate retail hierarchy is one that results in the efficient distribution of goods and services.

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The economic perspectives need to be considered in the context of community and social objectives. A focus on one in isolation of the other could result in a situation where the retail hierarchy is un-implementable in commercial terms or one where access to goods and services is restricted. A 'good' retail hierarchy is one which balances these needs.

Retailing as a dynamic industry needs to respond to both changing patterns of consumer behaviour and changing patterns of distribution and business requirements.

The long term forecasting of retail needs is a complex process that should have regard to a range of social, commercial and economic considerations. Consider, for example, the changes that have occurred in retailing in Australia over the last 50 years :

- A massive increase in the provision of retail floorspace overall;
- The emergence of the "shopping centre";
- Decentralisation (Growth of suburban retailing) – Driven by increasing car usage, retail has evolved a decentralised structure;
- Growth in average store size (supermarkets in particular); and
- New retailers, as well as new retail formats.

The above trends are not confined to Australia, but evident in developed economies around the world.

In planning for a retail structure at St Andrews, the continuing future changes in the retail industry need to be recognised and accommodated. Those factors that have driven the evolution of retail and are likely to continue to influence the nature of the retail industry going forward are therefore considered in this report.

There are a number of important factors that can be expected to shape the future retail landscape within St Andrews. The three main factors that have historically shaped the retail industry are :

- **Growth in incomes and wealth :** determines the amount of discretionary spending power at our disposal, and therefore the rate of retail sales growth.
- **Demographic change :** where people prefer to live, the ageing Australian population, and the changing composition of households influence the pattern and nature of retailing. Workforce participation rates in particular have influenced the recent behaviour of Australians.
- **Consumer preferences and behaviour :** determines what people choose to spend their money on, where they choose to spend it, how often they choose to shop, how they like to shop, and what other activities they like to combine with their shopping. Preferences have changed as a result of social and economic changes. Increased car ownership for example has contributed to the expansion of regional shopping centres and decentralisation of retail overall, whilst changing workforce habits have lead to extended shopping hours and weekend trading.

Historical retail trends, both within an Australian and Perth context, provide some insight into what the future retail landscape may be like in 2050 (the point at which it is assumed that St Andrews achieves a fully established position).

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## 1.3 Objectives of this Exercise

For the reasons discussed above it is important to demonstrate what is and what is not possible through the modelling of the future retail needs for St Andrews. The primary objective of this report and analysis is to demonstrate that the St Andrews Structure Plan provides an activity centre hierarchy which :

a. **Meets Consumer Needs** - A key objective of any activity centre hierarchy should be to ensure easy access to the widest range of retail facilities possible.
b. **Meets Community Needs** – The provision of retail contributes to community needs in many ways - social needs can be met through provision of attractive environments and through supporting or maximising use of civic functions. Economic needs of the community in terms of employment are also important.
c. **Satisfies Retailer Needs** - Retailers have a variety of operational requirements to satisfy across their businesses relating to, amongst other things, logistics, labour and store maintenance. Optimising these operational systems are necessary for the retailer to meet modern standards both in store provision and quality as well as in servicing their customers. These factors enable retailers to operate efficiently and compete effectively.
d. **Is Flexible** – the dynamic nature of retail requires a structure that is capable of accommodating future changes in the retail industry.

It is possible, in an exercise such as this, to demonstrate whether the current structure plan is likely to meet the needs identified above based on assumptions regarding the future retail environment, and test those against the current retail structure across Australia.

It should be recognised, however, that there are limitations to any long term forecasting exercise such as this. It is not possible, nor even desirable, to provide a prescriptive and rigid structure that will determine the exact size and composition of activity centres that, conceivably, may not emerge for some 30 years or more.

Given that the objective is to establish whether the District Structure Plan represents an appropriate size and distribution of centres, we have assumed a fully established position at 2050. The timing of population growth would ultimately influence the rate of development of individual centres within the retail hierarchy.

## 1.4 Methodology

Retail modelling, in its simplest form, looks at the number of people in a region, the spending levels they generate and the consequential level of retail floorspace and other activity that this can support.

The detailed process for undertaking this modelling adopts a 'spending distribution' approach rather than a 'black-box' or gravity model. A gravity model relies on the principle that shoppers use a centre more the closer it is to where they live, and the larger the centre is.

However, we consider that a pure mathematical formula should not be the sole determinant of retail needs. For example, a retail model that identifies a supermarket-based centre of 2,000 sq.m may not be reflective of the average size of modern supermarkets.

The spending distribution approach adopted in this instance does not differ greatly from the broad principles of a gravity model in that spending flows are related to each centre's perceived relative attractiveness. Our model has the advantage that it makes assumptions explicit, and accommodates real world realities of retailer and centre sizes and development economics.

# Introduction

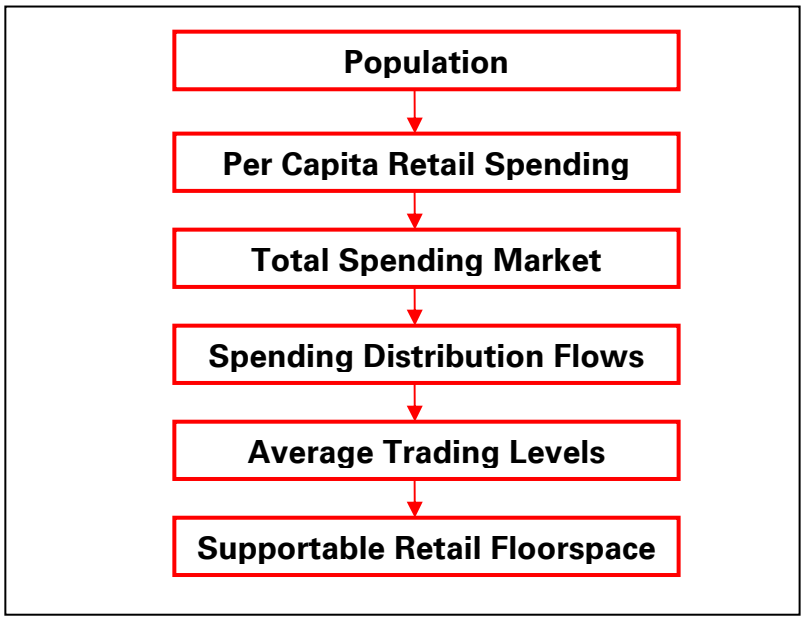
A gravity model for example would result in a prescriptive allocation of floorspace that would be supportable in each location – it would not necessarily be accommodating of the fact the resulting allocation may not reflect modern retailer and consumer expectations in terms of centre size or composition. For example, a floorspace allocation of 4,000 sq.m may not be commercially viable if applied to current retail market.

Development economics are such that the commercial viability of a shopping centre is generally determined by the level of specialty shops that can be supported (which typically represent a significant proportion of rental income), which in turn are influenced by the performance of a supermarket. With a modern full-line supermarket of 3,500 sq.m for example, an additional 500 sq.m of specialty shop floorspace may not be sufficient to result in a commercially viable centre. A smaller supermarket may not be able to provide the full range of products, with the result that consumers travel elsewhere for their main food shopping and only a modest retail function may eventuate. A prescriptive floorspace allocation in isolation of "real-world" outcomes may not be implementable and would ultimately fail to satisfy consumer, community or retailer needs.

The UrbisJHD approach recognises and accommodates these real world conditions. Our analysis quantifies the total spending market generated by future residents, considers the likely distribution of the spending to the different centres based on their position within the hierarchy as set out by the Structure Plan, and adopts an iterative approach to arrive at a solution that meets the needs of residents, consumers and retailers, and is implementable.

The approach we have adopted has followed the steps as detailed in Figure 1.1.

**Methodology** **Figure 1.1**




At the more detailed level, a number of assumptions are required relating to the how much future spending can expect to be directed to retail shops within St Andrews. Each of the assumptions used in this analysis are discussed, with the inputs justified in relation to observed patterns and expected future outlook. Moreover, as the plan for St Andrews evolves and develops, the assumptions can be revisited to ensure an activity centre hierarchy that remains relevant and achievable.

# Introduction

For the purposes of this exercise, we are considering whether the Structure Plan represents an appropriate Activity Centre hierarchy at *ultimate capacity.* That is, the objective of this exercise is not to determine an appropriate timing (which will be determined by actual rate of population growth) but to explore whether the proposed structure would be appropriate at full development.

At the outset it is useful to identify the guiding principles that underpin our analysis and outcomes in this report. Activity centres are, in the main, dependent on the retail function as the key driver of activity. It is therefore logical that the level of retail appropriate at any location is the first stage in determining the role and size of the activity centre as a whole.

In our experience, we consider the following to represent an appropriate guiding principle for considering the future hierarchy of St Andrews :

> *'The residents should be provided with the broadest range of conveniently located retail facilities and services which the market can support, at the earliest possible time without jeopardising the sustainability of other centres in the network which are adequately fulfilling consumer needs.'*

## 1.5 What is Retail?

Various definitions are relevant in considering the retail industry. UrbisJHD adopts the ABS retail definition for 'Total Shopfront' retail (detailed in Appendix 1.3). This definition is consistent with normal industry practice and reflects the scope of the ABS Retail Census/Retail Trade and Household Expenditure Survey (HES) data as well as UrbisJHD's annual Retail Averages publication, which are key sources of information on the performance of the retail industry and the size of the available retail spending market in Australia.

WA Planning's definition of retail floor area is based on the amalgamation of retailers classified under West Australian Standard Land Use Classification (WASLUC) as falling within the Planning Land Use Category 5 (PLUC 5) – Shop/Retail. A further classification is given as "other retail". The major component of 'Other Retail' is bulky goods retailers, although minor spending categories of trade and motor sales and service are excluded in reference to 'Other Retail' and PLUC 5 retail in this report.

A detailed concordance table is provided in Appendix 1.4. This report presents the analysis at PLUC 5 category and under the UrbisJHD definition which is PLUC 5 with the addition of bulky goods retail categories.

# 2 Historical Retail Trends

This section considers historical economic and demographic factors influencing retail, and identifies how these factors have influenced the retail environment. Consideration of historical patterns is an important input into the likely future requirements for retail and their implications for an appropriate activity centre hierarchy at St Andrews.

Changes to both the demand and supply of retail is evident, and informs consideration of future retail needs at St Andrews. Consumer preferences, demographic changes, transport issues, and economic conditions leading to income and retail spending growth have all influenced the demand for retail goods and services.

From the supply side, the emergence of new retail formats, non-store retailing and retail productivity levels can also be seen to have changed the retail industry.

## 2.1 Demographics

Retail growth is driven by two main factors :

1. population growth; and
2. real growth in retail spending per capita.

Table 2.1 details population growth for Australia and Perth (metropolitan area) since 1970. Looking at growth in 5 year intervals it is evident that population growth in Perth has outperformed the national average since 1970 (although off an initially low base). This growth has resulted in an increase in its share of the total population from 5.7% in 1970 to 7.3% at 2005.

Population growth in Perth has fluctuated reflecting the economic cycle, with particularly strong growth (over 30,000 people per year) evident between 1985-1990. The short term outlook for population growth is strong on the back of the resources boom. The long term outlook is considered to be more in line with long term trends observed since 1970. This strong growth in population translates to economic growth overall and, particularly relevant in this instance, growth in the retail spending market.

**Australia And Perth** **Table 2.1**
**Population Growth, 1970-2005**

| Year[1] | Est Resident Population | | Annual Growth | | | | Perth Share of |
|---|---|---|---|---|---|---|---|
| | Australia | Perth | Aus | | Perth | | Australia |
| | | | No | % | No | % | |
| 1970 | 12,830,866 | 690,140 | | | | | |
| 1975 | 13,892,995 | 798,440 | 212,426 | 1.6% | 21,660 | 3.0% | 5.7% |
| 1980 | 14,695,356 | 901,650 | 160,472 | 1.1% | 20,642 | 2.5% | 6.1% |
| 1985 | 15,788,312 | 1,018,200 | 218,591 | 1.4% | 23,310 | 2.5% | 6.4% |
| 1990 | 17,065,128 | 1,175,400 | 255,363 | 1.6% | 31,440 | 2.9% | 6.9% |
| 1995 | 18,071,758 | 1,271,738 | 201,326 | 1.2% | 19,268 | 1.6% | 7.0% |
| 2000 | 19,153,380 | 1,372,947 | 216,324 | 1.2% | 20,242 | 1.5% | 7.2% |
| 2005 | 20,328,609 | 1,477,815 | 235,046 | 1.2% | 20,974 | 1.5% | 7.3% |

*1. Year ending 30 June*
*Source : ABS Catalogue No. 3101.0*

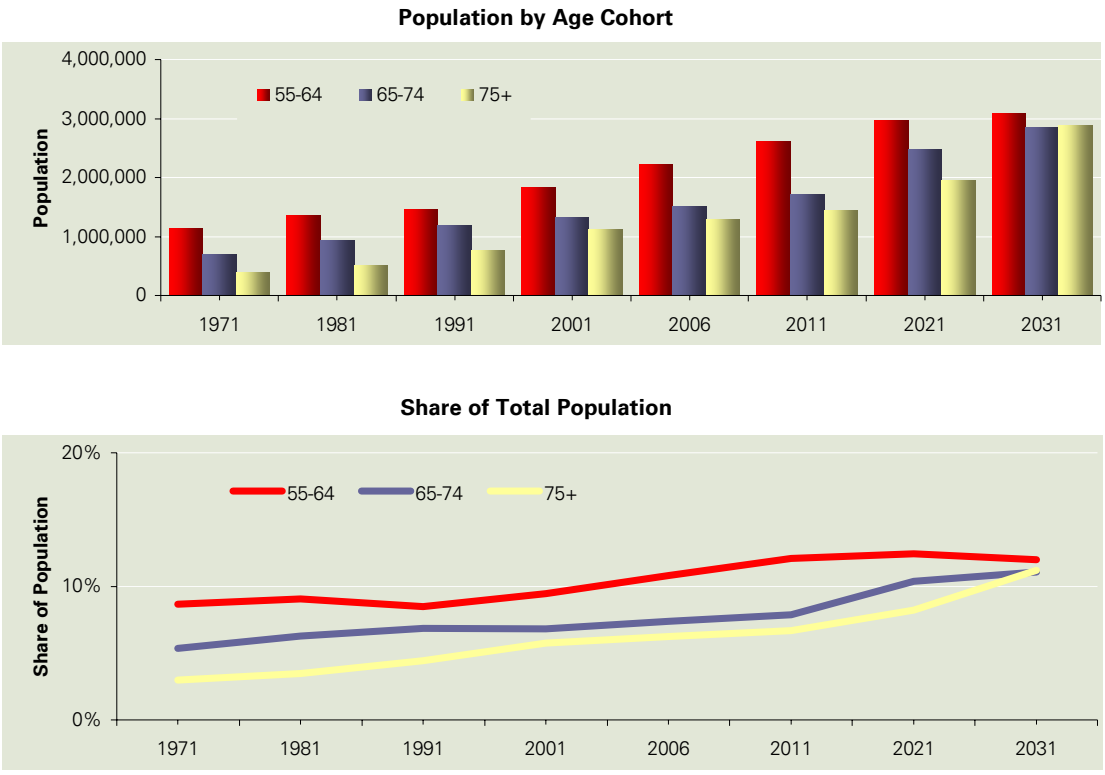
# Historical Retail Trends

Another key demographic shift is the ageing of the population. Over the 30 year period 1971-2001 the number of Australians over 75 years of age increased by over 700,000. Over the 30 year period to 2031 the number of Australians aged over 75 will increase by over 1.7 million. By 2031, Australians over 65 will represent almost one quarter of the population.

Importantly, having lived through a period of strong economic growth, income growth as well as capital growth through house price increases, the future aged population will differ from preceding generations in their retail spending power. The impact of the aging population on retail may have its greatest impact at the tenant level where apparel retailers emerging to cater for this larger market segment.

**Australia** **Chart 2.1**

**Historical and Projected Population Growth**




*Source: 1. ABS Cat 3222.0, Population Projections, Australia, 2004 to 2101; UrbisJHD*

*2. ABS Cat 3101.0, Australian Demographic Statistics, Table 2. Population Change, Components - States and Territories*

Other demographic factors that can be seen to influence retail include:

- Workforce participation rates – the return of women to the workforce has been a key driver of extended opening times and the need for more convenient shopping.
- Declining household sizes contribute to growth in the number of dwellings which, in turn, has been seen to contribute to the growth in spending on bulky goods and homewares in particular.

# Historical Retail Trends

## 2.2 Income and Spending Growth

One of the key drivers of retail spending is income levels, and more specifically, disposable income levels. This relationship is clearly evident from Chart 2.2, which details per capita income and expenditure levels over time. The two key factors of relevance in this instance are as follows :

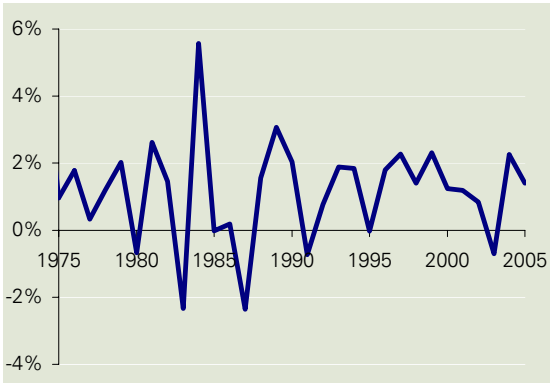
1. Income and retail growth has been sustained over a long period, only twice falling below zero since 1991. These occasions were in 1991, due to the recession, and in 2001 following the introduction of the GST.
2. A relationship exists between Western Australia and Australia such that it is reasonable to assume growth in Western Australia reflects growth in Australia as a whole over the long term.

Strong income growth has driven real annual retail growth, on a per capita basis, of 0.8% over the period 1975-2005, and much stronger growth in more recent times of 2% per annum (Table 2.2).

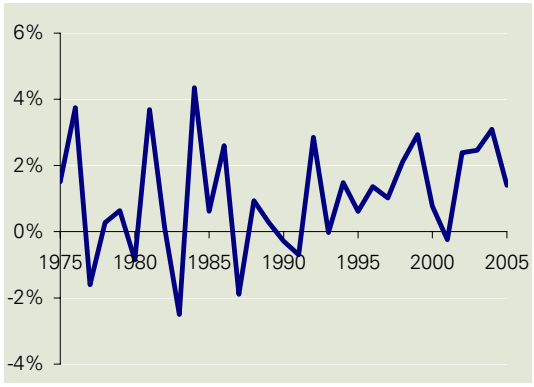
**Australia and Western Australia** **Chart 2.2**

**Per Capita Income and Consumption Expenditure Growth**

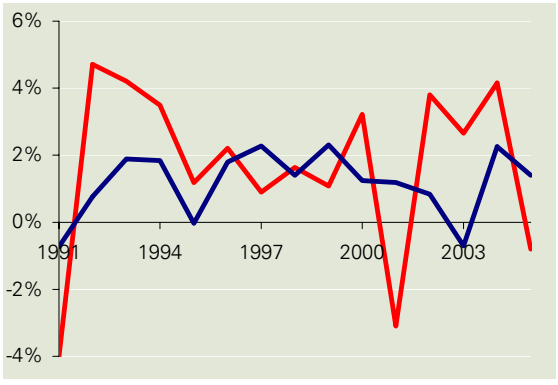
**Disposable Income Per Cap Growth (Aus)**



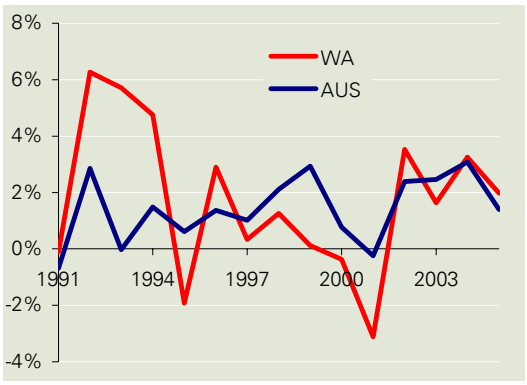

**Consumption Expenditure Per Cap Growth (Aus)**




**Disposable Income Per Cap Growth**




**Consumption Expenditure Per Cap Growth**




1. Data in real terms. Inflation was backed out from nominal figures using CPI.

*Source : Retail Trade Survey, ABS; Australian National Accounts; UrbisJHD*

# Historical Retail Trends

**Australia** **Table 2.2**

**Real Retail Sales Per Capita, 1975-2005**

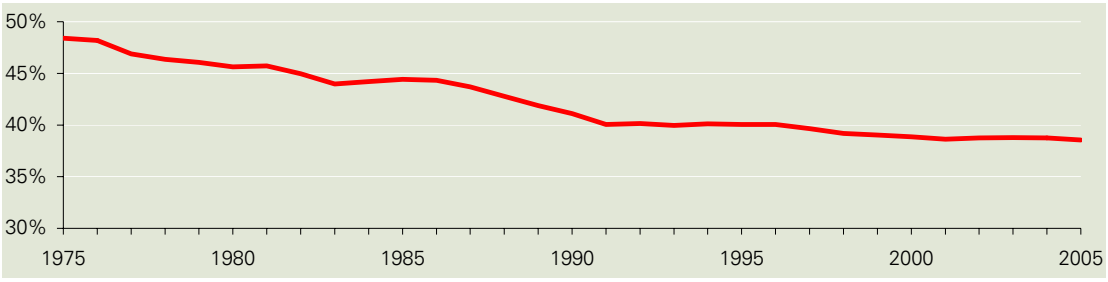
| Year[1] | Est Resident Population | Retail Sales (at 2005 prices) $m | Retail Sales (at 2005 prices) $ per capita | Ave real per capita growth |
|---|---|---|---|---|
| 1975 | 13,892,995 | 107,982 | 7,772 | 1.0% |
| 1980 | 14,695,356 | 112,886 | 7,682 | -0.2% |
| 1985 | 15,788,312 | 125,713 | 7,962 | 0.7% |
| 1990 | 17,065,128 | 132,190 | 7,746 | -0.5% |
| 1995 | 18,071,758 | 146,775 | 8,122 | 1.0% |
| 2000 | 19,153,380 | 172,739 | 9,019 | 2.1% |
| 2005 | 20,328,609 | 201,235 | 9,899 | 1.9% |
| *1975-2005* | | | | *0.8%* |
| *1985-2005* | | | | *1.1%* |
| *1995-2005* | | | | *2.0%* |

*1. Year ending 30 June*
*Source : ABS Catalogue No. 8501.0 ; ABS Catalogue No. 3101.0*

Chart 2.3 identifies retail spending as a proportion of household expenditure. Retail's declining share of total expenditure reflects increases in other types of expenditure such as housing, cars, education, health and holidays, as Australia's wealth has grown. While this trend has occurred, retail spending has continued to grow both as a result of inflation and on a real per capita basis as seen above. This suggests that continued growth in retail spending is sustainable.

**Australia** **Chart 2.3**

**Retail Spending As Proportion of Household Expenditure and Income, 1975 - 2005[1]**

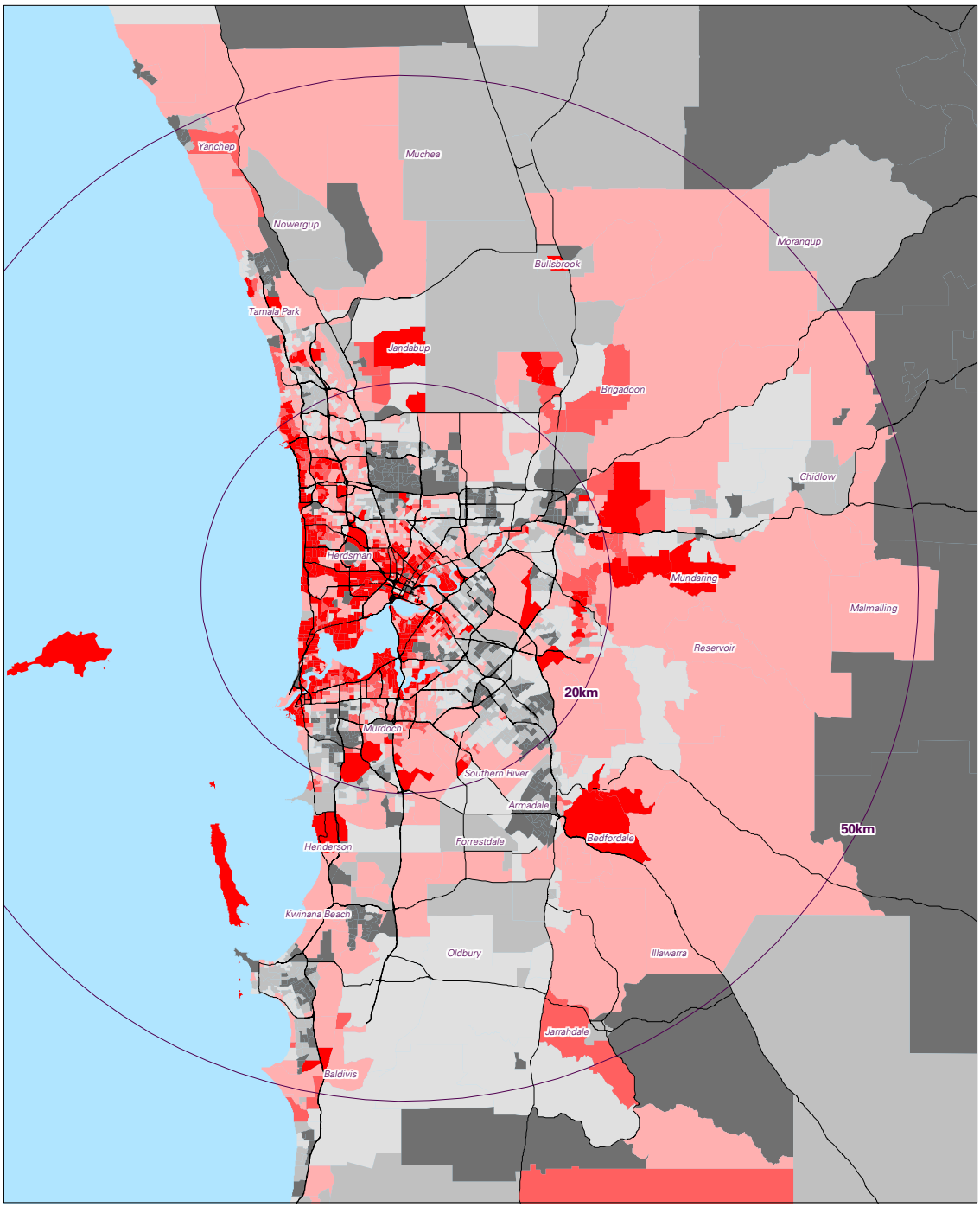



*1. Retail spending calculated as proportion of consumption expenditure on retail goods/services.*
*Source : ABS Catalogue No. 5206-58*

In addition to historical changes in income and retail growth, it is also useful to consider geographic variation in retail spending which inform future spending levels for the St Andrews region. Map 2.1 presents per capita income variation across metropolitan Perth. Higher incomes are evident in the inner suburban coastal regions to the north. It is therefore reasonable to expect income levels, and thus retail spending in the St Andrews region, to be above the average for Perth overall.

# Historical Retail Trends

**Perth – Average Per Capita Incomes, 2001** **Map 2.1**



# Historical Retail Trends

## 2.3 Consumer Preferences

Consumer behaviour determines the preference and success of shopping centres and influences the distribution, form and content of shopping destinations, as well as the characteristics of individual retailers both in terms of location and size.

Linked to consumer behaviour, a number of key social trends can be identified as influencing the retail environment. Key social trends relevant to retail include :

- Declining fertility
- Ageing population
- Working longer hours
- Better education
- Changing household structures
- Internet usage

These social changes, combined with changing attitudes and perceptions, have resulted in changes to the retail structure of the country. Key changes in shopper attributes include :

- Greater knowledge and exposure to products and services – the internet and technological advances in marketing have made consumers more informed.
- Shopping as a leisure activity - particularly evident in many Asian countries, shopping as a leisure activity is increasingly a feature of retailing in Australia.
- More sophisticated habits – time pressured consumers, in addition to shopping as a leisure activity, want increased convenience.
- Emotional purchase behaviour – the purchase of goods and services relates less to pure need considerations, with wants and aspirations increasingly important.

With regard to the overseas experience, we can expect these consumer trends to continue, with retail evolving to accommodate these changes in consumer preferences.

Whilst the population is aging, research indicates that the baby boomers have different priorities to the current aged population and that, even when retired, they will continue to exhibit time poor characteristics as related to their shopping habits.

## 2.4 Transport

The private car remains the dominant form of transport used by Australians when undertaking shopping trips. The private car represents the most convenient way to shop, something that public transport cannot replicate in most situations. In addition to the convenience of the private motor vehicle, its affordability has driven growth in car ownership and usage which has been the impetus for the suburbanisation of retailing observed across Australia over the last 30 years.

In any forecasting of retail environments it should be acknowledged that private transport will continue to play a significant role in the overall mix of transport options available. However, there are sound economic, social and environmental reasons to promote greater usage of public transport. Any retail hierarchy should accommodate centres that are accessible by a range of transport modes.

# Historical Retail Trends

The type of transport adopted by shoppers will vary dependant on the purpose of their trip. Convenience items, groceries and bulky items will be more dependant on the car. Other forms of transport will be more appropriate for less frequent, destination orientated shopping and leisure trips. These higher order shopping activities will be predominantly located in the higher order centres, particularly the City and Town centres. These larger centres will also have a greater employment capacity and encourage linked trips for work, shopping, entertainment and services.

For all of these reasons the planning for St Andrews should adopt some key principles :

- All centres should be capable of being accessed by a range of public and private transport options.
- Higher order centres (City and Town) should be located at major transport hubs or interchanges.
- All centres should provide adequate car parking both on and off street.

## 2.5 New Retail Formats

There are a number of supply side responses to the demand influences discussed above. These are most evident when examining changes in the type of retailers and their formats, the emergence of the shopping centre and in the design of retail environments.

### 2.5.1 Retailer Evolution

In response to changing consumer preferences, technological advancements as well as the suburbanisation of metropolitan regions, the format of both retailers and centres have changed. In the 1960s the average size of a new supermarket was in the order of 1,500 sq.m, by the 1980s this had increased to around 3,000 sq.m. New supermarket formats can now exceed 4,000 sq.m. Internationally, this trend has extended to Hypermarkets exceeding 15,000 sq.m. Combined with larger store formats, smaller stores are also emerging. These smaller store formats are mostly in CBDs where population densities are sufficient to support them.

Two new entrants to the Australian market highlight retail as a dynamic industry. Ikea, a large format homewares and bulky goods retailer, and Aldi, a small format discount supermarket are both new and successful entrants to the Australian retail sector. Any prescriptive retail hierarchy prepared 30 years ago may not have anticipated these new retail formats.

The changing composition of one of Australia's largest regional shopping centres also highlights the changing tenant profile. Table 2.3 lists the major and mini-major tenants at Chadstone, a regional shopping centre in Melbourne, at three time periods – 1980, 1995 and 2006. In 1980, Chadstone comprised one department store and one supermarket as anchor tenants. Mini-major tenants (over 1,000 sq.m) comprised five stores of which only one remains operational today (Target). Woolworths Variety and Coles Variety have become supermarkets and discount department stores. Buckley's and McEwans are no longer trading.

By 1995 the majors composition of Chadstone had substantially increased with the addition of a Target Discount Department Store (DDS) and Bi-Lo Mega Fresh supermarket. By 2006, a second department store (David Jones) and a second DDS (Kmart) had been added. Mini-major floorspace also increased substantially. Current approved proposals allow for a further extension with the addition of a Safeway supermarket and Big W DDS.

# Historical Retail Trends

**Chadstone** **Table 2.3**
**Major and Mini-Major Tenants 1980, 1995 and 2006**

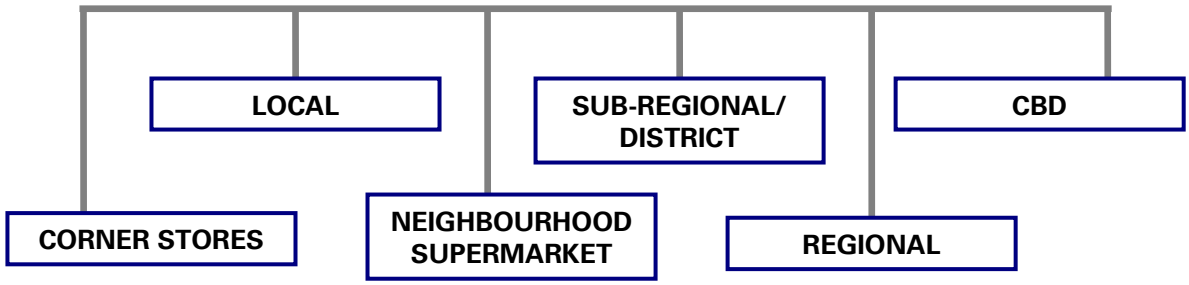
| **Retail Uses** | 1980 | 1995 | 2006 |
|---|---|---|---|
| Majors | Myer<br>Coles | Myer<br>Target<br>Bi-Lo Mega Fresh<br>Coles | Myer<br>David Jones<br>Target<br>Kmart<br>Coles<br>Bi-Lo Mega Fresh<br>Safeway (p)<br>Big W (p) |
| Mini-Majors | Woolworths Variety<br>Buckleys<br>McEwans<br>Coles Variety<br>Target | Hoyts Cinemas<br>Bowling Centre | Toys R Us<br>Borders Books & Music<br>Country Road<br>Priceline<br>Hoyts Cinemas<br>Bowling Centre<br>JB Hi-Fi<br>Lincraft |

*Source : UrbisJHD*

The retail environment can be expected to continue to change both in the type of retailers and their typical formats. A hierarchy that does not acknowledge or accommodate these changes can expect to see expenditure flow to areas where these modern retail formats can be accommodated.

## 2.5.2 Centre Type

Any retail hierarchy can be considered as a continuum of shopping destinations, highlighted by the diagram below.




These traditional forms of retail are complemented by specialist centres including :

- outlet centres;
- homemaker centres;
- themed retail (e.g. Hillarys Boat Harbour); and
- coastal centres (e.g. Mindarie Quays).

# Historical Retail Trends

In terms of considering changes in the traditional shopping centre we are assisted by the annual UrbisJHD Retail Averages survey which provides a record of the size, composition and performance of these centres since 1992. Now in its 15th year, the UrbisJHD Averages provide the most comprehensive resource available when considering the evolution of retail centres. Using this source, together with the latest retail census (1992) we can identify changes that have occurred in the retail industry over time.

Table 2.3 shows the amount of floorspace and turnover by each of the centre types in 1992 (sourced from the last retail census) and 2004. In 1992, there were 56 regional centres, with a total lettable floorspace of 2.6 million sq.m. By 2004, there were an additional nine regional centres with a total floorspace of more than 4 million sq.m. Over the period, regional centre floorspace grew by around 3.7% per year.

The number of DDS based centres also increased substantially, from 191 in 1992 to 243 in 2004. DDS centre floorspace increased by more than 4% per year. Finally, supermarket based centres also substantially increased in floorspace. Over the period, an additional 271 supermarket based centres were developed, and floorspace grew by more than 5% per year.

The regional centre share of floorspace in 1992 was 7.9%, and these centres contributed an estimated 11.6% of turnover of all centres. By 2004, regional centres contributed 9.8% of floorspace, but their turnover share declined marginally to 11.3%. Despite the increase in regional centre floorspace, the rate of turnover and productivity growth in other types of centre was faster. This phenomenon was largely due to declining department store performance. For example, in 1994, department stores contributed an average of $43.8 million to regional centre turnover. By 2004, department stores contributed $49.1 million to total centre turnover, an increase of 12% over 1994. In the same period, average regional centre turnover grew by almost 50%.

Key points to emerge from Table 2.4 include :

- The average size, turnover and productivity of regional shopping centres has grown strongly over the 12 year period.
- DDS-based centres experienced more modest growth in size, partly driven by the number of new DDS centres that came into existence. Average DDS centre size grew by 1.5% per annum, while turnover grew by 3.2% per annum.
- The average size of supermarket centres increased by almost 1,000 sq.m over the last 12 years.

# Historical Retail Trends

**Australia** **Table 2.4**

**Number of Centres, Retail Floorspace and Turnover by Centre Type, 1992 and 2004**

| | 1992 [1] | | | | | |
|---|---|---|---|---|---|---|
| **Centre Type** | | **GLA** | **Turnover** | | **Share** | |
| | No. | ('000) | $M | $/sq.m | GLA | Turnover |
| Regionals | 56 | 2,601 | 10,429 | 4,010 | 7.9% | 11.6% |
| DDS Based | 191 | 3,236 | 11,530 | 3,563 | 9.8% | 12.8% |
| Smkt Based | 463 | 2,677 | 11,929 | 4,456 | 8.1% | 13.3% |
| **Total Centres** | **710** | **8,514** | **33,888** | **3,980** | **25.9%** | **37.7%** |
| CBD | n.a. | 1,663 | 6,036 | 3,630 | 5.1% | 6.7% |
| Other [2] | n.a. | 22,707 | 49,892 | 2,197 | 69.1% | 55.5% |
| **Total Australia** | | **32,884** | **89,816** | **2,731** | **100.0%** | **100.0%** |

| | 2004 [3] | | | | | |
|---|---|---|---|---|---|---|
| **Centre Type** | | **GLA** | **Turnover** | | **Share** | |
| | No. | ('000) | $M | $/sq.m | GLA | Turnover |
| Regionals | 65 | 4,035 | 21,028 | 5,211 | 9.8% | 11.3% |
| DDS Based | 243 | 5,219 | 27,691 | 5,306 | 12.6% | 14.9% |
| Smkt Based | 734 | 4,908 | 32,241 | 6,569 | 11.9% | 17.4% |
| **Total Centres** | **1,042** | **14,162** | **80,960** | **5,717** | **34.3%** | **43.6%** |
| CBD | n.a. | 1,764 | 8,342 | 4,730 | 4.3% | 4.5% |
| Other [2] | n.a. | 25,363 | 96,291 | 3,796 | 61.4% | 51.9% |
| **Total Australia** | | **41,289** | **185,593** | **4,495** | **100.0%** | **100.0%** |

*1. Includes WST*
*2. Other centre type includes bulky/homemaker and large strip centres*
*3. Excludes GST*
*Source : 1992 ABS Retail Census; UrbisJHD*

The number, size, composition and performance of shopping centres has changed across Australia over the last decade. Also evident is the changing size and performance of retailers within those centres. We can expect retail to continue to be a dynamic industry in the future.

## 2.6 Non-Store Retailing

Non-Store retailing describes that proportion of retail spending generated by residents to facilities that do not form part of the retail hierarchy on the ground. The main components of this comprise mail order (catalogue) and internet retailing.

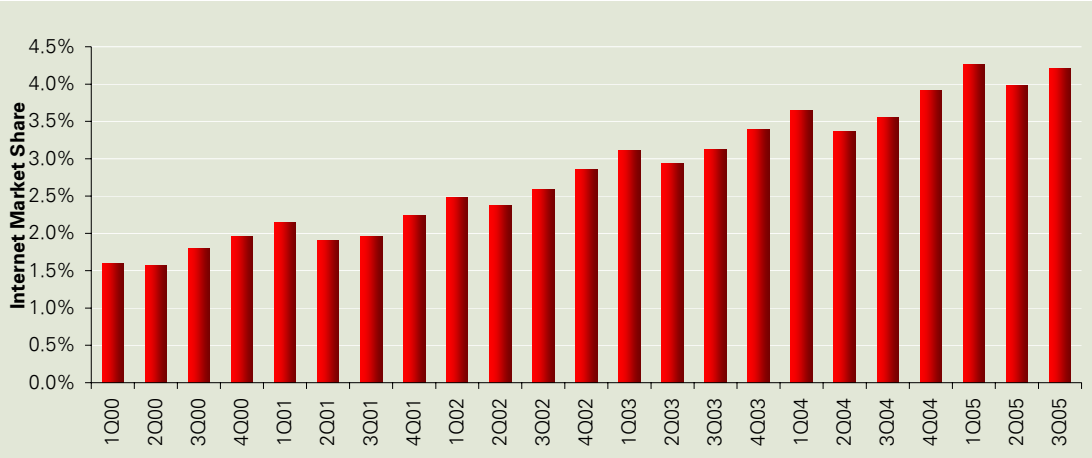
The internet emerged in the early 1990s as a global information super-highway. There are now up to 260 million internet users worldwide and this is forecast to grow rapidly.

In Australia at April 2005, 67% of the population over 14 had access to the internet, up from 54% in September 2001. Buying goods and services online is an activity performed by 59% of internet users *(DCITA Nov 2005).* Growth in internet use and its frequency is expected to continue. Recent data on the proportion of retail sales occurring online is not available for Australia. Taking the United States as an example, as shown in Chart 2.4, internet sales have grown from 1.5% of the spending market in 2000 to around 4% in 2005.

# Historical Retail Trends

**United States** **Chart 2.4**

**Internet Share of Retail Sales, Q1 2000 to Q3 2005**




*Source : US Census Bureau; UrbisJHD*

Continued growth in online retail sales and its implications for planning any future retail environment need to be accommodated.

## 2.7 Retail Productivity

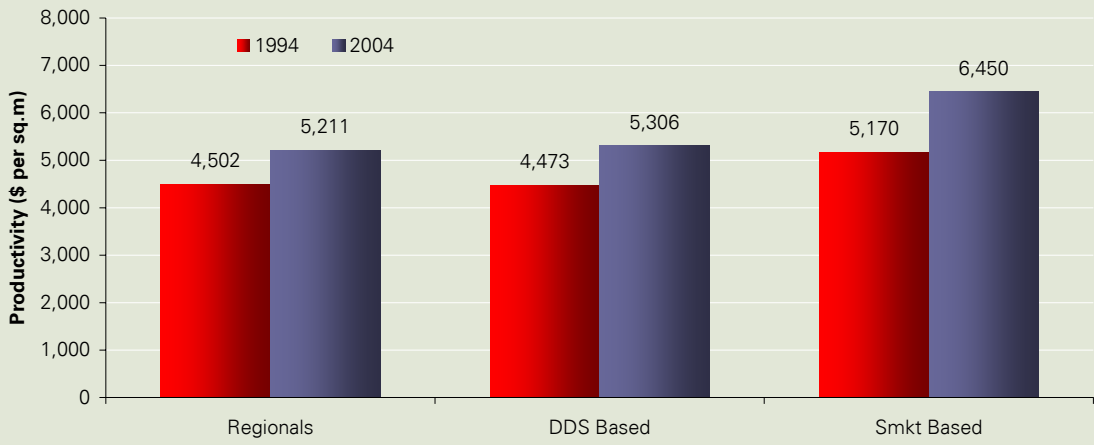
Retail productivity is the tool by which retail spending generated by the resident population of an area is used to assess the level of supportable retail floorspace. Retail productivity (or Average Trading Levels – ATLs) describe the performance in terms of the dollars per square metre retail could, or should, achieve. A high productivity can indicate under-provision of retail floorspace or a successful retailer, a low ATL on the other hand could indicate a poorly trading retailer or an oversupply of retail floorspace.

Additionally, it is important to recognise that different types of retail can expect to achieve different trading levels. In general, bulky goods stores require large building footprints to accommodate the goods and provide the range necessary to enable comparison shopping. Such goods, however, tend to be infrequent purchases.

# Historical Retail Trends

**Australia** **Chart 2.5**

**Average Retail Turnover per sq.m by Shopping Centre Type, 1994 and 2004**




*Source : UrbisJHD*

Chart 2.5 presents average trading levels in Australian shopping centres between 1994-2004. Growth in average turnover levels averaged 1.5% for regional and 2.4% for supermarket centres. Continued growth in average turnover levels is expected in the future. It is important to recognise that these figures relate to enclosed shopping centres and that growth in strips has generally been at a lower rate.

## 2.8 Implications for Retailing at St Andrews

Having considered the historical economic and demographic changes and explored how they have influenced the retail shopping environment in recent history, a number of lessons can be drawn for consideration of an appropriate activity centre hierarchy at St Andrews. The following points are particularly relevant :

1. Continued income growth can be expected to underpin growth in per capita retail spending.
2. Changing demographics and consumer behaviour will continue to result in a dynamic retail environment influencing the type, location and nature of the future retail landscape. Any retail hierarchy should allow for retail evolution and evolving consumer needs.
3. The commercial viability of centres will be related to accessibility and ease of use by a range of transport options.
4. Common ownership of the main retail component of activity centres allows for successful design and operational outcomes recognising both commercial and social requirements/desire.

Incomes and their resulting influence on per capita spending levels can be more accurately predicted than the future expectations and preference of consumers. The modelling and its output for an Activity Centre in St Andrews therefore needs to be considered in this context, with consumer preferences and retailer needs reflected in more detailed planning at the local level, and through monitoring of the retail hierarchy over time to ensure its relevance to the modern retail environment.

# 3 Retail Floorspace Provision

Based on the methodology and issues identified previously, this section presents the assumptions and describes the outputs of the retail model used to assess the St Andrews District Structure Plan.

## 3.1 St Andrews Region

Located approximately 50 kms north of the Perth CBD, the St Andrews District Structure Plan covers an area of approximately 42 sq.km.

The catchment area is bounded to the west by 12 kms of Indian Ocean coastline, the coastal location provides an opportunity for coastal developments and potentially a tourist destination. Additionally, an urban break (parkland) isolates the catchment from growing and established areas to the south.

The catchment area currently contains three existing communities (Yanchep, Two Rocks and St Andrews) with a current population of around 3,500 people.

### 3.1.1 Population Threshold

The following analysis has been based on population forecasts provided to us by Roberts Day, dated 13 December, 2006.

Population within the District Structure Plan area has been provided at the individual precinct level (1 to 35 and A to R) with A-R representing the identified Activity Centres. The population levels by precinct are reproduced in Table 3.1. Based on this population forecast, the ultimate capacity of the St Andrews District Structure Plan area is close to 155,000 people. Population forecasts are derived from density assumptions and land area calculations undertaken by Roberts Day and the project team. The District Structure Plan is shown at Appendix 1.1.

### 3.1.2 Catchment Area and Centre Size Considerations

The St Andrews District Structure Plan provides an indication of the relative scale and function of centres, accessibility with regards to transport, and the location of major physical barriers. Further detail on the infrastructure network is provided in Appendix 1.2.

Our approach quantifies the retail spending by various categories for each of the precincts identified in the plan, and considers the likely distribution of their spending amongst the retail centres in the region. This requires a number of base assumptions regarding the size and role performed by the centres.

Defining the retail floorspace for each of the centres is an iterative process, however initial assumptions are required as a starting point. Our assessment is based on the following initial assumptions :

- Centre A – **Major Activity Centre**: The dominant retail and commercial destination for the catchment area, it is located on the main north-south arterial route. The primary major activity centre within the entire St Andrews region, the centre will provide the highest proportion of floorspace for higher-order comparison shopping and related activities.
- Centre B – **Major Activity Centre**: A secondary major activity centre serving the northern sector of the catchment area. The centre will provide a high proportion of comparison floorspace, but not to the level of Centre A.

# Retail Floorspace Provision

**St Andrews** **Table 3.1**

**Population Assumptions - At Capacity**

| Precinct | Major Centre | Minor | Local | Mixed Use Area | HIGH DENSITY | MEDIUM DENSITY | LOW DENSITY | RURAL | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 363 | 3,901 | 0 | 4,264 |
| 2 | 0 | 0 | 0 | 276 | 0 | 768 | 3,595 | 0 | 4,639 |
| 3 | 0 | 0 | 0 | 2,041 | 449 | 593 | 5,322 | 0 | 8,966 |
| 4 | 0 | 0 | 0 | 897 | 552 | 603 | 1,819 | 0 | 3,871 |
| 5 | 0 | 0 | 0 | 0 | 0 | 552 | 1,424 | 0 | 1,976 |
| 6 | 0 | 0 | 0 | 0 | 0 | 1,109 | 1,849 | 0 | 2,958 |
| 7 | 0 | 0 | 0 | 282 | 357 | 920 | 2,293 | 0 | 3,851 |
| 8 | 0 | 0 | 0 | 667 | 512 | 607 | 547 | 0 | 2,333 |
| 9 | 0 | 0 | 0 | 1,058 | 489 | 837 | 895 | 0 | 3,693 |
| 10 | 0 | 0 | 0 | 707 | 265 | 685 | 437 | 0 | 2,370 |
| 11 | 0 | 0 | 0 | 552 | 242 | 1,385 | 2,284 | 0 | 4,462 |
| 12 | 0 | 0 | 0 | 541 | 230 | 846 | 1,040 | 0 | 2,657 |
| 13 | 0 | 0 | 0 | 0 | 0 | 782 | 1,785 | 0 | 2,567 |
| 14 | 0 | 0 | 0 | 0 | 0 | 1,159 | 1,776 | 0 | 2,935 |
| 15 | 0 | 0 | 0 | 0 | 0 | 534 | 1,612 | 0 | 2,146 |
| 16 | 0 | 0 | 0 | 604 | 242 | 911 | 1,295 | 0 | 3,051 |
| 17 | 0 | 0 | 0 | 587 | 253 | 906 | 1,136 | 0 | 2,882 |
| 18 | 0 | 0 | 0 | 0 | 0 | 777 | 1,714 | 0 | 2,491 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 267 | 267 |
| 20 | 0 | 0 | 0 | 564 | 247 | 1,688 | 2,668 | 0 | 5,167 |
| 21 | 0 | 0 | 0 | 564 | 247 | 929 | 1,486 | 0 | 3,226 |
| 22 | 0 | 0 | 0 | 506 | 0 | 1,748 | 6,054 | 0 | 8,308 |
| 23 | 0 | 0 | 0 | 719 | 385 | 488 | 984 | 0 | 2,576 |
| 24 | 0 | 0 | 0 | 322 | 460 | 1,086 | 207 | 0 | 2,075 |
| 25 | 0 | 0 | 0 | 0 | 0 | 630 | 1,256 | 0 | 1,886 |
| 26 | 0 | 0 | 0 | 184 | 552 | 704 | 690 | 0 | 2,130 |
| 27 | 0 | 0 | 0 | 1,581 | 656 | 1,458 | 3,146 | 0 | 6,841 |
| 28 | 0 | 0 | 0 | 242 | 0 | 911 | 4,779 | 0 | 5,932 |
| 29 | 0 | 0 | 0 | 592 | 247 | 722 | 1,647 | 0 | 3,209 |
| 30 | 0 | 0 | 0 | 0 | 0 | 759 | 1,532 | 0 | 2,291 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 318 | 318 |
| 32 | 0 | 0 | 0 | 0 | 0 | 1,086 | 5,306 | 0 | 6,392 |
| 33 | 0 | 0 | 0 | 736 | 500 | 1,012 | 3,374 | 0 | 5,622 |
| 34 | 0 | 0 | 0 | 0 | 368 | 1,247 | 3,420 | 0 | 5,035 |
| 35 | 0 | 0 | 0 | 633 | 512 | 1,127 | 2,233 | 0 | 4,505 |
| A | 5,796 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,796 |
| B | 3,312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,312 |
| C | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| D | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| E | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| F | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| G | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| H | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| I | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| J | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| K | 0 | 1,323 | 0 | 0 | 0 | 0 | 0 | 0 | 1,323 |
| L | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| M | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| N | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| O | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| P | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| Q | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| R | 0 | 0 | 742 | 0 | 0 | 0 | 0 | 0 | 742 |
| **Total** | **9,108** | **11,903** | **5,192** | **14,852** | **7,763** | **29,932** | **73,506** | **585** | **154,091** |

*Source : Roberts Day*

- Centres C to G, I, J and K – **Minor Activity Centres**: Containing a national supermarket chain tenant, the centres are seen as performing a convenience role for the surrounding residents. The comparison and bulky goods role of these centres would be limited. Importantly, only centre G is more than 2 kms from one of the major activity centres.
- Centres M, P and Q –**Local Activity Centre** : Located in-board from the coastline, these centres are assumed to perform a more limited convenience role (i.e. takeaway, newsagent, etc).
- Centres H, L, N, O and R– **Local (Coastal) Activity Centre** : Situated along the coast, these centres are assumed to perform a mainly food catering role and convenience role serving visitors to the area and the local community. Additional spending, and therefore further retail floorspace, can be expected in the event that significant levels of tourist visitation originate.

In the absence of detailed neighbourhood plans, the appropriate provision of corner shops or centres below 'local' designation is not explicitly modelled in this report, but are accounted for as part of residents' spending out of the model.

## 3.2 Retail Categories

This section describes the assumptions that underpin the retail model adopted. The assumptions reflect UrbisJHD's view of the future retail environment based on a range of historic and current patterns discussed in Section 2 and experience of both Australian and international retailing.

Retail spending per capita is derived using *MarketInfo*, a micro-simulation model developed by Market Data Systems (MDS), which provides estimates of resident retail spending per capita on a small area basis.

UrbisJHD obtained spending data at the detailed category level and this has been aggregated to reflect the requirements of this exercise and, in particular, to accommodate both the PLUC 5 and UrbisJHD retail definitions (refer Appendix 3.1). In this analysis, retail spending has been separated into the following categories which allow the role and broad composition of each centre to be considered :

- Food Catering (take-away and restaurants);
- Convenience (i.e. food retail, newspapers/magazines, pharmaceutical groceries, and services);
- Comparison (i.e. apparel, homewares, and leisure); and
- Bulky goods (i.e. furniture, floor coverings, large electrical).

At this level, retail spending is calculated in two ways. Based on the PLUC 5 definition of retail, retail spending includes food catering, convenience, comparison. Under UrbisJHD's definition, retail is a combination of food catering, convenience, comparison, and bulky goods.

# Retail Floorspace Provision

In general, the convenience market represents the market of most relevance to supermarkets, whilst the comparison (and to a lesser extent, convenience) represent the retail spending categories from which a discount department store (e.g. Target, Big W) can expect to derive most trade.

Based on these definitions, the current (2006) average Perth per capita retail spending is $8,850 (WASLUC) or $9,900 (UrbisJHD). Retail spending figures in this report are presented exclusive of the GST component of sales and in constant dollar terms (i.e. excluding the effect of inflation).

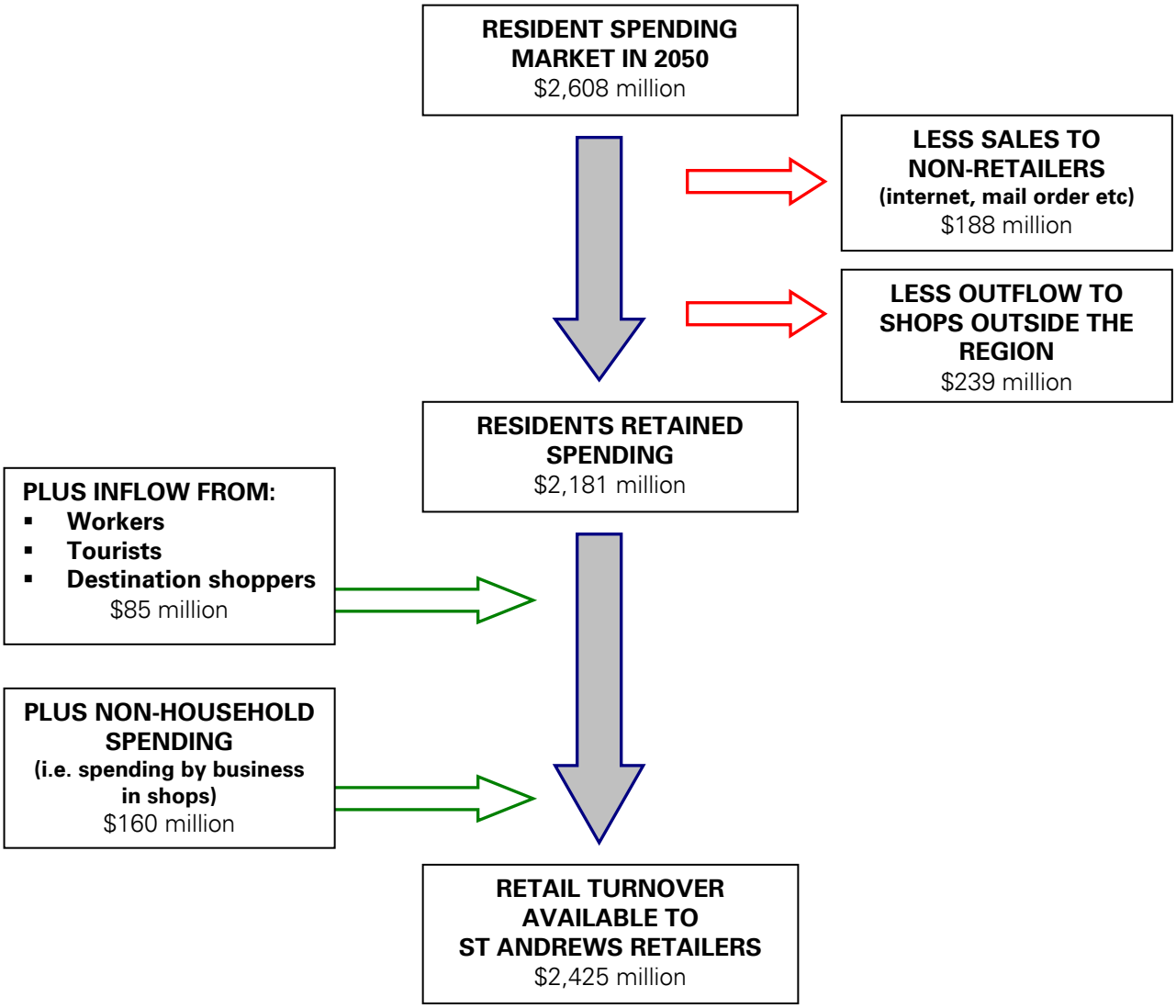
## 3.3 Per Capita Spending Assumptions

Table 3.2 identifies our expectations of future per capita spending levels for the St Andrews region. The assumptions upon which the future spending levels are derived are now considered. Table 3.3 presents the data in terms of total retail sales (rather than on a per capita basis).

The process undertaken in arriving at a figure for the amount of retail spending available to retail shops within St Andrews (i.e. the collective turnover of facilities identified in the DSP) is summarised in the following figure.

Any retail market can expect outflows of sales to retail facilities beyond the region and to other businesses that do not form part of the physical retail hierarchy (e.g. mail order, internet markets etc.). On the other hand the spending market available to retailers at St Andrews will be supplemented by workers, tourists and destination shoppers (people who do not reside within the St Andrews region, but who will direct some spending to the facilities within it) and from businesses spending money at the shops.

# Retail Floorspace Provision



# Retail Floorspace Provision

**St Andrews** **Table 3.2**
**Per Capita Retail Spending, 2050 ($2006)**

| | Food Catering | Convenience | Comparison | Bulky | PLUC 5 | UrbisJHD |
|---|---|---|---|---|---|---|
| Perth (2006) | 1,158 | 4,614 | 3,081 | 1,057 | 8,853 | 9,910 |
| Spending Growth Rate | 2.0% | 0.5% | 1.4% | 1.9% | 1.1% | 1.2% |
| Perth (2050) | 2,718 | 5,823 | 5,642 | 2,410 | 14,182 | 16,592 |
| St Andrews variation | +2% | +2% | +2% | +2% | | |
| St Andrews (2050) | 2,772 | 5,939 | 5,754 | 2,458 | 14,466 | 16,924 |
| Sales at non-retailers[1] | -55 | -297 | -575 | -295 | -928 | -1,223 |
| St Andrews Spend (2050) | 2,717 | 5,642 | 5,179 | 2,163 | 13,538 | 15,701 |
| St Andrews Outflow | -341 | -282 | -673 | -254 | -1,296 | -1,551 |
| St Andrews Inflow | +119 | +107 | +249 | +76 | 475 | 551 |
| Spending By Non- HH sector | +50 | +273 | +475 | +238 | 799 | 1,037 |
| **St Andrews Per Capita Retail** | **2,544** | **5,741** | **5,230** | **2,224** | **13,515** | **15,739** |

*1. Sales at non-retailers are non-shopfront sales including internet, mail-order, phone, etc.*
*Source: Market Data Systems, MarketInfo 2004; UrbisJHD*

**St Andrews District Structure Plan Region** **Table 3.3**
**Total Retail Sales 2050 ($2006)**

| | | Food Catering | Convenience | Comparison | Bulky | PLUC 5 | UrbisJHD |
|---|---|---|---|---|---|---|---|
| Population | *No* | | | | | | 154,091 |
| Per Capita Spending | *$* | 5,939 | 5,754 | 2,772 | 2,458 | 16,924 | 14,466 |
| Resident spending at retailers | *$m* | 915.2 | 886.7 | 427.2 | 378.8 | 2,608 | 2,229 |
| Sales At Non-Retailers | *$m* | -45.8 | -88.7 | -8.5 | -45.5 | -188.4 | -143.0 |
| Spending Inflow | *$m* | 16.5 | 38.3 | 18.3 | 11.8 | 84.9 | 73.1 |
| Spending Outflow | *$m* | -43.5 | -103.7 | -52.5 | -39.2 | -238.9 | -199.8 |
| Sales to Households | *$m* | 842.5 | 732.6 | 384.4 | 306.0 | 2,265 | 1,959 |
| Non-Household Sector Sales | *$m* | 42.1 | 73.3 | 7.7 | 36.7 | 159.8 | 123.1 |
| **Total Sales at St Andrews Retailers** | ***$m*** | **884.6** | **805.9** | **392.1** | **342.7** | **2,425** | **2,083** |
| **Share of Spending (UJHD)** | | **36%** | **33%** | **16%** | **14%** | **100%** | |

*Source : UrbisJHD*

# Retail Floorspace Provision

### 3.3.1 Retail Spending Growth

As shown in Section 2 (Table 2.2), retail growth in Australia has averaged 2% in real terms over the past decade and 1.1% over the 20 year period 1985-2005. Increases in income and long term forecasts which assume continued economic growth, suggest continuation of historic spending growth levels.

It is also evident that spending growth across retail categories has varied, with particularly strong growth recorded in Bulky goods. It would be unwise to assume continued growth of 2% over the long term and our forecast adopts the more conservative rate of 1.2% across retail as a whole.

Specifically the following annual growth rates are applied to the different retail categories :

- Food catering 2.0%
- Convenience 0.5%
- Comparison 1.4%
- Bulky 1.9%

St Andrews' variation from Perth's average spending (+2%) reflects the current position and relative spending levels across Perth (i.e. the northern coastal areas achieve spending levels above the Perth average).

Total spending per capita generated by each resident of St Andrews at 2050 is therefore calculated at $13,515 per capita under PLUC 5 or $15,739 (UrbisJHD). This spending will be directed to a range of facilities in different locations. For the purposes of this exercise, we need to establish the level of spending that can reasonably be expected to be directed to retail shops within the St Andrews region. Other assumptions are therefore required.

### 3.3.2 Sales at Non-Shopfront Retailers

Sales at non-shopfront retailers are also an important factor in considering future retail spending in St Andrews. These comprise Mail Order, Online Sales, vending machines, direct (factory) sales, Sunday markets etc. This retail expenditure is not available to the shops and centres forming part of the retail strategy and needs to be subtracted from the retail spending market in assessing the future retail requirements of St Andrews.

Predicting the future level of retail spending at non-stores is complex and inherently difficult to forecast. The internet is however likely to be the key driver of any increase in spending at non-shopfront retailers.

The format of future online retailing is an important factor. The UK's largest online retailer, Tesco, satisfies internet orders from dedicated warehouses which can be considered true non-shopfront sales. The Australian model as adopted by Coles, however, satisfies online orders through the existing store network and as such, sales generated are attributable to traditional store sales. Therefore not all online shopping will necessarily cannibalise storefront sales.

# Retail Floorspace Provision

Australian and overseas experience suggests non-store retail sales is currently in the range 2%-5%, with significant variation amongst retail groups (that is, books, music and electrical items are more likely to be purchased online than clothing). Taking into account further growth in non-store sales (including mail order, online and home delivery), we consider it reasonable to allow for the following outflows of appropriate retail spending to non-store retailers in 2050 :

- Food catering 2%
- Convenience 5%
- Comparison 10%
- Bulky 12%

### 3.3.3 Spending Outflow

St Andrews residents can be expected to direct the majority of their spending to facilities within the region, however residents' spending will also flow out to facilities beyond the St Andrews region. Outflow of retail spending will typically occur as residents undertake shopping whilst working or visiting friends or relatives beyond the region, in addition to some special purpose trips.

The Perth CBD and other regional centres within the metropolitan region can also be expected to attract spending generated by residents of St Andrews. Specialist retail facilities including Harbour Town and Ikea, both strong retail destinations serving extensive metropolitan catchments, would also attract spending generated by St Andrews residents. In addition a proportion of retail spending will be directed to facilities in both other Australian locations and abroad. Outflow assumptions are as follows :

- Food catering 13%
- Convenience 5%
- Comparison 13%
- Bulky 12%

The difference in outflow of retail spending between categories reflects the fact that convenience shopping is an activity undertaken less than other categories whilst travelling on business or leisure. For example consumers can be expected to have a greater propensity to buy clothes in the Perth CBD than convenience goods and services.

As mentioned previously, a model of this nature cannot be expected to pinpoint the scale or distribution of corner shops. To ensure that the model accommodates this retail form, the outflow of expenditure referenced here includes 'outflow' of spending from the model to such localised retail facilities that may be provided within the District Structure Plan area.

### 3.3.4 Spending Inflow

Spending inflow will occur as people not residing within the trade area direct their spending to facilities within. Specifically, inflow is expected to originate from :

- Workers – The employment aspirations for St Andrews identify an inflow of almost 10,000 workers from beyond the region. These workers can be expected to direct some of their spending to retailers within St Andrews. The larger employment nodes (centres A & B) can therefore expect to benefit most from spending by workers from beyond the region.

- Tourists – The beaches and tourist facilities envisaged at St Andrews can expect to attract tourist spending from beyond the region.
- Destination Shopping – The regional nature of the city centre can expect to attract visits from shoppers living outside the area.

Reflecting these market segments, assumptions regarding the inflow of expenditure are as follows :

- Food catering 5%
- Convenience 2%
- Comparison 6%
- Bulky 4%

Collectively, these spending groups add $85 million to the retail turnover available to St Andrews retailers.

UrbisJHD have conducted a number of telephone surveys across Australia, including the Perth metropolitan region and internationally. These surveys seek to establish the shopping patterns of retailers from an area. The 'base case' assumptions on both inflow and outflow of spending are based on this experience of shopping patterns in comparable locations.

### 3.3.5 Non-Household Spending

To ensure the retail market is 'balanced' we have also had to accommodate spending at retail establishments by non-households. This equates to the purchase of goods and services by business at retail premises.

As with non-store retail spending, spending by businesses is difficult to assess and quantify into the future. Evidence from individual retailers suggests this varies from 5-20%. Typically hardware retailers are at the higher end of the scale reflecting the 'trade' business that is directed through these retailers. In the long term forecasting of St Andrews we have assumed that sales from business accounts for the following proportion of spending/sales across the different retail categories :

- Food catering 2.0%
- Convenience 5.0%
- Comparison 10%
- Bulky 12%

### 3.3.6 Per Capita Spending Market

Taking into account the above assumptions and as illustrated in Table 3.2, the size of the retail market at 2050 is calculated at $13,500 retail spending per person under the PLUC 5 definition of retail and almost $15,700 under the UrbisJHD definition (expressed in $2006 and exclusive of GST).

This spending level, together with the population forecasts identified earlier determines the size of the total spending market available to retailers within the St Andrews area.

# Retail Floorspace Provision

## 3.4 Total Area Retail Spending

Using the per capita spending discussed above together with the ultimate population capacity, the ultimate level of retail spending that is expected to be directed to retail facilities within the St Andrews region is derived. Table 3.3 provides a summary of this total retail market. Retail spending is broken down further by precinct area in Appendix 3.2.

Combined, retail sales at St Andrews in 2050 are calculated at $2.43 billion (UrbisJHD) and $2.08 billion (PLUC 5). The total spending market comprises :

| Retail Category | Spending Market | Share of Spending Market |
|---|---|---|
| Convenience | $885 million | 36% |
| Comparison | $806 million | 33% |
| Food catering | $392 million | 16% |
| Bulky Goods | $343 million | 14% |
| **Total (UrbisJHD)** | **$2.43 billion** | **100%** |
| **Total (PLUC 5)** | **$2.08 billion** | |

These figures represent the spending that can reasonably be expected to flow to retailers within the St Andrews region. Since this model has accommodated all expected inflows and outflows of expenditure, this number is equivalent to the total volume of sales (turnover) that retailers within the region can expect to achieve. The next section considers the floorspace that this level of retail spending can support.

## 3.5 Centre Turnover – Retail

Having established the total spending generated by residents of St Andrews and retained in the region, the next stage explores the distribution of spending flows to centres and to retail types.

The additional steps in the model are as follows :

1 Assess likely spending flows (by precinct) for each category to each activity centre.

2 Identify the distribution of spending by precinct for each of the product categories (i.e. food catering, convenience, comparison, and bulky).

3 Apply estimated productivity level to each precinct to derive supportable floorspace at each centre.

### 3.5.1 Spending Distribution

In establishing spending distribution for each centre we considered the likely flows of spending by each category to each centre from each of the precincts. The establishment of a realistic distribution of spending across product categories was an iterative approach and one based on experience of the spending pattern informed by analysis of spending flows across Australia.

The level of spending directed to each centre relates to the relative proximity of the precinct to that centre. For example the total spending of Precinct 1 is split with centre A, the major activity centre attracting 74% of spending and the balance to centre C. The initial assumptions identified previously formed the starting point for expectation of spending distribution.

In considering the likely distribution of spending, the following points are relevant :

1 Residents can be expected to travel further for higher order (more infrequent) purchases such as comparison and bulky goods shopping.

2 In an established hierarchy, people can be expected to direct their retail spending to a range of facilities – i.e. the majority, but not all of supermarket trips would be to the most accessible centre, if residents travel to one of the major activity centres for comparison shopping, it would be reasonable to expect some to undertake convenience shopping at the same time.

3 Each precinct represents a unique location relative to the activity centres within the St Andrews region and therefore can also expect to have a unique distribution of its retail spending.

4 The centre size will influence its attractiveness. A centre without a full-line supermarket would not be expected to cater for all the main food shopping trips of residents.

The distribution of spending flows for each precinct for each retail category results in the aggregated spending distribution shown at Appendix 3.3. A summary of the spending expected to be directed to each centre is outlined in Table 3.4.

# Retail Floorspace Provision

**St Andrews** **Table 3.4**

**Spending Distribution to Activity Centres ($m), 2050 ($2006)**

| Activity Centre | Convenience | Comparison | Bulky | Food Catering | PLUC 5 | UrbisJHD |
|---|---|---|---|---|---|---|
| A | 235.8 | 483.7 | 215.0 | 106.1 | 825.6 | 1,040.6 |
| B | 222.3 | 189.0 | 112.1 | 98.5 | 509.9 | 622.0 |
| C | 50.5 | 34.6 | 6.8 | 22.4 | 107.6 | 114.3 |
| D | 36.2 | 15.2 | 2.3 | 16.0 | 67.4 | 69.7 |
| E | 51.5 | 14.9 | 2.0 | 22.8 | 89.3 | 91.3 |
| F | 56.8 | 12.6 | 0.0 | 25.2 | 94.6 | 94.6 |
| G | 42.5 | 9.9 | 2.1 | 18.8 | 71.2 | 73.2 |
| H | 15.8 | 11.0 | 0.0 | 7.0 | 33.8 | 33.8 |
| I | 30.0 | 9.7 | 0.6 | 13.3 | 53.0 | 53.6 |
| J | 32.3 | 9.1 | 0.8 | 14.3 | 55.8 | 56.5 |
| K | 45.0 | 8.4 | 1.1 | 19.9 | 73.3 | 74.4 |
| L | 5.6 | 0.3 | 0.0 | 4.2 | 10.1 | 10.1 |
| M | 23.9 | 1.1 | 0.0 | 7.5 | 32.5 | 32.5 |
| N | 7.0 | 0.9 | 0.0 | 2.9 | 10.8 | 10.8 |
| O | 8.7 | 0.4 | 0.0 | 3.8 | 12.9 | 12.9 |
| P | 4.4 | 0.4 | 0.0 | 2.0 | 6.8 | 6.8 |
| Q | 6.5 | 4.2 | 0.0 | 2.9 | 13.7 | 13.7 |
| R | 9.6 | 0.4 | 0.0 | 4.3 | 14.3 | 14.3 |
| **Total** | **885** | **806** | **343** | **392** | **2,083** | **2,425** |

*Source : UrbisJHD*

Conclusions from the output presented in Table 3.4 are as follows :

- Over half of residents' spending is expected to be directed to the two major activity centres. Importantly, no part of the St Andrews area is more than 5 kms from either Centre A or B.
- Limited bulky goods spending is expected to be directed to retail outside of these two activity centres, reflecting the need for co-location of bulky goods and the propensity of people to travel further to undertake this form of retailing. Again, the fact that all residents will be within 5 kms of a major bulky goods precinct is considered reasonable.
- The majority of spending directed to the smaller centres (L-R) can be seen to be convenience based, reinforcing their role as serving the day to day needs of residents from the local area.

# Retail Floorspace Provision

Reflecting some of the points above, one of the most apparent outcomes is the difference between the turnover volume of the major activity centres and the next largest centre. This result reflects the following :

- The distribution of major tenants – The ultimate size of any retail centre will be closely related to the provision of major tenants (department store, DDS, supermarket) in that centre. In the current retail environment, a population of 155,000 can be expected to support four full-line DDSs. Distribution of these into more than two centres would limit the benefits of concentrating higher order retail functions in a way that allows comparison shopping.
- The physical structure of the area – The linear nature of the area lends itself to two major centres. Another larger or mid-sized centre serving a relatively narrow region could result in an unsustainable competitive environment.
- The retail structure detailed within the District Structure Plan provides access for all residents to a major activity shopping facility within 5 kms.

### 3.5.2 Retail Productivity (Average Trading Levels)

Growth in productivity levels of retailers has been discussed previously in Section 2. Using the UrbisJHD averages it is evident that productivity levels have increased in the order of 1.5%-2.5% over the decade to 2004 in different centre types.

| | Regional Centre | Sub - Regional Centre | Supermarket Centre |
|---|---|---|---|
| **1994** | 4,502 | 4,473 | 5,170 |
| **2004** | 5,211 | 5,306 | 6,569 |
| **Average Annual Growth** | 1.5% | 1.7% | 2.4% |

Based on this pattern of historical growth it is reasonable to expect continued growth in productivity levels or, more accurately, it is reasonable to expect retailers to continue to benefit from productivity growth.

Table 3.5 details the 2005 (UrbisJHD Averages) turnover productivity for regional, sub-regional and supermarket centres. Also identified in Table 3.5 are the growth rate assumptions used to derive the appropriate future average trading levels at St Andrews. Relative to the growth outlined above we consider more modest growth levels appropriate for the purposes of long term forecasting, ranging from 0.5% for convenience retailing to 1.0% for bulky goods.

These discounts from the benchmarks reflect the fact that enclosed shopping centres have experienced higher growth than the retail market overall, whilst in this instance, the activity centres encompass all retail formats.

# Retail Floorspace Provision

**St Andrews** **Table 3.5**
**Average Trading Levels Calculations, 2050**

| Activity Centre | Food Catering | Conv. | Comp. | Bulky | Total |
|---|---|---|---|---|---|
| Growth Rate | 0.7% | 0.5% | 0.7% | 1.0% | 0.6% |
| Regional (Major Activity Centre A) | | | | | |
| 2005 Average | 9,000 | 9,400 | 8,200 | 2,800 | 8,700 |
| Forecast Average (2050) | 12,319 | 11,765 | 11,224 | 4,381 | 11,564 |
| Sub-Regional (Major Activity Centre B) | | | | | |
| 2005 Average | 6,800 | 8,000 | 6,000 | 2,800 | 6,800 |
| Forecast Average (2050) | 9,308 | 10,013 | 8,213 | 4,381 | 8,993 |
| Supermarket (Minor Activity Centres) | | | | | |
| 2005 Average | 4,000 | 6,100 | 4,400 | 1,600 | 4,800 |
| Forecast Average (2050) | 5,475 | 7,635 | 6,023 | 2,504 | 7,250 |

*Source : UrbisJHD Retail Averages, 2004/05*

## 3.6 Supportable Retail Floorspace by Centre

Having distributed spending to centres within St Andrews and applying average trading levels, we are able to calculate supportable retail floorspace for each activity centre. Table 3.6 indicates the supportable floorspace by activity centre.

Activity centre A has the highest supportable floorspace of around 72,000 sq.m (PLUC 5), and 120,000 sq.m (UrbisJHD).

# Retail Floorspace Provision

**St Andrews** **Table 3.6**

**Supportable Floorspace by Activity Centre, 2050 (sq.m)**

| Activity Centre | Convenience | Comparison | Bulky Goods | Food Catering | Total Retail Floorspace[1] PLUC 5 | Total Retail Floorspace[1] UrbisJHD |
|---|---|---|---|---|---|---|
| A | 20,044 | 43,092 | 49,075 | 8,616 | 71,800 | 120,800 |
| B | 18,898 | 16,843 | 25,578 | 8,000 | 43,700 | 69,300 |
| C | 5,047 | 4,215 | 1,547 | 2,407 | 11,700 | 13,200 |
| D | 3,613 | 1,846 | 526 | 1,723 | 7,200 | 7,700 |
| E | 5,148 | 1,813 | 460 | 2,455 | 9,400 | 9,900 |
| F | 5,677 | 1,534 | 0 | 2,707 | 9,900 | 9,900 |
| G | 4,242 | 1,200 | 471 | 2,023 | 7,500 | 7,900 |
| H | 1,576 | 1,341 | 0 | 752 | 3,700 | 3,700 |
| I | 2,999 | 1,178 | 134 | 1,430 | 5,600 | 5,700 |
| J | 3,226 | 1,114 | 173 | 1,538 | 5,900 | 6,100 |
| K | 5,890 | 1,400 | 428 | 3,640 | 10,900 | 11,400 |
| L | 736 | 53 | 0 | 763 | 1,600 | 1,600 |
| M | 3,126 | 188 | 0 | 1,375 | 4,700 | 4,700 |
| N | 923 | 154 | 0 | 525 | 1,600 | 1,600 |
| O | 1,135 | 64 | 0 | 701 | 1,900 | 1,900 |
| P | 578 | 64 | 0 | 357 | 1,000 | 1,000 |
| Q | 855 | 705 | 0 | 528 | 2,100 | 2,100 |
| R | 1,263 | 64 | 0 | 781 | 2,100 | 2,100 |
| **Total** | **84,975** | **76,868** | **78,393** | **40,319** | **202,300** | **280,600** |

*1.'Retail Floorspace': UrbisJHD definition includes Bulky goods. Refer Appendix 1.3*
*Source : UrbisJHD*

The output presented in Table 3.6 reflects the spending distribution in Table 3.4, and the key outcomes are therefore related :

- Centre A should be the dominant major activity centre in the region, accommodating the full range of retail shopping needs of the residents of the entire region.
- Centre B, at 70,000 (UrbisJHD), is also identified as a major activity centre that provides the full range of retail facilities (although not to the same level as centre A).
- Centres C, E, F and K are much smaller than the major activity centres and, with a strong convenience offer (the convenience floorspace in these centres would be sufficient to accommodate two full-line supermarkets). These centres would also have potential to accommodate an element of comparison based shopping in the form of a large mini-major tenant or small scale DDS.
- Centres D and G with floorspaces between 7,000 sq.m-9,000 sq.m can be expected to accommodate a supermarket and accommodate the full convenience offer.
- Smaller centres (H, I, J and M) are still expected to have a strong convenience offer, but may not provide the full convenience offer, with residents therefore more likely to use these centres in combination with others. In time, the role of centre H may expand if the population expands beyond the study area boundary.

- Centre M is identified as accommodating 4,500 sq.m of retail floorspace. The anticipated pattern of population growth and the status of the Capricorn Village Structure Plan, suggest that this will be the first centre to be established within the region.
- Centres L, N, O, Q, P and R at below 3,000 sq.m can be expected to serve only a limited convenience role. Furthermore, centres L, N and R are likely to serve a limited tourist retail function, however the provision of a major tourist attraction at any of these centres could be expected to increase the floorspace allocation of that centre further.
- The Capricorn Village Structure Plan identifies Centre L as providing a key tourist destination for the region. In this event it would be reasonable to expect the supportable floorspace to increase from the 1,500 sq.m identified as supportable by residents and local visitors in the modelling.
- Local corner shops are excluded from this analysis since their viability and appropriateness will be determined by more detailed planning considerations.

## 3.7 Output Checks

The output of the retail model is now assessed to see whether the results are consistent with the current retail environment. The two checks are :

1 Comparison of per capita floorspace provision resulting from the model against established benchmarks.

2 At the centre specific level, we have compared the size and turnover against industry standards.

### 3.7.1 Floorspace Per Capita

The model results in a retail floorspace per capita across the region of 1.8 sq.m per capita (Table 3.7). This comprises 1.22 sq.m in major activity centres, 0.44 sq.m in district, and 0.12 sq.m in neighbourhood and local centres.

Remembering that the UrbisJHD per capita floorspace includes bulky, whilst the proposed Wanneroo benchmarks do not, and recalling that the majority of bulky goods floorspace falls within the major activity centres, the appropriate comparison is the PLUC 5 figure of 0.74 sq.m against 0.62 sq.m.

Also evident from Table 3.7 is the lower provision of neighbourhood and local centres. This issue is discussed in detail below.

# Retail Floorspace Provision

**St Andrews** **Table 3.7**
**Floorspace Per Capita Comparison[1]**

| Centre Category | Proposed Wanneroo Benchmarks[2] | UrbisJHD Retail Output PLUC 5 [3] | UrbisJHD Retail |
|---|---|---|---|
| Major Activity Centres (Regional) | 0.62 | 0.74 | 1.22 |
| Minor Activity Centres (District) | 0.41 | 0.44 | 0.46 |
| Local Activity Centres (Local & Neighbourhood) | 0.55 | 0.12 | 0.12 |
| Total Suburban (Excl Perth) | 1.58 | 1.30 | |
| Other Retail | 0.39 | | |
| Total Shop and Other Retail | 1.97 | | 1.80 |

*1. Retail floorspace (sq.m)*
*2. City of Wanneroo Centres Strategy 2005 (page 20)*
*3. Excludes Bulky*
*Source : City of Wanneroo Centres Strategy; UrbisJHD*

## 3.7.2 Provision of Local and Sub-Local Retail

The results in Table 3.7 do not include a provision for small local, sub local and corner store retailing. The low provision of Neighbourhood and Local retail is due to the fact that we have not provided forecasts for the provision of centres that are below approximately 1,000 sq.m. For the purposes of this section we refer to this form of retailing as 'sub-local'.

This subsection considers why this forecasting has not been undertaken, but also considers the level of floorspace that might be supportable and what impact this would have on our forecasts.

**Drivers of sub-local retail?**

The provision of shopping facilities at the scale being considered (sub-local, corner shops) has progressively fallen over the past fifty years. This has been a trend driven by social change (increased availability and use of cars) as well as changes at the larger end of the retail industry (especially the advent and growth of supermarkets). Local shops generally can not compete with larger retailers on price, a factor that limits their appeal and commercial potential. Reduced demand and increased competition has meant a sharp decline in the financial viability of small local retail shops in many locations.

The possible social and economic benefits of improved access to sub-local retail are not easily valued. Generally, contemporary market forces alone do not lead to the development of these sub-local centres, suggesting that these centres often have limited financial value. The benefit derived is predominately an external one in that it accrues to the community at large.

To achieve the benefits from improved access to sub-local retail, Government has put in place a policy response that mandates a higher level of sub-local retail. The benefits that flow from this policy response (environmental and social) are seen by Government to outweigh the costs in terms of market efficiency. We should make it clear that we do not necessarily disagree with this assessment, however the trade-off should be recognised.

# Retail Floorspace Provision

This leads to the key difficulty in forecasting the demand for and the ability to support these centres. Larger centres are supported by market forces (i.e. consumer demand) and we can recognise that market forces tend to drive the allocation of consumer spending and therefore retail floorspace to centres. We can, therefore, assess how large each of these centres could be. However, as we noted above, the market driven trend has been for sub-local centres to diminish in importance. Therefore, as the provision of sub-local retail floorspace is not generally market driven, it is difficult to assessment of the number these centres that should be developed.

**Trade-off: economic efficiency and social accessibility.**

In our assessment of the level of floorspace that is supportable in each activity centre, we have assumed an efficient balance between demand and supply. That is, we have endeavoured to allocate floorspace to each centre in a way that results in an efficient and sustainable allocation of retail floorspace reflecting access to population and the location of other centres.

Allocating floorspace to sub-local retail requires a different approach. With this approach, there is a trade off between the efficiency derived from allowing the market to drive the result, and the external benefits that accrue from mandating a higher provision of sub-local retail.

On the one hand allowing the market to determine the allocation of floorspace is likely to result in only a moderate supply of sub-local retail. The outcomes of this are likely to be :

- More consumer spending directed to the main retail centres (major activity, district, neighbourhood and local)
- More productive and therefore efficient use of retail floorspace;
- A greater concentration of activity in a smaller number of centres, and the benefits of this allowing stronger, more viable centres.

On the other hand, Government intervention and mandating higher provision of sub-local retail floorspace might result in :

- The community benefits that are derived from greater access for residents to sub-local shops and any community building effects that result;
- The benefits of less and/or shorter car trips for the purpose of shopping including more walking and cycle based short trips, which include :
  - Health benefits associated with any physical exercise behavioural changes;
  - Environmental savings in terms of reduced greenhouse gas and other emissions;
  - Social savings in the possible reduction in motor vehicle accidents (albeit limited in scale).
- Slightly lower trading levels at larger centres , as some retail expenditure is directed towards the sub-local shops;
- Potentially some immediately local retail employment opportunities, i.e. in line with the transfer of expenditure; and
- Potentially some ongoing trading stress, as the sub-local retail proprietors struggle to meet return expectations.

Thus, as St Andrews develops, Government will need to weigh up the costs/benefits of these two approaches recognising that each has costs and benefits.

**An example of the impact of increased sub-local floorspace.**

# Retail Floorspace Provision

Here we have provided an example of what may occur with a higher provision of sub-local retail floorspace.

Table 3.7 shows that the total provision of retail floorspace (UrbisJHD) of 1.80 sq.m per capita, compared with 1.97 sq .m per capita. Should sufficient sub-local retail floorspace be developed that results in total per capita retail floorspace being equal to the benchmark levels, the additional floorspace would be equal to 0.17 sq.m per capita, or 25,800 sq.m of retail floorspace in total. Assuming an average of approximately 250 sq.m per centre, this could result in a further 100 sub-local retail centres.

If we assume an average trading level of $3,000 per sq.m, total turnover at these centres would be equal to $77 million.

Table 3.3 (above) shows that we have assumed an expenditure outflow (from the model) of $43.5 million of food catering retail turnover, and $103.7 million in convenience retail turnover, giving a total of $147.2 million. This outflow includes turnover that is captured by sub-local retailers, as well as turnover that is leaked outside the region. Assuming that 40% of this was retained by sub-local retailers, then this would amount to $59 million in turnover. Therefore, a further $19 million in turnover ($77 million *minus* $59 million) would be re-directed from the range of nominated retail centres to sub-local retail facilities.

This will result in slightly lower average turnover at the larger centres. Across the larger activity centres, average turnover levels will decrease from $7,420 to $7,350 per sq.m (UrbisJHD), a decrease of 3.2%. These centres will remain viable although marginally less profitable. The outcome is a lower trading density for retail floorspace across the St Andrews region as a whole, and therefore slightly reduced level of resource efficiency. The upside is the non-financial benefits that flow from increased access to sub-local retail.

This example would result in an average provision of local activity centre retail of 0.29 sq.m per capita. Should circumstances and government policy dictate, a greater provision could occur, however average productivity of retail floorspace would continue to decline.

**Theory vs Practice**

There is a practical element to this analysis that has thus far not been considered in detail. Current shopping patterns are for shoppers to bypass sub-local retailers and go to larger centres that provide a better range and more cost competitive pricing.

Mandating a provision of sub-local retail floorspace may result in a high provision of this floorspace. However, this does not guarantee that the market will support this floorspace. The region could end up with a large number of vacant corner shops. The Government's policy is enforced to avoid negative externalities[1] (such as the environmental impact of longer car trips). However, this negative externality is only avoided if these sub-local retailers are successful and do attract a share of the market and remain viable. Current market trends suggest that this may not necessarily be the outcome, although it is acknowledged that consumer behaviour could conceivably change in the future.

In order for the negative externalities to be avoided, Government may choose to subsidise the operation of these sub-local retail centres to ensure their survival. Thus, the provision of sub-local retail needs to be very carefully considered to ensure that the Government's objectives are achieved in practice. At a minimum, these facilities need to be provided along side other activity generating property uses such as schools.

[1] A negative externality occurs in economics when a decision causes costs or benefits to individuals or groups other than the person making the decision. In this situation, consumer's decisions to drive to the shops causes pollution that effects everyone, however the consumer does not necessarily take this environmental cost into account when deciding to drive.

# Retail Floorspace Provision

**Conclusion – Local & Sub Local Centres**

In this section, we have attempted to capture the issues involved in pre-determining the level of retail floorspace that might be allocated to sub-local retail centres. These centres have not received strong market support in the past, and there is no current evidence that they will do so in the future. Therefore, the provision of sub-local retail floorspace is government mandated in order to achieve the governments' social and environmental objectives. However, this may come with a cost relative to the most efficient allocation of resources.

This results in a trade off – efficiency of market resource allocation vs the social/ environmental benefits of a greater proportion of sub-local retail facilities. Given the uncertainty involved in making these policy decisions for specific sites, we believe that such decisions should be made on a case by case basis as St Andrews develops.

Further, mandating the provision of sub-local retail floorspace will not necessarily result in the Government's objectives being met if consumers do not support these facilities.

We have considered how around 100 small centres could provide a further 25,000 sq.m, and take the average provision of neighbourhood and local retail to 0.29 sq.m per capita.

Thus, the location of sub-local retail floorspace needs to be carefully considered in light of on the ground conditions at the time of development. We are not suggesting that sub-local retail floorspace doesn't have a place in St Andrews – on the contrary. But we are recommending that decisions on where and when it is developed occur as St Andrews develops to ensure that sub-local retail remains viable while the Government's objectives are achieved in practice.

### 3.7.3 UrbisJHD Averages Comparison

In an effort to test whether the output of the model regarding the size and floorspace of each centre would fit with current 'real world' outcomes, Table 3.8 compares the model outputs of centre floorspace against the UrbisJHD benchmarks of centre sizes.

Table 3.8 details the larger activity centres within St Andrews and, with regard to its size and role, identifies how this centre would be classified under UrbisJHD definitions. The benchmark sizes (from UrbisJHD's Retail Averages publication) for each centre type is identified. For example, the average size of regional shopping centres across Australia is 64,700 sq.m, which represents the closest match to centre A at 71,800 sq.m.

The size of centre B derived from the model, 44,000 sq.m (PLUC 5), would be close to the average size of sub-regional shopping centres containing two discount department stores (DDSs) in Australia. In a similar fashion, the size of other centres can be seen to be broadly consistent with the average size for single and double supermarket centres in Australia.

In Australia, the size of any retail facility is influenced by the provision of major tenants. A double supermarket centre is able to support a greater level of specialty shop retail than a single supermarket centre. Similarly, a centre with a DDS is able to support greater specialty shop floorspace (particularly comparison retailers) than a supermarket centre. The above exercise is therefore important in demonstrating that the floorspace allocations to the centres are both realistic and achievable.

# Retail Floorspace Provision

**St Andrews - Major Centres** **Table 3.8**
**UrbisJHD Averages Comparison**

| Activity Centre | Centre Comparison Type[1] | Centre Floorspace Benchmark[2] (sq.m) | Centre Floorspace Model Output[3] (sq.m) |
|---|---|---|---|
| A | Regional | 64,677 | 71,800 |
| B | Sub-Regional - Double DDS | 36,538 | 43,700 |
| C | Supermarket - 2 Supermarkets | 11,252 | 11,700 |
| D | Supermarket - 1 Supermarkets | 5,668 | 7,200 |
| E | Supermarket - 1 Supermarkets | 5,668 | 9,400 |
| F | Supermarket - 2 Supermarkets | 11,252 | 9,900 |
| G | Supermarket - 1 Supermarkets | 5,668 | 7,500 |
| H | Supermarket - 1 Supermarkets | 5,668 | 3,700 |
| I | Supermarket - 1 Supermarkets | 5,668 | 5,600 |
| J | Supermarket - 1 Supermarkets | 5,668 | 5,900 |
| K | Supermarket - 2 Supermarkets | 11,252 | 10,900 |
| M | Supermarket - 1 Supermarkets | 5,668 | 4,688 |

*1. As defined by UrbisJHD*
*2. Current ( 2005/06 ) excludes bulky other than associated with "shopping centre"*
*3. Forecast ( 2050 ) excludes all bulky*
*Source : UrbisJHD Retail Averages, 2005/06*

# 4 Success Factors

Having demonstrated that the St Andrews District Structure Plan represents a viable retail hierarchy, we have also been asked to comment on design, layout and other factors relevant to consideration of more detailed Activity Centre planning. These factors are concerned with the influence of detailed planning on the viability or success of activity centres.

Each centre type has particular characteristics that benefit from a particular location or built form. Bulky goods/homemaker centres, for example, draw from a broad catchment and successful examples are located on sites with high exposure to large volumes of passing traffic and with access to an extensive catchment area.

At the other end of the scale, the commercial viability of small centres is generally influenced by factors such as the quality of individual tenants and the positioning of the retail element relative to other activity generating uses.

This section provides an overview of the success factors for different centre types.

## 4.1 Major/Minor activity Centres

Major activity centres benefit from significant destinational appeal and are therefore less dependant on passing traffic flows. The key factors influencing the success of these centres include :

- **Access –** Good road access to a regional catchment.
- **Parking –** Easy and efficient parking as well as the quantum of parking are particularly important for major activity centres where the majority of trips are and can be expected to be in the future, made by private vehicle.
- **Layout –** A layout that recognises the relationships between major tenants and the spin off benefits to specialty retailers should be maintained.
- **Design –** Notwithstanding planning objectives surrounding new urbanism and main street principles, the traditional enclosed shopping centre remains a key destination for consumers.

Many of the points for major activity centres are also relevant for minor activity centres. However, minor activity centres have less destinational appeal and as such, accessibility and exposure generally have a greater significance.

## 4.2 Supermarket (Minor Activity) Centres

Supermarket centres perform a convenience role and as such, they need to be convenient. Typically convenience shopping trips are 'needs' based. Those factors that can influence their viability include :

- **Location –** Supermarket centres need to be conveniently located relative to the population they serve. A typical pitfall evident from experience in Canberra, is the internalisation of facilities within residential estates with the road network limiting rather than extending catchment areas.
- **Parking –** Reflecting the convenience role, parking should be sufficient in number and easy to access. Recognising that supermarket centres are the main destination for large shopping trips, surveys undertaken by this office highlight the need for sufficient parking at these centres.
- **Layout –** The layout of the centre should be simple and legible.

# Success Factors

## 4.3 Local Centres

- **Access -** Any retail facility other than one with a purely destinational appeal must be accessible to the market which it aims to serve. Different types of retailing require different accessibility considerations. Small local convenience stores must be easily accessible to their immediate trade area. That means they benefit from a strategic position such as on the road network which provides appropriate levels of vehicular and pedestrian flow.
- **Parking -** The layout and quantum of parking are important factors in the success of any retail facility. Notwithstanding policy objectives of encouraging public transport use, it remains the case that, particularly in WA, most trips to retail facilities, even small local facilities are undertaken by car.
- In broad terms a ratio of five spaces per 100sq.m. of retail floorspace is a useful guide however local and neighbourhood facilities typically induce short duration trips and consequently a lower provision can be justified.
- **Location -** Both local convenience shops and cafés depend heavily on passing trade. An important consideration in new residential developments is where pedestrian and vehicular "desire lines" are likely to evolve. In the absence of high volumes of passing traffic (either vehicular or pedestrian) the propensity to use the facility diminishes. Patrons will tend to purchase convenience items at immediately accessible locations on another part of their journey. For example milk and other such low order purchases may be made at a convenience store passed near a transport node.
- **Layout -** This factor refers to the shop or shops utilising the layout to maximise exposure, optimise orientation and aspect, and ensure safety. These can serve to make an attractive commercial place, and encouraging patrons to utilise and stay at the facility. In practice and notwithstanding urban planning objectives, the observed pattern of shopping centre usage indicates a preference for secure, enclosed, climate controlled shopping environments that can be negotiated without the need to cross streets.
- **Operator -** It is acknowledged that, given the local convenience nature of the proposed centre, it is unlikely that national tenants will be seeking representation in these centre types. Independent operators are therefore the most likely occupants of the proposed shops. The competency of these individuals, without the backing of national branding or support can similarly detract from the quality and feel of the centre, potentially beginning a cycle of poor quality tenants and low visitation rates. Experienced and competent operators are important to the success of any retail precinct.
- **Co-Location and Critical Mass -** Historically, retailing has congregated together to benefit from spin-off trade, this is particularly so in emerging retail forms, i.e. the homemaker centre, the café strip etc. In the absence of co-locational benefits a retailer must either have destinational appeal or be able to survive off passing trade (e.g. a small convenience centre on a main road).

Linked to the co-locational aspect are issues of critical mass, this is particularly relevant for restaurant/café locations where they are typically grouped together in precincts so that the area becomes the destination rather than the individual retailer. The number and size of tenants required to generate sufficient critical mass can vary depending on the nature and location of the surrounding development.

Many of these factors are also relevant in considering the location of corner shops.

# Success Factors

## 4.4 Bulky Goods / Homemaker Centres

There are a number of key location requirements for the successful operation of purpose built homemaker/bulky goods centres, and indeed freestanding stores. The key factors include :

- **Exposure** - Sites need to offer high levels of exposure to large passing traffic volumes. The importance of a high profile location is highlighted by the fact that nearly all of the major homemaker centres and bulky goods retailing precincts in Australian cities are either situated along a highway or major arterial road, or they form part of a major commercial precinct.
- **Accessibility** - Sites also need to be highly accessible by car, reflecting that more than 95% of trips to undertake "bulky goods" shopping are made by car. Along with ingress and egress arrangements, the ability of the site and the layout plan to deliver convenient and sufficient carparking and loading are therefore also important considerations.
- **Size and Mix** - Except for the major national retailers, such as Ikea and Harvey Norman which can attract substantial customers in their own right, "bulky goods" retailers generally locate in sizeable retail precincts that have the critical mass to create sufficient combined appeal and cross-usage. A reasonable number and range of retailers, as well as broad product range, are therefore important for a successful homemaker centre or "bulky goods" precinct.
- **Large Site Size** - The physical size of the premises, together with the co-location preferences and requirements of a number of retailers, gives rise to the requirement for a large site, of a scale typically not available within existing activity centres.
- **Low Assembly and Development Costs** - The turnover densities (turnover per square metre) of "bulky goods" retailers are generally well below average turnovers achieved by traditional strip or centre based retailing, as a result of the requirement for a large area for display, the high value of goods sold and relatively infrequent purchasing pattern. In order for the business model to survive therefore, the costs of development and site assembly need to be relatively low to enable developments of this nature to proceed.

In the main, these success factors are also applicable to outlet centre retailing.

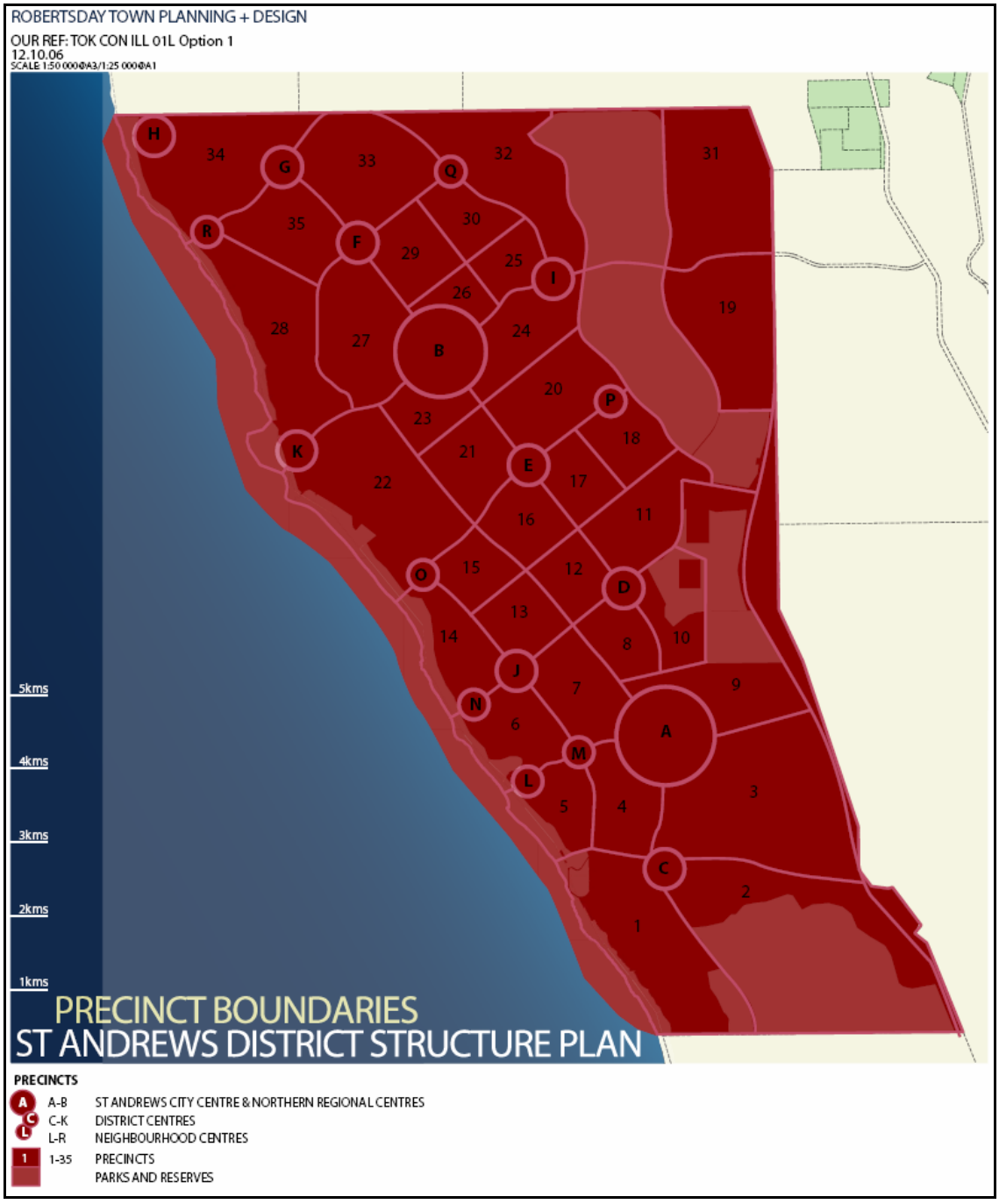
## 4.5 Success Factors

Beyond catchment area and market size considerations, the location both in a regional and local context as well as the design and layout of the development are important considerations at the more detailed planning level for the St Andrews retail hierarchy.

# Appendices

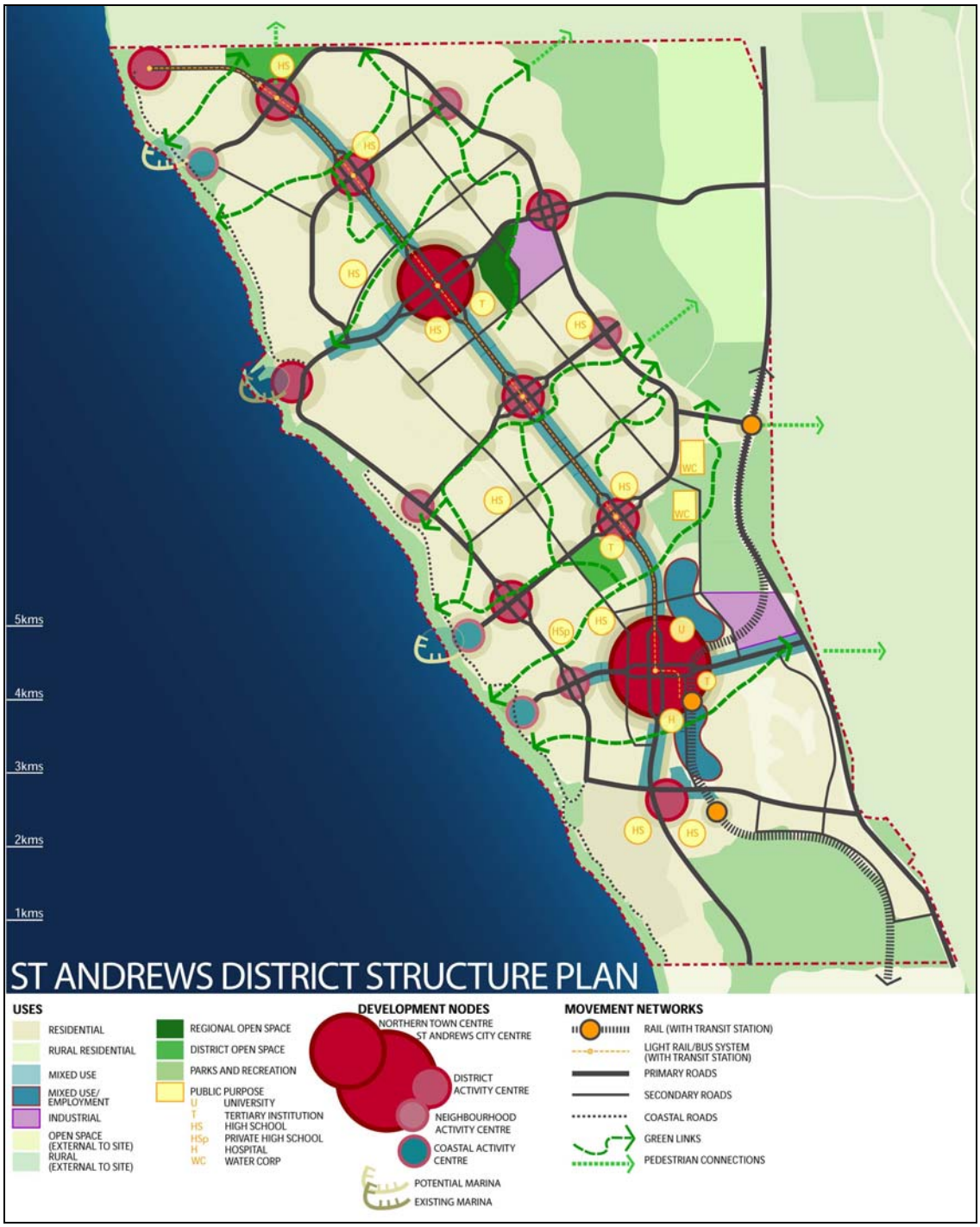
# Appendices

**St Andrews District Structure Plan – Precinct Boundaries** **Appendix 1.1**



# Appendices

**St Andrews District Structure Plan** **Appendix 1.2**



# Appendices

**Retail Definitions** **Appendix 1.3**

The following industries comprise 'Total Shopfront' retail. They are included in the Retail Trade Survey conducted by the ABS, and are as defined in ANZSIC :

## Food Retailing

- Supermarkets and grocery stores (5110) and non-petrol sales of convenience stores of selected petrol stations
- Takeaway food retailing (5125)
- Other food retailing
  - Fresh meat, fish and poultry retailing (5121)
  - Fruit and vegetable retailing (5122)
  - Liquor retailing (5123)
  - Bread and cake retailing (5124)
  - Specialised food retailing n.e.c. (5129)

## Department Stores (5210)

## Clothing and Soft Good Retailing

- Clothing retailing (5221)
- Footwear, fabric and other soft good retailing
  - Footwear retailing (5222)
  - Fabric and other soft good retailing (5223)

## Household Good Retailing

- Furniture and floor covering retailing
  - Furniture retailing (5231)
  - Floor covering retailing (5232)
- Domestic hardware and houseware retailing (5233)
- Domestic appliance and recorded music retailing
  - Domestic appliance retailing (5234)
  - Recorded music retailing (5235)

## Recreational Good Retailing

- Newspaper, book and stationery retailing (5243)
- Other recreational goods retailing
  - Sport and camping equipment retailing (5241)
  - Toy and game retailing (5242)
  - Photographic equipment retailing (5244)

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## Other Retailing

- Pharmaceutical, cosmetic and toiletry retailing (5251)
- Other retailing n.e.c.
  - Antique and used good retailing (5252)
  - Garden supplies retailing (5253)
  - Flower retailing (5254)
  - Watch and jewellery retailing (5255)
  - Retailing n.e.c. (5259)

## Hospitality and Services

- Hotels and licensed clubs
  - Pubs, taverns and bars (5720)
  - Clubs (Hospitality) (5740)
- Cafes and restaurants (5730)
- Selected services
  - Video hire outlets (9511)
  - Hairdressing and beauty salons (9526).

# Appendices

**Western Australian Standard Land Use Classification (WASLUC)** **Appendix 1.4**

**Correspondence Between WA Planning's PLUC 5 Defintion[1] and UrbisJHD's Retail Definition[2]**

**PLUC 5 WASLUC Codes in JHD's Retail Definition**

5321 Department Stores Retail
5322 General Merchandise Retail
5331 General Markets
5341 Duty Free Stores
5411 Grocers, Confectioners, Tobacconist
5421 Meats Retail
5422 Fish and Seafoods Retail
5431 Fruits and Vegetables - Retail
5441 Take Away Food and Milk Bars
5461 Bread and Cake Stores
5491 Delicatessen
5492 Health Foods
5499 Other Retail Food Trade NEC
5611 Men's and Boys' Clothing Retail
5621 Women's, Girls' and Infant Wear Stores Retail
5631 Combined Men's and Women's Clothing Stores Retail
5661 Footwear Retail
5691 Fabric Shop and Dressmaking Accessories Retail
5692 Fur and Leather Clothing Retail
5693 Knitting Wool and Accessories Retail
5694 Accessories Retail NEC
5713 Manchester Goods and Soft Furnishings Retail
5714 Kitchenware Retail
5719 Furniture and Home Furnishings and Equipment Retail
5721 Household Appliance Retail
5722 Music and Musical Instruments Retail
5724 Electronic Equipment and Parts Retail
5811 Restaurants, Café and Function Centres
5911 Pharmacies, Chemists
5921 Liquor Retail
5931 Antiques Retail
5932 Secondhand Merchandise Retail
5941 Newsagents
5942 Stationers
5943 Booksellers
5944 Craft and Art Supplies
5945 Gifts, Novelties and Souvenirs
5946 Adult Products Retail
5951 Sporting Goods and Trophies Retail
5952 Bicycles Retail
5953 Toys and Hobbies Retail
5961 Business and Computing Equipment
5971 Watchmakers and Jewellers Retail
5981 Florists Retail
5991 Cameras and Photographic Supplies
5992 Sheepskins Retail
5995 Pets and Pet Supplies Retail
5997 Leather Goods and Saddlery Retail
5999 Other Retail Trade NEC
6231 Men's Hairdressers
6232 Women's Hairdressers (inc. Unisex)
6233 Beauty Salons
6398 Motion Picture Distribution and Services (Video Libraries)
6496 Footwear Repair Services

**PLUC 5 WASLUC Codes not included in JHD's Retail Definition**

5954 Firearms Retail
6234 Weight Reduction Salons
6391 Clothing Hire
6398 Motion Picture Distribution and Services (excluding motion picture theatres)

**Other WASLUC Codes included in JHD's Retail Definition**

5231 Paint and Wallpaper Retail
5242 Light Fittings Retail
5251 Hardware Retail
5711 Furniture Retail
5712 Floor Coverings Retail
5715 Tiles Retail
5996 Ice Retail
6211 Laundering, Dry-cleaning Services

**'Other Retail' WASLUC codes not inc. in JHD's Retail Definition**

5252 Agricultural Equipment Retail
5595 Aircraft and Accessories - Retail
6396 Boat, Caravan and Trailer Hire
5592 Caravan Dealers
5261 Chemical Sales
5993 Coal, Coke and Firewood Retail
5994 Containers Retail
5241 Electrical Construction Materials Retail
6395 Equipment Hire
5712 Floor Coverings Retail
5531 Fuel Retail
5711 Furniture Retail
5251 Harware Retail
525 Hardware and Farm Equipment Retail
5983 Hay, Grains and Feeds Retail
522 Heating, Plumbing and Refrigeration Equipment Retail
6394 Household Equipment Retail
5996 Ice Retail
5242 Light Fittings Retail
5998 Livestock Retail
5591 Marine Craft and Accessories Retail
5513 Motor Cycle Dealers
5593 Motor Vehicles Parts (New) Retail
5594 Motor Vehicles Parts (Used) Retail
6397 Motor Vehicle Rental Services
5512 Motor Vehicles (used only) Retail
5511 Motor Vehicles (new and used) Retail
5982 Nurseries Retail
5984 Other Farm and Garden Supplies Retail NEC
559 Other Retail Trade
559 Other Retail Trade NEC
5231 Paint and Wallpaper Retail
523 Paint, Glass and Wallpaper Retail
5221 Plumbing, Heating and Refrigeration Equipment Retail
56 Retail Trade - Apparel and Accessories
55 Retail Trade - Automotive, Marinecraft, Aircraft and Accessories
5956 Swimming Pools Retail
5715 Tiles Retail
5521 Tyres, Batteries and Accessories Retail
51 Wholesale Trade

*1. PLUC 5 Retail/Shop definition used in the WA Planning Commission's, "Metropolitan Centres Policy Statement for the Perth Metropolitan Area", October 2000.*
*2. See the Introduction of this report.*
*Source : WA Planning; UrbisJHD*

# Appendices

**St Andrews** **Appendix 3.1**
**Retail Categories**

| Group | UrbisJHD | Product Category |
|---|---|---|
| Bakery | Food Retail | Convenience |
| Deli & dairy | Food Retail | Convenience |
| Fish | Food Retail | Convenience |
| Frozen food | Food Retail | Convenience |
| Fruit & vegetables | Food Retail | Convenience |
| Meat | Food Retail | Convenience |
| Groceries | Food Retail | Convenience |
| Pharmaceutical groceries | Food Retail | Convenience |
| Toiletries | Food Retail | Convenience |
| Tobacco | Food Retail | Convenience |
| Take home liquor | Food Retail | Convenience |
| Take-away food | Food Catering | Food Catering |
| Cafes & restaurants | Food Catering | Food Catering |
| Women's clothing | Apparel | Comparison |
| Children's clothing | Apparel | Comparison |
| Men's clothing | Apparel | Comparison |
| Other clothing | Apparel | Comparison |
| Footwear | Apparel | Comparison |
| Jewellery | Apparel | Comparison |
| Fashion accessories | Apparel | Comparison |
| Glassware & tableware | Homewares | Comparison |
| Home decoration | Homewares | Comparison |
| Home entertainment equipment | Homewares | Comparison |
| Computer hardware & software | Homewares | Comparison |
| Communications | Homewares | Comparison |
| Small appliances | Homewares | Comparison |
| Manchester | Homewares | Comparison |
| Furniture | Bulky Goods | Comparison |
| Floor coverings | Bulky Goods | Bulky Goods |
| Whitegoods | Bulky Goods | Bulky Goods |
| Hardware, garden etc. | Bulky Goods | Bulky Goods |
| Books | Leisure | Comparison |
| Newspapers & magazines | Leisure | Convenience |
| Stationary | Leisure | Comparison |
| Music/video/games | Leisure | Comparison |
| Pharmaceuticals | Leisure | Convenience |
| Cosmetics & accessories | Leisure | Comparison |
| Recreational equipment | Leisure | Comparison |
| Toys & games | Leisure | Comparison |
| Other items | Leisure | Comparison |
| Hair & beauty | Services | Convenience |
| Laundry & cleaning | Services | Convenience |
| Video & games hire | Services | Convenience |
| Optical goods & fees | Services | Convenience |
| Photographic film etc. | Services | Convenience |
| Repairs & maintenance | Services | Bulky Goods |

*Source: UrbisJHD*

# Appendices

**St Andrews** **Appendix 3.2**

**Spend by Precinct, 2050 ($2006)**

| Precinct | Population | Food Catering | Convenience | Comparison | Bulky | PLUC 5 Total ($m) | UrbisJHD Total ($m) |
|---|---|---|---|---|---|---|---|
| 1 | 4,264 | 10.9 | 24.5 | 22.3 | 9.5 | 57.6 | 67.1 |
| 2 | 4,639 | 11.8 | 26.6 | 24.3 | 10.3 | 62.7 | 73.0 |
| 3 | 8,966 | 22.8 | 51.5 | 46.9 | 19.9 | 121.2 | 141.1 |
| 4 | 3,871 | 9.8 | 22.2 | 20.2 | 8.6 | 52.3 | 60.9 |
| 5 | 1,976 | 5.0 | 11.3 | 10.3 | 4.4 | 26.7 | 31.1 |
| 6 | 2,958 | 7.5 | 17.0 | 15.5 | 6.6 | 40.0 | 46.6 |
| 7 | 3,851 | 9.8 | 22.1 | 20.1 | 8.6 | 52.1 | 60.6 |
| 8 | 2,333 | 5.9 | 13.4 | 12.2 | 5.2 | 31.5 | 36.7 |
| 9 | 3,693 | 9.4 | 21.2 | 19.3 | 8.2 | 49.9 | 58.1 |
| 10 | 2,370 | 6.0 | 13.6 | 12.4 | 5.3 | 32.0 | 37.3 |
| 11 | 4,462 | 11.4 | 25.6 | 23.3 | 9.9 | 60.3 | 70.2 |
| 12 | 2,657 | 6.8 | 15.3 | 13.9 | 5.9 | 35.9 | 41.8 |
| 13 | 2,567 | 6.5 | 14.7 | 13.4 | 5.7 | 34.7 | 40.4 |
| 14 | 2,935 | 7.5 | 16.8 | 15.3 | 6.5 | 39.7 | 46.2 |
| 15 | 2,146 | 5.5 | 12.3 | 11.2 | 4.8 | 29.0 | 33.8 |
| 16 | 3,051 | 7.8 | 17.5 | 16.0 | 6.8 | 41.2 | 48.0 |
| 17 | 2,882 | 7.3 | 16.5 | 15.1 | 6.4 | 38.9 | 45.4 |
| 18 | 2,491 | 6.3 | 14.3 | 13.0 | 5.5 | 33.7 | 39.2 |
| 19 | 267 | 0.7 | 1.5 | 1.4 | 0.6 | 3.6 | 4.2 |
| 20 | 5,167 | 13.1 | 29.7 | 27.0 | 11.5 | 69.8 | 81.3 |
| 21 | 3,226 | 8.2 | 18.5 | 16.9 | 7.2 | 43.6 | 50.8 |
| 22 | 8,308 | 21.1 | 47.7 | 43.4 | 18.5 | 112.3 | 130.8 |
| 23 | 2,576 | 6.6 | 14.8 | 13.5 | 5.7 | 34.8 | 40.5 |
| 24 | 2,075 | 5.3 | 11.9 | 10.8 | 4.6 | 28.0 | 32.7 |
| 25 | 1,886 | 4.8 | 10.8 | 9.9 | 4.2 | 25.5 | 29.7 |
| 26 | 2,130 | 5.4 | 12.2 | 11.1 | 4.7 | 28.8 | 33.5 |
| 27 | 6,841 | 17.4 | 39.3 | 35.8 | 15.2 | 92.5 | 107.7 |
| 28 | 5,932 | 15.1 | 34.1 | 31.0 | 13.2 | 80.2 | 93.4 |
| 29 | 3,209 | 8.2 | 18.4 | 16.8 | 7.1 | 43.4 | 50.5 |
| 30 | 2,291 | 5.8 | 13.2 | 12.0 | 5.1 | 31.0 | 36.1 |
| 31 | 318 | 0.8 | 1.8 | 1.7 | 0.7 | 4.3 | 5.0 |
| 32 | 6,392 | 16.3 | 36.7 | 33.4 | 14.2 | 86.4 | 100.6 |
| 33 | 5,622 | 14.3 | 32.3 | 29.4 | 12.5 | 76.0 | 88.5 |
| 34 | 5,035 | 12.8 | 28.9 | 26.3 | 11.2 | 68.0 | 79.2 |
| 35 | 4,505 | 11.5 | 25.9 | 23.6 | 10.0 | 60.9 | 70.9 |
| A | 5,796 | 14.7 | 33.3 | 30.3 | 12.9 | 78.3 | 91.2 |
| B | 3,312 | 8.4 | 19.0 | 17.3 | 7.4 | 44.8 | 52.1 |
| C | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| D | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| E | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| F | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| G | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| H | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| I | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| J | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| K | 1,323 | 3.4 | 7.6 | 6.9 | 2.9 | 17.9 | 20.8 |
| L | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| M | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| N | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| O | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| P | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| Q | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| R | 742 | 1.9 | 4.3 | 3.9 | 1.6 | 10.0 | 11.7 |
| **Total** | **154,091** | **392.1** | **884.6** | **805.9** | **342.7** | **2,082.5** | **2,425.2** |

*Source: Market Data Systems, MarketInfo 2004; UrbisJHD*

**Retail Spending Distribution and Centre Turnover** **Appendix 3.3**

**Centre Distribution**

| Precinct | A | B | C | D | E | F | G | H | I | J | M | L | N | O | K | P | Q | R | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 74% | 0% | 26% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 2 | 75% | 0% | 25% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 3 | 78% | 0% | 22% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 4 | 69% | 0% | 19% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 11% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 5 | 69% | 0% | 21% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 8% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 6 | 73% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | 12% | 6% | 2% | 3% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 7 | 73% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | 12% | 7% | 1% | 3% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 8 | 80% | 0% | 0% | 19% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 9 | 80% | 0% | 0% | 17% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 10 | 80% | 0% | 0% | 19% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 11 | 60% | 10% | 0% | 17% | 8% | 0% | 0% | 0% | 0% | 3% | 0% | 1% | 1% | 1% | 0% | 0% | 0% | 0% | 100.0% |
| 12 | 60% | 10% | 0% | 17% | 8% | 0% | 0% | 0% | 0% | 3% | 0% | 1% | 1% | 1% | 0% | 0% | 0% | 0% | 100.0% |
| 13 | 58% | 12% | 0% | 9% | 0% | 0% | 0% | 0% | 0% | 19% | 0% | 0% | 1% | 2% | 0% | 0% | 0% | 0% | 100.0% |
| 14 | 54% | 14% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 27% | 0% | 0% | 3% | 3% | 0% | 0% | 0% | 0% | 100.0% |
| 15 | 41% | 19% | 0% | 2% | 19% | 0% | 0% | 0% | 0% | 16% | 0% | 0% | 0% | 3% | 0% | 0% | 0% | 0% | 100.0% |
| 16 | 41% | 22% | 0% | 12% | 20% | 0% | 0% | 0% | 0% | 3% | 0% | 0% | 1% | 1% | 0% | 1% | 0% | 0% | 100.0% |
| 17 | 41% | 25% | 0% | 12% | 20% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 1% | 0% | 0% | 100.0% |
| 18 | 46% | 27% | 0% | 7% | 15% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 4% | 0% | 0% | 100.0% |
| 19 | 40% | 38% | 0% | 3% | 0% | 0% | 0% | 0% | 19% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 20 | 28% | 44% | 0% | 0% | 13% | 0% | 0% | 0% | 12% | 0% | 0% | 0% | 0% | 0% | 0% | 3% | 0% | 0% | 100.0% |
| 21 | 30% | 46% | 0% | 0% | 21% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 3% | 0% | 0% | 0% | 100.0% |
| 22 | 28% | 47% | 0% | 0% | 10% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 3% | 13% | 0% | 0% | 0% | 100.0% |
| 23 | 24% | 55% | 0% | 0% | 10% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 12% | 0% | 0% | 0% | 100.0% |
| 24 | 24% | 49% | 0% | 0% | 10% | 0% | 0% | 0% | 12% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 100.0% |
| 25 | 24% | 49% | 0% | 0% | 0% | 8% | 0% | 0% | 14% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 100.0% |
| 26 | 24% | 49% | 0% | 0% | 0% | 10% | 0% | 0% | 12% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 100.0% |
| 27 | 24% | 49% | 0% | 0% | 0% | 15% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 12% | 0% | 0% | 0% | 100.0% |
| 28 | 21% | 45% | 0% | 0% | 0% | 10% | 8% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 14% | 0% | 0% | 3% | 100.0% |
| 29 | 24% | 49% | 0% | 0% | 0% | 20% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 3% | 0% | 3% | 0% | 100.0% |
| 30 | 24% | 47% | 0% | 0% | 0% | 15% | 0% | 0% | 9% | 0% | 0% | 0% | 0% | 0% | 3% | 0% | 3% | 0% | 100.0% |
| 31 | 21% | 34% | 0% | 0% | 0% | 0% | 0% | 0% | 45% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| 32 | 20% | 43% | 0% | 0% | 0% | 8% | 3% | 0% | 16% | 0% | 0% | 0% | 0% | 0% | 3% | 0% | 7% | 1% | 100.0% |
| 33 | 16% | 33% | 0% | 0% | 0% | 23% | 24% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 3% | 100.0% |
| 34 | 16% | 27% | 0% | 0% | 0% | 0% | 25% | 29% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 3% | 100.0% |
| 35 | 16% | 45% | 0% | 0% | 0% | 16% | 17% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 3% | 100.0% |
| A | 79% | 0% | 10% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 8% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| B | 12% | 76% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 11% | 0% | 0% | 0% | 100.0% |
| C | 48% | 0% | 42% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 8% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| D | 44% | 0% | 2% | 39% | 0% | 0% | 0% | 0% | 0% | 11% | 0% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| E | 34% | 21% | 2% | 0% | 39% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 0% | 100.0% |
| F | 23% | 39% | 0% | 0% | 0% | 33% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 100.0% |
| G | 17% | 44% | 0% | 0% | 0% | 0% | 34% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 100.0% |
| H | 9% | 42% | 0% | 0% | 0% | 0% | 8% | 36% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 100.0% |
| I | 15% | 45% | 0% | 0% | 0% | 0% | 0% | 0% | 34% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 0% | 0% | 100.0% |
| J | 47% | 4% | 3% | 1% | 0% | 0% | 0% | 0% | 0% | 34% | 5% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| M | 54% | 0% | 10% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 30% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| L | 48% | 0% | 15% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 23% | 7% | 5% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| N | 50% | 0% | 9% | 0% | 0% | 0% | 0% | 0% | 0% | 17% | 3% | 3% | 19% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| O | 31% | 15% | 3% | 0% | 5% | 0% | 0% | 0% | 0% | 16% | 0% | 0% | 0% | 19% | 11% | 0% | 0% | 0% | 100.0% |
| K | 26% | 39% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 36% | 0% | 0% | 0% | 100.0% |
| P | 15% | 43% | 0% | 0% | 21% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 19% | 0% | 0% | 100.0% |
| Q | 15% | 43% | 0% | 0% | 0% | 9% | 5% | 0% | 9% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 19% | 0% | 100.0% |
| R | 11% | 43% | 0% | 0% | 2% | 7% | 8% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 24% | 100.0% |

**Centre Turnover**

| Precinct | A | B | C | D | E | F | G | H | I | J | M | L | N | O | K | P | Q | R | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 49.3 | 0.0 | 17.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.1 |
| 2 | 37.8 | 0.0 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.3 |
| 3 | 109.8 | 0.0 | 31.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 141.1 |
| 4 | 42.1 | 0.0 | 11.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.9 |
| 5 | 21.5 | 0.0 | 6.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 31.1 |
| 6 | 34.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 | 2.7 | 0.9 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 46.6 |
| 7 | 44.2 | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.4 | 4.1 | 0.8 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 60.6 |
| 8 | 29.2 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.7 |
| 9 | 54.6 | 0.0 | 0.0 | 11.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 68.1 |
| 10 | 29.9 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 37.3 |
| 11 | 42.4 | 7.1 | 0.0 | 12.1 | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 70.2 |
| 12 | 25.3 | 4.3 | 0.0 | 7.2 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 41.8 |
| 13 | 23.4 | 4.9 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6 | 0.0 | 0.0 | 0.4 | 0.6 | 0.0 | 0.0 | 0.0 | 40.4 |
| 14 | 25.2 | 6.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.4 | 0.0 | 0.0 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 46.2 |
| 15 | 14.0 | 6.6 | 0.0 | 0.6 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 33.8 |
| 16 | 19.5 | 10.6 | 0.0 | 5.9 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.3 | 0.0 | 48.0 |
| 17 | 18.4 | 11.2 | 0.0 | 5.5 | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.5 | 0.0 | 45.4 |
| 18 | 18.0 | 10.7 | 0.0 | 2.7 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 1.7 | 0.0 | 0.0 | 39.2 |
| 19 | 1.7 | 1.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 |
| 20 | 22.7 | 36.0 | 0.0 | 0.0 | 10.5 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 81.3 |
| 21 | 15.4 | 23.2 | 0.0 | 0.0 | 10.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.3 | 0.0 | 0.0 | 0.0 | 50.8 |
| 22 | 36.6 | 61.4 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 16.9 | 0.0 | 0.0 | 0.0 | 130.8 |
| 23 | 9.6 | 22.1 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 40.5 |
| 24 | 7.7 | 16.1 | 0.0 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 32.7 |
| 25 | 7.0 | 14.6 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 29.7 |
| 26 | 7.9 | 16.5 | 0.0 | 0.0 | 0.0 | 3.2 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 33.5 |
| 27 | 25.5 | 53.1 | 0.0 | 0.0 | 0.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.1 | 0.0 | 0.0 | 0.0 | 107.7 |
| 28 | 19.9 | 41.8 | 0.0 | 0.0 | 0.0 | 8.9 | 7.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.9 | 0.0 | 0.0 | 2.5 | 93.4 |
| 29 | 12.0 | 24.9 | 0.0 | 0.0 | 0.0 | 10.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 1.7 | 0.0 | 50.5 |
| 30 | 8.5 | 16.8 | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 1.2 | 0.0 | 36.1 |
| 31 | 1.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 |
| 32 | 20.5 | 42.8 | 0.0 | 0.0 | 0.0 | 7.9 | 2.6 | 0.0 | 16.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 0.0 | 7.0 | 0.5 | 100.6 |
| 33 | 14.0 | 29.2 | 0.0 | 0.0 | 0.0 | 20.4 | 21.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 2.3 | 88.5 |
| 34 | 12.6 | 21.4 | 0.0 | 0.0 | 0.0 | 0.0 | 19.9 | 23.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 79.2 |
| 35 | 11.3 | 31.6 | 0.0 | 0.0 | 0.0 | 11.7 | 12.2 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 70.9 |
| A | 72.3 | 0.0 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.2 |
| B | 6.1 | 39.7 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.0 | 0.0 | 0.0 | 52.1 |
| C | 9.9 | 0.0 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.8 |
| D | 9.1 | 0.0 | 0.3 | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.8 |
| E | 7.0 | 4.3 | 0.3 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 20.8 |
| F | 4.8 | 8.1 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 20.8 |
| G | 3.5 | 9.2 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 20.8 |
| H | 1.9 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 7.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 20.8 |
| I | 3.1 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 20.8 |
| J | 9.8 | 0.9 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.8 |
| M | 6.3 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 3.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7 |
| L | 5.7 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.7 | 0.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7 |
| N | 5.8 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.3 | 0.3 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7 |
| O | 3.6 | 1.8 | 0.4 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 2.2 | 1.2 | 0.0 | 0.0 | 0.0 | 11.7 |
| K | 5.3 | 8.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.4 | 0.0 | 0.0 | 0.0 | 20.8 |
| P | 1.8 | 5.1 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 11.7 |
| Q | 1.8 | 5.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.6 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 11.7 |
| R | 1.3 | 5.0 | 0.0 | 0.0 | 0.2 | 0.8 | 0.9 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 11.7 |
| **Turnover Distributio** | **1,032** | **622** | **109** | **71** | **91** | **95** | **73** | **34** | **54** | **57** | **33** | **10** | **11** | **13** | **74** | **7** | **14** | **14** | **2,412.5** |

# Definitions

# Definitions

The following definitions have been adopted for the purposes of this report :

1. **Retail** refers to the Australian Bureau of Statistics (ABS) definition adopted for the purposes of the 1991/92 Retail and Services Census, with some minor exclusions. This definition includes Total Shopfront Retailing less garden supplies and marine equipment. Motor vehicle and related retailers are also excluded. This definition has been adopted for the purposes of detailing the retail market using the ABS Household Expenditure Survey (HES), and also for categorising shopping centre turnover and tenancy details.

2. **Non-Retail** therefore refers to various store types, services and expenditure categories, not included in the appropriate Australian & New Zealand Standard Industrial Classification (ANZSIC) included within the scope of the latest Retail and Services Census. The non-retail component includes the following tenancy types :

   - Amusements
   - Appliance Rental
   - Auto Accessories
   - Banks and Building Societies
   - Cinemas
   - Equipment Hire
   - Financial and Property Services
   - Garden Supplies
   - Lottery & Gaming
   - Marine Equipment
   - Medical and Dental Services
   - Offices
   - Post Office
   - Travel Agency

   In addition to the above tenant types which are quite often found in shopping centres, facilities such as garden supplies, builders supplies, and similar businesses which are predominantly wholesale, are usually treated entirely as non-retail stores, despite the fact that a proportion of the business may be retail orientated.

3. The **Food & Groceries (F&G)** market refers to the market relevant to supermarkets, and comprises spending on take-home food and groceries. Some non-supermarket traders, including fresh food specialties, milk bars and convenience stores and to a limited extent non-food stores such as Discount Department Stores (DDSs), also compete for F&G spending. The F&G category includes food items only and therefore does not include the general merchandise items sold in supermarkets. The F&G category also excludes spending on liquor. Where a specific supermarket competes for bottled liquor spending, the analysis takes this component into account separately.

4. The **Department Store Type Merchandise (DSTM)** market specifically refers to the market relevant to department stores and DDSs. It comprises expenditure on department store and DDS type merchandise, all of which is included in the defined retail market. More specifically it comprises expenditure on :

   - Clothing and Accessories including all clothing, footwear, clothing accessories, jewellery and cosmetics.
   - Furniture, Floor Coverings and Major Electrical including all furniture, floor coverings, televisions, refrigerators, and other large electrical appliances.
   - General Merchandise including books, printed material, toys, hardware items, small electrical appliances, bikes, photographic equipment, etc.

   This category excludes spending on food items which these stores also stock, such as confectionery, soft drinks, tobacco, tea and coffee and other consumable items.

5. **Financial Years.** Analysis throughout this report relates to financial years (ending June) unless otherwise specified.

# Definitions

## Abbreviations

The following abbreviations are used in this report :

| | |
|---|---|
| ABS | Australian Bureau of Statistics |
| ANZSIC | Australian & New Zealand Standard Industrial Classification |
| CBD | Central Business District |
| DDS | Discount Department Store |
| DSTM | Department Store Type Merchandise |
| DSP | District Structure Plan |
| F&G | Food & Groceries |
| GLA | Gross Leasable Area |
| GST | Goods and Services Tax |
| HES | Household Expenditure Survey |

## Goods and Services Tax (GST)

The tax package has had differential effects on turnover by various categories of retailers as a result of changes in prices and consumer demand.

These effects have been estimated by UrbisJHD and from 2001 the spending market and turnover forecasts presented in this report are exclusive of GST.

## MarketInfo

Spending estimates provided in this report are based on the *MarketInfo* 2004 micro-simulation model developed by MDS Market Data Systems. *MarketInfo* 2004 is based on the Household Expenditure Survey and Australian National Accounts. Given that the estimates are based on survey data they will be subject to sampling variability.