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Planned residential community developments: Do they add value?

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Abstract

Sustainable development in the major cities of the world have focussed on the combination of good planning and meeting the overall needs of the community and the ability for property developers to maintain profitability.

In many countries, these objectives have been achieved in relation to planned residential community benefits, which encompass all planning requirements and the subsequent residential land or houses being sold, however what is not always considered is any reduction or increase in value that could result from the development of planned residential developments.

This paper will examine the long term capital return investment performance of residential property in planned, themed and gated residential housing developments compared to the investment return for housing in adjoining residential areas that have not been based on an overall planning basis.

The study will determine if the residential market is prepared to pay a premium to purchase in a planned residential estate and if this premium is maintained over time or reverts to the average return for that particular area.
A number of planned residential estates throughout the City of Sydney will be used as the basis of the study and will include both freestanding residential developments and planned community medium density unit developments

Key Words

Residential property, housing developments, planned estates, investment performance, Sydney residential market, community housing projects

1. Introduction

A recent development in the residential property markets of Australia is the concept of planned residential developments offering buyers and residents in these estates facilities that are not available to the general population in that particular area. These facilities can comprise:

- Security services and measures, including gated residential housing estates, being fully fenced and with security entry
- Recreational facilities such as golf courses, recreation halls, gymnasiums and swimming pools
- Natural (or man made) surroundings such as bushland, parkland or lakes
- A combination of the above

The provision of these services and facilities is generally at a cost to the purchaser, with the developer providing a lifestyle as well as a home.

Often, these planned residential estates and developments have been developed on both Greenfield and Brownfield sites, and in areas that are not considered to be as socio-economically desirable as other areas in the same city or town. However, the need for a larger area for the development of such estates can limit the actual locations, where these planned residential estates can be developed.

2. Research Objectives

This paper will examine four planned residential estates in Sydney, Australia to determine if:

- Planned residential community developments sell at price differentials over time to the surrounding residential properties;
- Any price premiums are maintained over time;
- Planned residential community estates have a positive or negative impact on the price of surrounding residential property;
- The capital return performance of the non planned and planned residential property in these areas is similar over time.

3. Literature Review

There have been a number of significant studies completed in relation to residential property prices and the influence of views and proximity to natural scenic locations, especially in the US, where the concept of planned developments (Common Interest Developments [CIDs}) has been in place longer than in Australia.

According to Gordon (2004), over 15% of US housing stock is now in CIDs, with 70% of all new housing in California being in planned developments.

The attraction of these developments can be security, recreation, location, availability of goods and services, but can also lead to issues such as segregation (Logan, 2001; Frey 2001; Putnam, 2000).

Similar issues of segregation and limitation of diversity in residential suburbs has also been raised in Australia. Gleeson (2002) states that the increase in the number of "privatopias" (planned residential community developments) has lead to an increase in segregation in Australian residential property markets.

At issue with these new developments is why there has been an increasing trend for various population groups to live in these planned communities and the premium or price difference that people will pay to live in such planned communities.

A study by Thorsnes (2002) indicated that proximity to forest areas resulted in residential lots closer to the forests achieved higher selling prices than those with a less favourable proximity.

Further studies by Bond, Seiler and Seiler, 2002; Bourassa, Hoesli and Sun, (2003) and Yu, Han and Chai (2005) have also confirmed that a view provides a premium or greater value to residential property ranging from 15% to a maximum of 89% as stated in the Bond, Seiler and Seiler (2002) study. All these studies have also confirmed that the actual amount of any premium for a view depends on the supply of such property and the potential for such views to be blocked by future development. These results supported the earlier studies by Darling 1973; Plattner and Campbell, 1978 and Gillard, 1981, which also found that views have significant influence on the value of property.

Although these studies confirm that the location of residential property close to natural landscapes and views has a positive impact on capital returns and prices, there has been limited studies in relation to the impact of developing planned residential estates in areas that do not possess these natural attributes, but are actually based on providing artificial landscapes, lakes or services not available in that particular location.

Planning for the demand for housing in all growing urban areas of Australia has seen significant changes over the last 50 years in relation to lot sizes, required services construction type and buyer expectations. Fraser (1965) stressed the role that the developer plays in providing the residential estates required by the community, but stresses that the profit drive of the developer is not always to the benefit of the community or the planning authority. This is contrary to the general principle of urban planning that the development of the urban land should be made for the community needs at the right time and in the right place (Ashton, 1964).

Studies by Lynch and Rasmussen (2004 and 2001) and Pate (2001) have shown that within specific neighbourhoods the availability of good schools, positive attributes or the prevalence of crime in US cities can have a positive or negative impact on residential house prices. Similar studies in the UK by Raco (2003) has also found that providing the perception of a "safe" urban environment for regeneration areas such as retail centres has an effect on the marketing and investment in these areas. The issue of crime and safe housing areas in the UK has also been studied by Cozens, Hillier and Prescott (2001), with the conclusions that the public prefers to live in areas with a safe, well maintained environment and have negative views on areas which are run down and perceived to be un-safe from a personal perspective.

Recent residential developments in Sydney have been based on a strict set of guidelines and covenants to all purchasers to ensure the maintenance of a desirable living community

(Gwyther, 2005). This can include a requirement for all residents to maintain gardens to a high degree, not leave cars parked on the street and to look after the safety of other residents.

Ratcliff and Flanagan (2004) state that many of the factors that make a place a good place to visit also make that particular place a good place to live.

The more recent development of planned residential areas in Australia has been based on the above factors. Many of the newer residential estates in urban renewal areas or in developing residential subdivisions are being developed and marketed on the basis of:

- The level of security offered
- Quality of services such as retail, schools or transport
- Availability and exclusive use of recreational and sporting facilities such as golf courses, parklands, lakes, gymnasiums and tennis courts
- Community ethic and expectations (Gwyther, 2005)

This paper will examine the sales transactions for residential property in four of these "themed" and planned residential estates and compare them directly with the residential markets immediately adjoining these planned estates.

4. Study Areas

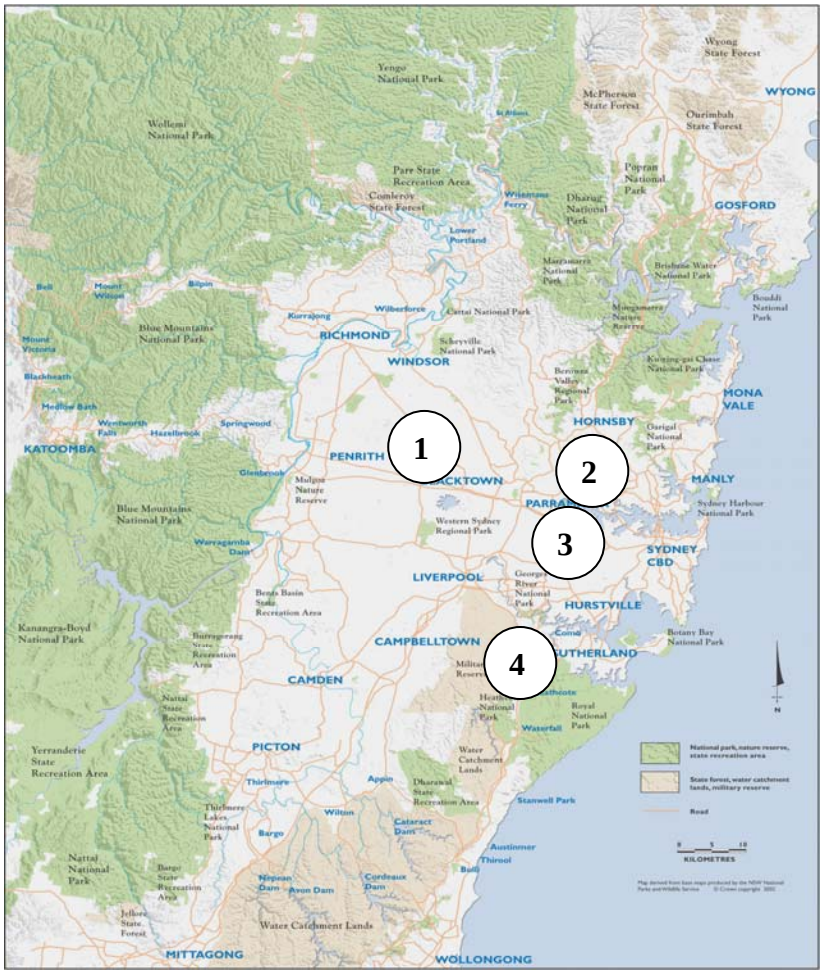
Four newer type planned residential areas were selected for the study. All are in the city of Sydney and were developed within existing residential areas or were part of an urban regeneration project on former industrial property. Two areas comprise freestanding residential dwellings, with the two other areas in the study comprising medium density strata title residential units.

The four areas in the study and the adjoining existing residential areas are shown in Table 1 and Figure 1, with the corresponding location numbers to show the planned residential developments in relation to each other:

Table 1: Study Area Summary

Location	**Residential Property type**	**Planned Development Suburb**	**Adjoining Residential Suburb**
North West Sydney	Houses	Woodcroft Estate (1)	Doonside
Northern Suburbs	Units	Liberty Grove (2)	Concord
Olympic Precinct	Units	Newington (3)	Auburn
South West Sydney	Houses	Wattle Grove (4)	Hollsworthy

Figure 1: City of Sydney: Planned Development Locations



4.1. Woodcroft Estate

This residential estate was established by developers in 1991-1993, with the first house and land packages sold in 1994. Woodcroft is a gated estate, with a large community parkland and lake incorporating walkways and a family orientated lifestyle. The development is situated in a lower socio-economic area and large sections of the surrounding suburbs are public housing. An important part of this development was a medium sized retail community shopping centre, which may not have been built if this development had not gone ahead, as it was a requirement of the development approval. The development site was also very well located in relation to proximity to reasonable primary and secondary schools (State and private).

Gated communities in Australia can be either:

1. A fenced development area with access limited to a single or double entry point, usually representing an ornate driveway. These driveways provide a psychological barrier to entry and as such can be accessed by the general public, not just property owners (Wattle Grove and Woodcroft estates).

2. More recent medium density gated developments actually comprise a single point of vehicular entry, distinguished by a secure automatic key/card entry gate (Liberty Grove).

4.2. Liberty Grove

Liberty Grove is a gated and fenced medium density residential unit estate developed on land previously used for industrial purposes. This residential estate comprises over 20 unit complexes ranging from three to 10 stories in height. The complex was completed in 1999 and was marketed on the basis of the security and recreational facilities including tennis courts, gymnasium and indoor lap pool. Liberty Grove is well located in relation to a new shopping centre (small regional) and rail transport.

The medium density units in the surrounding suburb comprise a mixture of medium to high rise residential units built from 1960's through to current developments.

4.3. Newington

The Sydney suburb of Newington was built to initially provide athlete accommodation for the 2000 Olympic Games and was always intended to be sold as a residential unit development after the games. A number of the units were sold to the public on completion in 1999, on the basis that permanent occupation could not be taken until after the Olympic and Para-Olympic games were completed in November 2000.
This suburb has been marketed on the basis of the proximity to the sporting and entertainment facilities of the former Olympic Games site.

This was also a former industrial site and the surrounding development in Auburn is a mixture of freestanding residential houses and medium density residential units ranging in age from 1930's through to new stand alone unit developments. Auburn is a lower socio economic area servicing the older industrial areas of Sydney.

4.4. Wattle Grove

Wattle Grove is the first community title development in the Sydney region and was developed on former Defence Department land in the south west of Sydney during the early 1990's. Development of this planned estate was preceded by a heavy rail line linking Wattle Grove to the Sydney and Liverpool CBD's. This planned estate is based on large areas of natural bushland with walking tracks and a large recreation lake that can be used for boating.

The adjoining suburb of Hollsworthy was developed in the 1970's as a residential suburb to service the adjoining military base and in the early stages of its development was predominately defence force families. In the 1980's the suburb became a popular area for the lower middle income socio-economic group.

5. Research methodology

A commercial sales transaction data base (R P Data Pty Ltd) provided all residential sales transactions for the following periods:

Woodcroft	1994-2004	200 sale transactions
Doonside	1993-2004	231 sale transactions
Liberty grove	1999-2004	247 sale transactions
Concord	1993-2004	251 sale transactions
Newington	1999-2004	608 sale transactions
Auburn	1993-2004	653 sale transactions
Wattle Grove	1993-2004	489 sale transactions
Hollsworthy	1993-2004	421 sale transactions

The sales transactions for all streets in the planned residential estates were collected for the above periods and these were matched with an equivalent number of streets in the immediately adjoining residential suburbs.

Sales were analysed on an annual basis to determine average annual price, average annual capital (price) return, average annual volatility, correlation of change in house or unit prices for each of the adjoining areas and an index of the average annual capital return.

6. Research Limitations

As the Woodcroft and Wattle Grove estates have been developed for over 10 years, there are a significant number of sales transactions for comparative analysis. However, the more recent developments of Liberty Grove and Newington only allow a comparison over the past 5 years. This limited time period may not reflect the potential differences between these two developments and the surrounding suburbs to the same degree as the older developments in the study. However, they do show the variation in pricing between the comparative development styles

7. Results

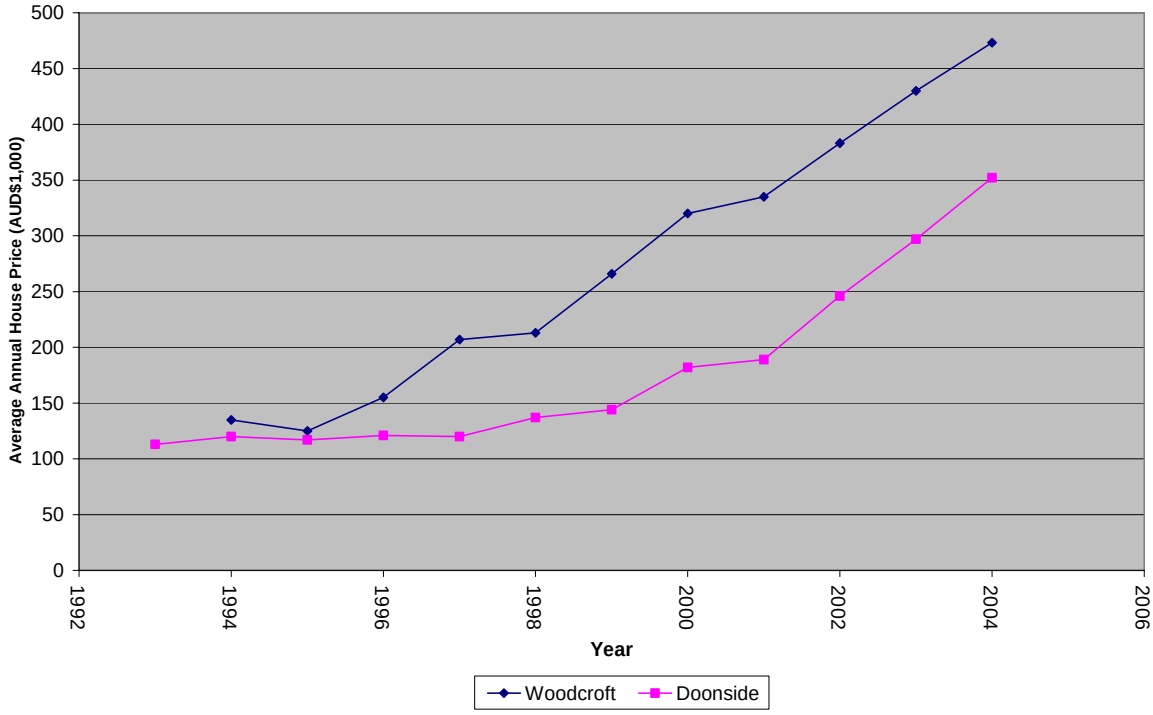
The results of the study will be undertaken in two sections. The first section will compare the planned residential housing estates to their surrounding residential development, with the second section comparing the performance of the planned residential unit estates to their surrounding unit developments.

7.1 Residential Housing Developments

Figures 1 and 2 show the average annual price for residential property in the planned estate developments of both Woodcroft Estate and Wattle Grove estate compared to the price of residential property immediately adjoining these planned estates.

In Figure 2, it can be seen that the initial price for houses in the planned estate of Woodcroft were only slightly higher than similar houses in Doonside from the first sales in 1994 to 1995 ($125,000 for Woodcroft and $117,000 for Doonside). This suggests that the market was not initially prepared to accept the concept of a higher quality planned estate in a traditional lower quality socio-economic area based on public housing.

Figure 2: Average Annual House Price: Woodcroft v Doonside: 1993-2004



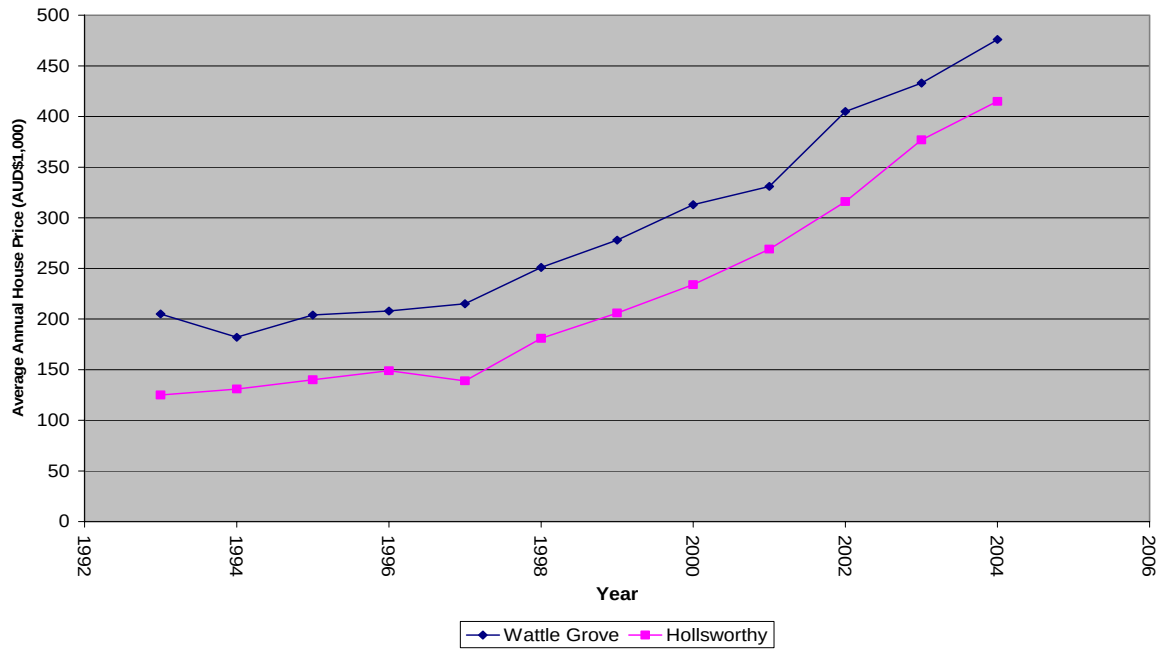
However, Figure 2 also shows that after 1995 there was a considerable increase in average annual house prices in the Woodcroft estate, compared to the traditional surrounding dwellings. By 1997, the average price for a house in Woodcroft was $207,000, compared to only $120,000 in Doonside. In this short 2 year period, the market residential housing market in this sector of Sydney had accepted the new planned estate and the market was prepared to pay considerable more for a dwelling in this estate, despite the fact that similar houses in the adjoining suburb were over 40% less expensive.

By 2000, the difference in the average price of houses in these two areas had increased to 43%. Since 2000, both the rate of increase in the average annual price for residential property in these two areas have been similar and the actual percentage difference in average annual price between a hose in the planned estate of Woodcroft and the traditional residential suburb of Doonside has decreased to only 25% in 2004. This suggests that the better quality residential development in the planned estate has had a positive impact on the surrounding residential areas. Over the period 1996-2004, there has been a significant change in the style and quality of home being constructed in the Doonside area, compared to pre 1994 and the planned Woodcroft estate.

The difference between the residential property market in Hollsworthy and the target market for Wattle Grove was not as great as that between Woodcroft Estate and Doonside.

Figure 3 shows that the average annual sale price for houses in Wattle Grove in the first year of sales was $205,000, this compared to only $125,000 in Hollsworthy. This figure also suggest that these higher initial prices in the Wattle Grove estate were not supported by the market, as the average annual price for houses in Wattle Grove fell during 1995 to $182,000, while the average house price in Hollsworthy increased from $125,000 to $131,000.

Figure 3 Average Annual House Price: Wattle Grove v Hollsworthy: 1993-2004



However, since 1995, Figure 3 also shows that the average annual price for houses in the planned estate of Wattle Grove has been consistently higher than the adjoining suburb of Hollsworthy, with percentage difference between price in the two areas being relatively consistent from 1998-2004.

7.2 Residential Unit Developments

Figure 4 Average Annual Unit Price: Liberty Grove v Concord: 1999-2004

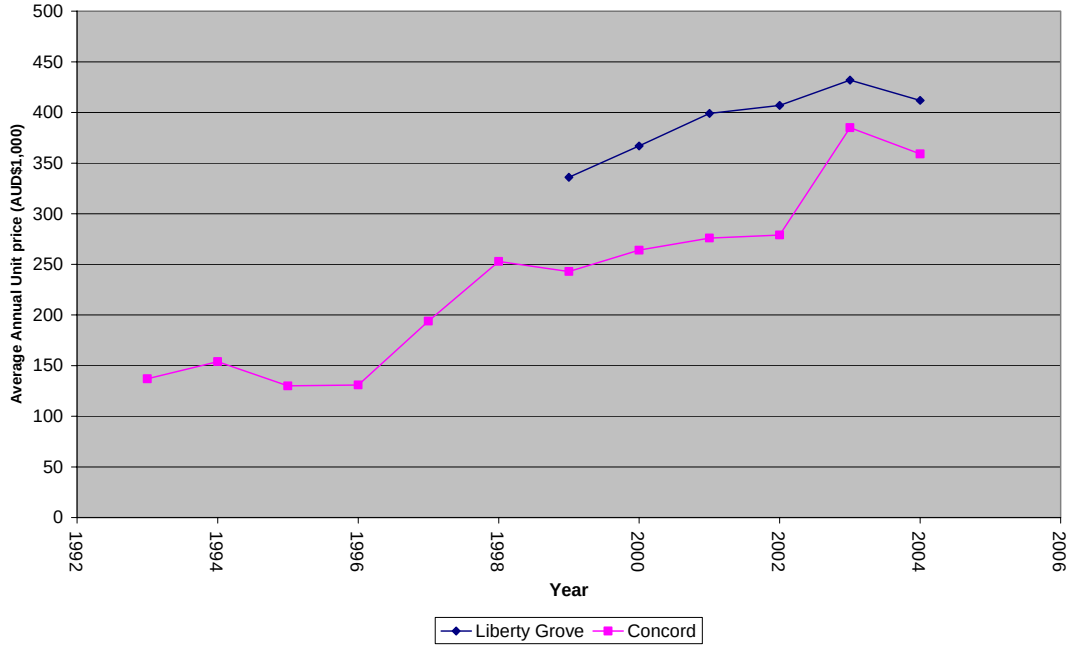


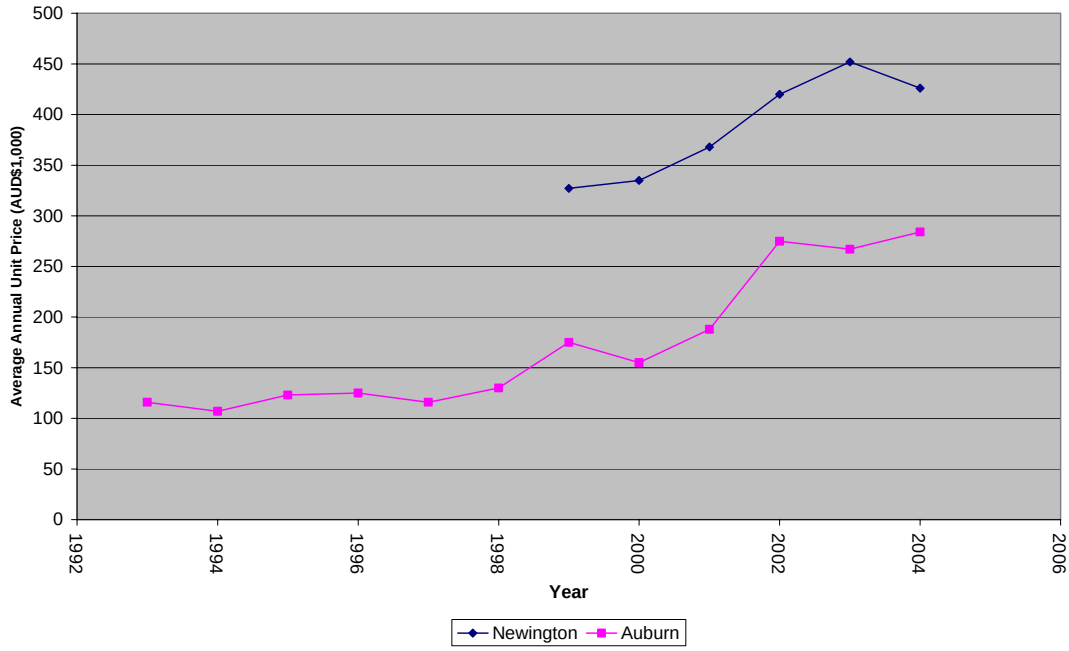
Figure 4 compares the average annual sale price for units in the planned Liberty Grove development to single residential unit sales in the surrounding suburbs. As Liberty Grove was only completed in late 1998, sales data is only available for the period 1999-2004.

However, sales for Concord have been analysed from 1993 to 2004 and provide details of the market prior to the entry of Liberty Grove units in 1999.

This figure shows that in 1999, the average residential unit in Concord was selling for $243,000; however the market was prepared to pay $336,000 for an average unit in Liberty Grove. This difference in price is more reflective of the benefits offered by this planned residential community rather than locational factors such as services and transport, as Concord has always been considered an upmarket residential location.
In the early period from 1999-2002, the market price for residential units remained relatively flat, increasing in average price from $243,000 to $279,000. However, during this same time period, the average price of residential units in Liberty Grove increased from $336,000 to $406,000.

From Figure 4 it can be seen that in 2003 the average price for residential units in Concord increased significantly $385,000, at which point both markets declined slightly, but at similar rates.

Figure 5 Average Annual Unit Price: Newington v Auburn: 1999-2004



The residential unit market in the study area of Newington and Auburn has been very similar in relation to average annual price, as the Liberty Grove/Concord area.

Average annual sale prices in the Newington development commenced at a significantly higher level then Auburn ($278,000 compared to $175,000). This difference was expected due to the fact that Newington is a modern planned community in a high profile location (Olympic site). However, Figure 5 shows that the introduction of the large number of units from the Newington development into this general residential area in 1999 actually resulted in a decrease in unit prices in Auburn.

Since 2000, the new development at Newington has had a positive impact on the residential unit market at Auburn, with a substantial increase in price from 2000 to 2002 from $155,000 to $275,000.

7.3 Average Annual Capital Return

Table 2 represents the average annual capital return and volatility for residential property in the study locations. Although the previous figures confirmed that the residential property in the planned developments have sold at higher prices than similar residential property in the same area, apart from Woodcroft, have shown a lower capital return and lower risk than similar residential property in the adjoining suburbs.

This Table shows that the highest average annual capital return was recorded in Woodcroft at 13.95%, with the lowest return being Liberty Grove at 4.29% (recorded over the limited time period of 1999-2004). The most volatile residential markets in the study were Concord and Newington at 21.01% and 18.44% respectively and both suburbs where the new planned developments have had the greatest impact on the average annual sale price for residential property in the adjoining areas.

Table 2 Average Annual Capital Returns: 1993-2004

Location		Average Annual Capital Return (%)	Average Annual Volatility (%)
Woodcroft	**1994-2004**	13.95	12.15
Doonside	**1993-2004**	11.90	11.65
Liberty Grve	**1999-2004**	4.29	5.75
Concord	**1993-2004**	10.53	21.01
Newington	**1999-2004**	5.66	7.64
Auburn	**1993-2004**	11.57	18.44
Wattle Grove	**1993-2004**	10.25	6.20
Hollsworthy	**1993-2004**	12.60	9.64

The impact of this capital growth in the various areas of the study is highlighted in Figures 6 and 7, which represents the average annual capital growth as an index from 1993 for residential houses and 1994 for residential units.

From a capital return basis the best performing residential housing market in the study over the period 1993-2004, has been Woodcroft Estate (planned development), increasing from the base index of 100 in 1993 to 350 in 2004. Over the same period the other planned housing estate in the study only increased to an index level of 232. Doonside was the lowest performing area in the study until 2001, at which time the index increased considerably from 158 to 293.

Figure 6: Capital Return Index: Residential Houses: 1993-2004: Planned Developments and Adjoining Suburbs

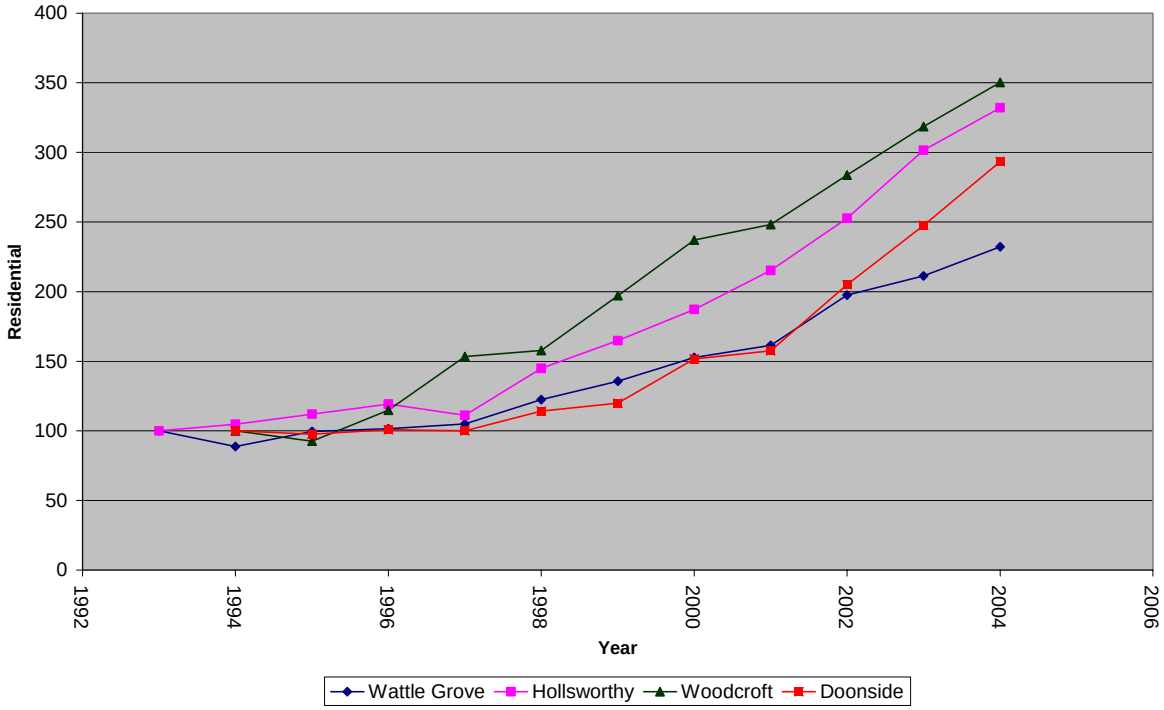


Figure 7: Capital Return Index: Residential Units: 1993-2004: Planned Developments and Adjoining Suburbs

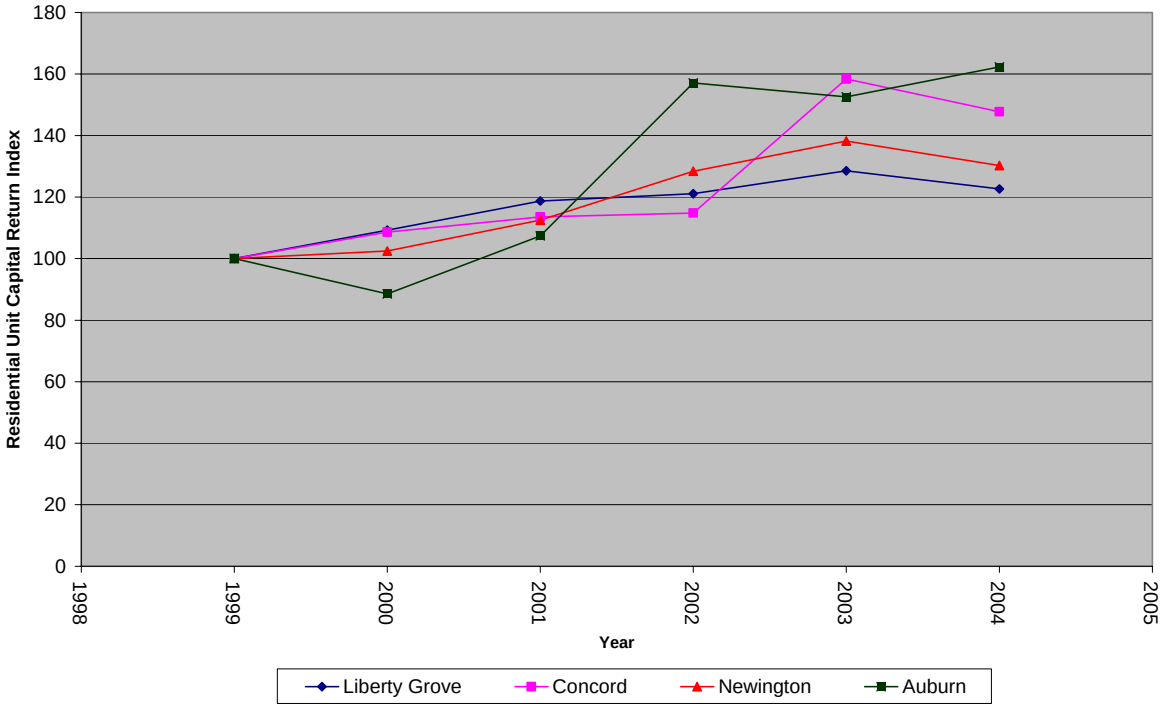


Figure 7 shows the capital return indices for the residential unit markets in the study for the period 1999-2004, have shown very similar trends in relation to the planned residential unit

developments of Liberty Grove and Newington, with both rising to 2003 then recording a similar fall (129-123 and 138-130 respectively). This figure also shows that both Auburn (2001) and Concord (2002) experienced significant increase in their respective capital indices from 107 to 157 and 115 to 158.

8 Conclusions

Although this research only compares sale transaction prices and does not control for other variables that may cause price differentials to move at different rates, the results still provide an valuable insight into the market perceptions of these planned residential community developments.

The analysis of the sales transactions for the residential areas in this specific study has shown the following in relation to these specific planned residential developments in Sydney:

- Regardless of the type, size, quality of the surrounding housing development a well planned residential development can attract initial sale prices in excess of the prices being paid for residential property immediately adjoining the development. This also applies when the surrounding development is predominately public housing, although in such areas the risk and return is greater. This also suggests that the premium inclusions in these planned estates are considered more advantages to the buyer than the possible negative impacts of the surrounding development.

- There is no major difference in the premium price paid for residential property in planned developments on the basis of security or recreational facilities being the main focus of the planned developments, evidenced by the similarity in price differentials between Wattle Grove and Woodcroft Estate.

- Well planned and developed residential estates have a lower risk compared to similar property types in the same location.

- Property surrounding the planned residential estate can actually benefit from the development, with the average price of the surrounding houses and units increasing significantly as the planned residential development establishes and matures. This suggests that the new planned development attracts a second tier of buyers to the surrounding area, who may not be able to afford the houses/units in the planned estate but desire to live close to the development.

- The difference in price between the property in the planned development and the surrounding residential property tends to remain more constant as the development ages, but the price differential always remains higher for the property in the planned estate.

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